Exploring EFL Teachers' Self-Efficacy, Reflective Thinking, and Job Satisfaction: Structural Equation Modeling

Ibrahim Safari, Department of English Language, Ardabil Branch, Islamic Azad University, Ardabil, Iran

safariibrahim1@gmail.com

Mehran Davaribina*, Department of English Language, Ardabil Branch, Islamic Azad University, Ardabil, Iran

davaribina@gmail.com

Iraj Khoshnevis, Department of English Language, Ardabil Branch, Islamic Azad University, Ardabil, Iran

Iraj.khoshnevis@gmail.com

Abstract

The increasing call for learning English as a foreign language has dramatically heightened the necessity to recruit effective English teachers. This is mainly because teachers have a key role in the success or otherwise of an educational program. Nevertheless, a comprehensive review of the related literature confirms the paucity of research studies on teacher characteristics which can influence their job satisfaction. The present research set out to investigate the association among EFL teachers' self-efficacy, reflective thinking, and job satisfaction. Two-hundred and twelve Iranian EFL teachers from language institutes, schools, and universities participated in the study. They were asked to answer Teachers' Sense of Efficacy Scale, Reflective Thinking Scale and The Minnesota Satisfaction Questionnaire, as the main data collection instruments. The questionnaires were presented in three different ways: social networks, email, and in person. Structural Equation Modeling was employed to examine the hypothesized model of relationships. This model was confirmed following the application of the modification indices proposed by the software (Normal chi-square = 3.6; RMSEA = .03; RMR = .02; GFI = .93; AGFI = .90; NFI = .92; CFI = .93; IFI =.93). The results revealed that there were significant internal correlations between all the latent variables and their sub-scales. Moreover, results of multiple regression analysis represented that self-efficacy and reflective thinking positively predicted job satisfaction, with self-efficacy exerting more predictive power compared to reflective thinking. Pedagogical implications of the findings have been discussed.

Keywords: Job satisfaction, reflective thinking, self-efficacy, Structural Equation Modeling

Introduction

Teachers, as one of the determining factors in achieving the educational objectives, play a key role in all educational systems. They have an important role in shaping and modeling habits, customs and, above all, personality of the students. As stated by Brosh (1996), effective EFL teachers concentrate on improving students' comprehension, prepare attractive issues, are in command of the language, adopt effective strategies in their teaching, and assist students to be autonomous. These teachers' quality of teaching depends on a number of social and personal factors, and if these factors encounter problems, it can have a negative effect on the educational system and its outcome. Self-efficacy is one of these characteristics, which has been extensively discussed in the literature.

Bandura (2005) believed that self-efficacy in the first place is a belief and then action; therefore, to strengthen it, one should first and foremost create an effective attitude toward

oneself. Then he should be instructed to identify ways to succeed; to be aware of situations, perceptions, interpretations and evaluations, and to have a positive mood to face the challenges. Individuals who are confident about their capabilities consider problems as challenges that must be dominated, rather than threatened and avoided. They will choose to challenge goals and will all remain committed to doing it. They will be confident to control threatening situations, reducing their perception of stress and depression. Also, as Bandura and Locke (2003) argued, highly self-efficacious individuals exert more efforts in this regard and stay in it more than those with low self-efficacy. When problems occur, they quickly overcome them and are committed to their goals.

Reflective thinking is the second characteristic of EFL teachers. As stated by Boody (2008), the reflection of the teacher can be thought of as, critical analysis, retrospection, problem solving and placement of thought in practice. Boody (2008) pointed out that teacher reflection could be considered as necessary to analyze and resolve problems before the performance. This enables teachers to do constructive operations rather than implement a quick solution for these problems. Spalding and Wilson (2002) focused on some of the problems in the field of teacher education and suggested that teachers enhance their capability for reflective thinking using explicit training on the reflection practices. By explicit instruction, they meant activities such as definitions, discussion of samples, and the use of an organizational model.

As the third characteristic of EFL teachers, job satisfaction is an invaluable area for study, considering the fact that it is related to the humanitarian and utilitarian perspective (Yücel, 2012). Higher levels of job satisfaction mean that people are equitably treated with an organization. The utilitarian perspective shows that job satisfaction can result in behaviors that affect the performance of the organization. Simatwa (2011) argued that job satisfaction is an emotional state and a pleasurable feeling resulting from work performance. Teachers' job satisfaction is important at a university or school because that is what the productivity of teachers is dependent on. Teachers with higher level of job satisfaction are more likely to present higher efficiency at ideal time and enhance training. Satisfied teachers are supposed to be innovative and creative and allow for a positive change with time.

EFL teacher's quality of teaching depends on a number of personal and social characteristics, and if these characteristics encounter problems, it can exert negative influence over the educational system and its outcome. Using structural equation modeling (SEM), the present study attempts to simultaneously examine the interrelationships between three latent variables namely, self-efficacy, reflective thinking, and job satisfaction. Some similar researches have set out to evaluate teachers' self-efficacy, reflective thinking, and job satisfaction separately, yet, to the authors' knowledge, they have not studied all these three variables concurrently. This is crucial in order to simultaneously examine the complex associations between these factors captured by the measurement models and the structural models.

Literature Review

This section reviews the theoretical underpinnings of the research as well as the empirical research conducted about the three latent variables under investigation, namely EFL teachers' self-efficacy, reflective thinking, and job satisfaction.

Self-Efficacy

As stated by Bandura (1995), self-efficacy is defined as the "beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations" (p. 2). Bandura and Locke (2003) stated that highly self-efficacious people exert more efforts and stay in

a task more than those with low self-efficacy. When problems occur, they quickly overcome them and are committed to their goals. Tschannen-Moran and Woolfolk Hoy (2001), succeeded in designing teachers' sense of efficacy scale (TSES). The three-factor structure of this scale provides useful information about the teachers' self-efficacy. The most remarkable critique on this scale is that it does not measure the general self-efficacy of teaching (Koehler, 2006). Koehler designed a set of questions that measured the general self-efficacy of teaching, in conjunction with the design of a tool that comprehensively measures teachers' self-efficacy and added it to the "teacher's Sense of Efficacy Scale".

The construction of self-efficacy scales led to the emergence of a number of empirical studies, which set out to investigate how this variable and some others which are vital teacher characteristics are correlated. In a research, Babaei and Abednia (2016) examined the association between teachers' self-efficacy and reflective teaching. Data analyses indicated a significant relationship between teachers' self-efficacy and reflectiveness. Odanga, Raburu, and Aloka, (2018) carried out a study to find strategies to improve self-efficacy among 1790 teachers. The results showed that there were effective strategies to improve self-efficacy of teachers, such as, improvement in working conditions, facilitative style of leadership, capacity-building programs and better payment. Furthermore, Research also confirms that people with higher self-efficacy focus on wider job opportunities and have more job prospects; they have better mental health and higher personal goals (MirSami and Ebrahimi Ghavam, 2007). Gkolia, Belia, and Koustelios (2014) stated that behavioral self-efficacy explains the magnitude of a teacher's efficacy belief in implementing particular performances to address educational circumstances.

Rahimi and Weisi (2018) conducted a research to shed more light on the association between 150 EFL teachers' self-efficacy and reflective practices. Multiple correlation analyses showed significant association between these two variables. These findings additionally revealed a positive relationship between self-efficacy and all sub-scales of reflective practice. Furthermore, reflective practice significantly correlated with all sub-scales of self-efficacy. In another similar research, Singh, Doyle, Kennedy, Ludlow, and Rose (2000) investigated the association between teachers' reflective thinking and their efficacy of classroom management. They found that teachers' reflective thinking enhances their classroom management abilities. One conceivable justification is that reflective teachers intentionally consider the procedures and techniques they apply to their classrooms. However, reflective thinking is known as a key to encouraging the process of reasoning; it shows and predicts questions about teachers' self-efficacy and a successful academic teaching process.

رتال جامع علوم انسابي

Reflective Thinking

Reflective thinking has a close association with metacognitive reasoning, through which an individual examines his/her reasoning procedure and recognizes his/her thinking conduct. According to Dewey (1933, as cited in Demirel, Derman and Karagedik, 2015) reflective thinking is "Active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusion to which it tends" (p. 2088). Ünver (2003) stated that at the end of reflective thinking, one often turns to creative thinking. Like most of thinking skills, critical thinking is a wide-ranging construct that involves reflective thinking. Put differently, when individuals think critically, they think reflectively, too. What is more, reflective thinking has a significant association with metacognitive thinking. Metacognition is that the people examine the process of their thinking and recognize their behavior. In reflective thinking, people think about their thinking and learning styles.

Baleghizadeh and Javidanmehr (2014) aimed to explore whether EFL teachers'

reflectivity and its main sub-scales can predict teachers' sense of self-efficacy. Findings of multiple regression analysis revealed the predictive power of reflectivity and its sub-scales on teachers' self-efficacy. It also showed that the correlation between these two components was relatively high. Furthermore, critical and ethical issues from sub-categories of reflectivity had the highest contribution in this prediction.

In another related study, Bilač and Miljković (2017) examined the effect of reflective practice on job satisfaction in the field of classroom management. The participants of the research were selected from lower elementary teachers. The results did not represent an impact for reflective practice on job satisfaction of lower elementary teachers. In another study, Mirzaei, Aliah Phang, and Kashefi (2014) attempted to specify the ways to improve teachers' reflective thinking skills. They compared reflective thinking skills between inexperienced and experienced teachers. As a result, they introduced some reflective thinking tools to improve teachers' reflective thinking skills.

Noormohammadi (2014) aimed to explore the association between EFL teachers' reflection and their efficacy as well as the relationship between different components of self-efficacy and reflection through a new English language teacher reflective inventory. The findings revealed that there was a significant association between teachers' self-efficacy and reflective practice; also self-efficacy had significant relationship with reflection elements. Further, they showed that reflection enhances job satisfaction and helps teachers to improve their confidence in following the policy of school or institutes. Choy, Yim and Tan (2017) conducted a study to examine a reflective thinking model among teachers using 1070 pre-school teachers in Malaysia. The results showed that reflective thinking results in teachers' self-efficacy, instructional awareness, and evaluation.

Job Satisfaction

Job Satisfaction is a psychological and multifaceted response to employee occupation, which is influenced by important demographic, psychological and contextual factors (Crossman & Harri, 2006). According to Aziri (2011), "The term job satisfactions refers to the attitudes and feelings people have about their work. Positive and favorable attitudes towards the job indicate job satisfaction. Negative and unfavorable attitudes towards the job indicate job dissatisfaction". (p.78).

In their study, Mitchell, Holtom, and Lee (2001) noted that job satisfaction is more challenging for educational systems due to a number of factors. The education policy makers need to help strategic initiatives to satisfy the current teachers, which is now essential ever in order to improve the maintenance rate and reduce the costs associated with high turnover. Voluntary turnover is a major problem for some schools. Today, educational systems are rapidly developing and changing and it is the responsibility of the manager to cope with these changes so that it can make the organization profitable. To be able to do that, it is important to satisfy the teachers at school because they are the ones driving the school forward.

With regard to empirical studies, Aziri (2011) found that there is no strong association between people's performance and their job satisfaction. Their meta-analysis of related research works put .17 best estimate relationship between people's performance and their job satisfaction. Aziri stated that an individual with a high job satisfaction level does not necessarily have a higher degree of performance. Another research by Rose, Kumar, and Pak, (2011), attempted to observe the relationship between job performance and job satisfaction in Malaysia. The findings revealed that organizational learning is positively dependent on organizational commitment, work performance, and job satisfaction. Raza, Rafique, Hussain, Ali, Mohsin, and Shah (2015) also

conducted a research with the purpose of estimating the relationship between people's performance and their job satisfaction, which indicated that there was a significant correlation between people's performance and their job satisfaction. In another study, Nigama, Selvabaskar, Surulivel, Alamelu, and Joice (2018) conducted a research aimed at evaluating job satisfaction between private and public school teachers. Findings of the comparison of job satisfaction between these school teachers showed that there was no significant difference in the degree of satisfaction of teachers regardless of gender. The findings of this research also revealed that some of the ways such as, organizational support, freedom at workplace, high appreciation, and rewards can improve teachers' job satisfaction.

Finally, different attempts have been made to operationalize job satisfaction. In using a comprehensive scoring method, researchers have different ideas on the job satisfaction structure. A method is commonly used by the Minnesota Satisfaction Questionnaire (MSQ), which classifies Job satisfaction into four main parts: the work, interpersonal relationships in the job, development, and reward (Weiss, Dawis & England, 1967).

Purpose of the Study

As mentioned previously, this study was an attempt to be innovative in two respects. First, it is going to consider three above-mentioned variables, namely teachers' self-efficacy, reflective thinking, and job satisfaction, collectively in a single research. Second, it will employ structural equation modeling for the data analysis in order to provide a more comprehensive profile of how these three determining aspects of EFL teacher characteristics are associated with each other. More specifically, the current research is an attempt to examine the association and interaction among three determining aspects of EFL teachers' behavior, namely their self-efficacy, reflective thinking, and job satisfaction. To do so, a detailed model (Figure 1) was proposed to show the probable association between these teacher characteristics.

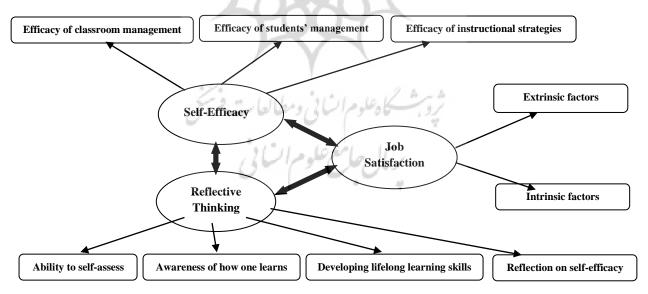


Figure 1. The hypothesized model of the relationships between the study variables

Research Questions

In order to achieve the above-stated research purposes, the following research questions were posed:

Q1.Is there any statistically significant association between EFL teachers' self-efficacy and their

job satisfaction?

Q2.Is there any statistically significant association between EFL teachers' self-efficacy and their reflective thinking?

Q3.Is there any statistically significant association between EFL teachers' reflective thinking and their job satisfaction?

Method

Context and Participants

The main participants consisted of 212 EFL teachers (131 males and 81 females) working in educational centers (language institutes, schools, and universities) from eight different provinces of Iran. It is necessary to mention that totally 334 questionnaires were distributed among the original pool of the participants. Out of this, 193 copies were sent via email and social networks (mainly Telegram and Whats App) and the remaining 141 copies were distributed in paper. As mentioned above, 212 teachers filled out and returned the questionnaires, which formed the main data for the study. These participants consisted of both experienced as well as novice teachers with their active working years ranging from 5 to 35. They ranged in age from 25 to 65 with most teachers aging between 30 to 40. Upon distributing the questionnaires, all EFL teachers were introduced to the objectives and importance of completing the questionnaires. The confidentiality of the results of the research were also announced to these teachers so that they participated more confidently.

Instrumentation

For data collection, three questionnaires were administered, namely, (1) Teachers' Sense of Efficacy Scale, (2) Reflective Thinking Questionnaire and (3) Job Satisfaction Questionnaire.

Teachers' Sense of Efficacy Scale (TSES)

Teachers' Sense of Efficacy Scale, constructed by Tschannen-Moran and Woolfolk-Hoy (2001), consists of 24 items and is divided into three sub-categories: *Efficacy of classroom management* (8 Items), *efficacy of students' management* (8 Items) and *efficacy of instructional strategies* (8 Items). The participants were required to report their beliefs on a scale of 1 to 9, with 1 meaning "nothing," 3 meaning "very little," 5 meaning – "some influence", 7 meaning – "quite a bit", and 9 meaning – "a great deal". The reliability of the questionnaire, computed via Cronbach alpha, turned out to be .87.

Reflective Thinking Questionnaire (RTQ)

Teachers' reflective thinking questionnaire by Choy and Oo (2012), includes four subscales of reflective thinking: Ability to self-express (12 Items), awareness of how one learns (9 Items), developing lifelong learning skills (9 Items), and belief about self and self-efficacy (3 Items). This questionnaire utilizes a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). Cronbach alpha was applied to estimate the reliability of the test and indicated a reasonable internal consistency among the items (α =.91).

The Minnesota Satisfaction Questionnaire (MSQ)

The Minnesota Satisfaction Questionnaire, constructed by Weiss, Dawis, England and Lofquist (1967) was employed to assess teachers' degree of satisfaction with their job. This measurement scale comprised 20 items and includes two constructs namely *intrinsic satisfaction* with 14 items and *extrinsic satisfaction* comprising 6 items. The respondents are expected to answer on a five-point Likert scale from 1= very dissatisfied to 5= very satisfied. The reliability of the questionnaire turned out to be .89.

Data Collection Procedure

Once the questionnaires were piloted with a group of 26 colleagues, minor modifications were made in the wordings of some items in order to improve their intelligibility. Also, the scores obtained from these participants were fed into SPSS and Cronbach's alpha was computed for the scales (see instruments section above for details) to make sure the scales were sufficiently reliable. It should be mentioned that a group of colleagues in eight different provinces of Iran were contacted and asked to distribute the questionnaires among their own colleagues and ask for their cooperation. As mentioned previously, the questionnaires were delivered to 141 teachers in person and 193 copies were sent via email or social networks (mainly Telegram and Whats App). In total, out of 334 teachers contacted, 212 teachers answered the questionnaires and returned them. These questionnaires were scored and the obtained data were fed into SPSS. It is worth mentioning that the negatively worded items were reverse-coded and the necessary preliminary computations were run to prepare the data for the AMOS and test the hypothesized model afterwards.

Data Analysis

Once the data were collected using three different questionnaires related to the latent variables, SEM analysis was run using SPSS AMOS version 24 to explore these relationships in the path model. The SEM includes two main phases: exploratory factor analysis and confirmatory factor analysis. The exploratory factor analysis is employed to test whether the sub-scales are related to their own latent variables; this includes some statistical procedures such as KMO-Bartlett Test and Correlational Matrix. On the other hand, confirmatory factor analysis aims to validate or confirm the hypothesized model applying goodness of fit indices, and examining all the associations between the latent variables and their sub-scales.

In Accordance with Hoyle and Panter (1995), the following fit indices were employed to estimate the fitness of the hypothesized model: Normal chi-square, Root Mean Squared Error of Approximation (RMSEA), the goodness of-fit-index (GFI), the incremental fit index (IFI), and the comparative fit index (CFI). As Hoyle and Panter pointed out, the values of GFI, IFI, and CFI range from 0 to 1.0, with the values closer to 1.0 commonly representing better fitting models. Additionally, the loading factors indicate the high correlation between each latent variable and its sub-scales. In order to demonstrate model path predictions, two statistical analyses, Spearman bivariate correlations and multiple regression analysis, were conducted.

Results

As noted in the previous section, a number of statistical procedures were used to answer the research questions. Descriptive statistics, correlation matrix, KMO and Bartlett's test, SEM, and multiple regression were employed to serve these purposes. Table 1 represents the descriptive statistics for all the sub-scales of the latent variables.

It can be understood from table 1 that the continuous variables are not normally distributed (Skewness and Kurtosis < 2), for that reason, Spearman bi-variate correlation was applied instead of Pearson product-moment correlation to compute the interrelation between these three variables.

Table 1. Descriptive statistics for all sub-scales of latent variables

Latent Variables	Sub-scales	N	Mean		Skewnes s	Kurtosis
Self-efficacy	1. Efficacy of classroom management	212	4.14	.46	39	68

	2. Efficacy of students' management	212	4.04	.35	.11	1.41
	3. Efficacy of instructional strategies	212	4.21	.43	13	94
	6. Ability to self-assess	212	3.88	.26	27	1.98
Reflective Thinking	7. Awareness of how one learns	212	3.50	.33	.82	2.79
	8. Developing lifelong learning skills	212	3.72	.32	12	67
	9. Reflection on self-	212	4.38	.56	80	.08
	efficacy					
Job	4. Intrinsic factors	212	4.14	.36	36	.24
Satisfaction	5. Extrinsic factors	212	3.98	.49	56	21

Table 2 depicts the correlation matrix of the latent variables and their related sub-scales. As it is clearly demonstrated in table 2, there is a relatively significant correlation among latent variables of the study with the highest correlation between self-efficacy and job satisfaction and their sub-scales. Moreover, not only are all latent variables of the study strongly related to their sub-scales, but some sub-scales are related to other latent variables and sub-scales. As a case in point, self-efficacy is correlated with all the sub-scales of job satisfaction and reflective thinking. Interestingly, there was a higher correlation between self-efficacy and job satisfaction in comparison with the reflective thinking.

Table 2. Correlation matrix for the latent variables and their sub-scales

Variables	Self-efficacy Classroom management	Students' management	Instructional strategies	Reflective thinking	Ability to self-assess	Awareness of how o	Developing lifelo	learning skills Reflection on self-efficacy	Job satisfaction	Intrinsic satisfaction	Extrinsic satisfaction
Self-efficacy	1.0			- 4	. 4						
Classroom management	.86 1.0										
Students' management	.74 .43	1.0									
Instructional strategies	.87 .65	.49	1.0								
Reflective thinking	.58 .41	.55	.42	1.0							
Ability to self-assess	.37 .24	.34	.34	.69	1.0						
Awareness of how one lear			.04	.48	.23	1.0					
Developing lifelong lea skills	rning .45 .43	.20	.44	.63	.42	.26	1.0				
Reflection on self-efficacy	.28 .23	.19	.28	.71	.32	.03	.15	1.0			
Job satisfaction	.64 .60	.49	.51	.41	.24	.09	.32	.34	1.0		
Intrinsic satisfaction	.56 .48	.42	.50	.40	.32	.02	.32	.33	.86	1.0	

Extrinsic satisfaction	.62 .59 .35	.42	.34	.13	.12	.26	.29	.92	60	1.0

Regarding the one by one correlation between sub-scales of the study, it can be observed that the highest correlation is between "efficacy of classroom management" under self-efficacy and "extrinsic factors" under job satisfaction (r=.59). On the other hand, the lowest correlation is between "awareness of how one learns" belonging to reflective thinking and "Intrinsic satisfaction" under Job satisfaction (r=.02). Moreover, all the sub-scales of job satisfaction are significantly and positively correlated with self-efficacy.

In spite of multiple relationships between the latent variables and their sub-scales, simple correlation analysis, due to the measurement errors, cannot be used as a powerful confirmatory measure. To further approve the relationships between variables of the hypothesized model, both the exploratory and confirmatory analyses of SEM were applied.

To achieve this purpose, Bartlett test was used to find out whether all of the sub-scales were correlated within themselves and with their own latent variables. It is necessary to mention that result of the Bartlett test should be significant (p < .5). On the other hand, KMO test was applied to assess the adequacy of the sample. This test combines the correlations and partial correlations to see if each sub-scale sufficiently loads on its related factor. The value of KMO test should be between .5 and .9. A small value for KMO (p < .5) denotes that there is a problem in sampling procedure. Therefore, variables with small values should be removed.

Table 3. KMO and Bartlett's test

Variables			Self-efficacy	Reflective thinking	Job satisfaction
KMO mea	asure of	sampling	.662	.590	.512
Bartlett's	Approx. Square	Chi-	181.100	86.702	97.020
test	Df		3	6	1
	Sig.		.000	.000	.000

As represented in table 3, all of the statistics for KMO measure were greater than .5 indicating the sampling appropriateness. Moreover, confidence level of .00 for Bartlett's test verifies the appropriateness of the factor model for all of the latent variables. In accordance with Jöreskog and Sörbom (1996), the goodness of fit indices for the model was evaluated employing maximum likelihood estimation approach in AMOS version 24.

More specifically, the following fit indices were used to assess the fitness of the hypothesized model: Normal Chi-square ($(\frac{2}{4f})$ < 5), Root Mean Squared Error of Approximation (RMSEA <.05), Root Mean Squared Residual (RMR \geq 0), Goodness-of-Fit Index (GFI >. 9), Adjusted Goodness-of-Fit Index (AGFI >.85), Normal Fit Index or Bentler-Bonett Index (NFI >.90), Comparative Fit Index (CFI >. 90) and Incremental Fit Index (IFI >. 90). The values of GFI, IFI, and CFI range from 0 to 1.0, with values closer to 1.0, according to Hoyle and Panter (1995), generally representing high and better fitting models. Eight criteria used to estimate the fit statistics of the model are represented in table 4.

Table 4. *Structural equation model: fit statistics*

Evaluation	Acceptable level	Current level	Fit statistics

Normal Chi-Square	$\left(\left(\frac{x^2}{df}\right) < 5\right)$	3.6	Accept
Root Mean Squared Error of	RMSEA <.05	.03	Accept
Approximation			_
Root Mean Squared Residual	$RMR \ge 0$.02	Accept
Goodness-of-Fit Index	GFI >. 9	.93	Accept
Adjusted Goodness-of-Fit Index	AGFI >.85	.90	Accept
Normal Fit Index or Bentler-Bonett	NFI >.90	.92	Accept
Index			
Comparative Fit Index	CFI >. 90	.93	Accept
Incremental Fit Index	IFI >. 90	.93	Accept

As represented in table 4, all indices are accepted for the self-efficacy, reflective thinking, and job satisfaction model (Normal Chi-Square = 3.6; RMSEA=.03; RMR =.02; GFI = .93; AGFI =.90; NFI =.92; CFI =.93; IFI =.93).

Figure 2 showed the schematic representation of the modified model, accepted based on the criteria above. This figure also shows the standardized path correlations between the latent variables as well as their sub-scales.

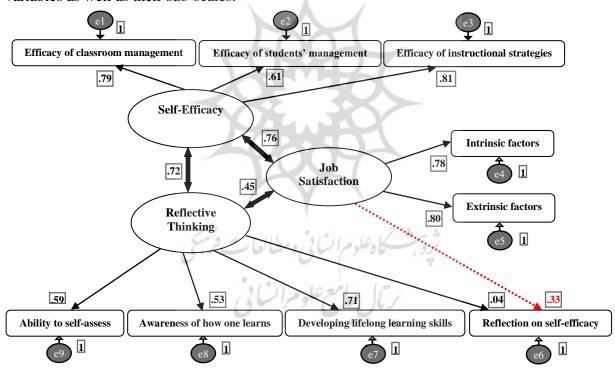


Figure 2. Structural equation modeling in standardized estimates after modification of the hypothesized model

As shown in figure 2, some positive inter-group correlations exist, the highest of which was between self-efficacy and job satisfaction.

The findings of the correlation matrix analysis discussed before, show different bi-variate relationship between the research measures. Therefore, these bi-variate analyses cannot delineate the impact of one measure on another. As a result, multiple regression is required in order to

determine which independent variable accounts for which dependent variable(s).

As it can be seen from table 5, self-efficacy predicts job satisfaction (B=.605, t=10.052, Sig=.000) more strongly than reflective thinking (B=.048, t=.796, Sig=.427). According to independent variables' B and t values, self-efficacy and reflective thinking are positive predictors of job satisfaction whereas self-efficacy has more prediction power in comparison with reflective thinking.

Table 5. *Multiple regression analysis predicting teachers' job satisfaction*

Predictor	В	t	Sig.
(Constant)	1.472	3.600	.000
Self-efficacy	.605	10.052	.000
Reflective thinking	.048	.796	.427

Discussion

Employing structural equation modeling (SEM), the current research aimed to concurrently explore the interrelationships between three latent variables namely, self-efficacy, reflective thinking, and job satisfaction. It is necessary to mention that this study expanded the previous similar studies through exploring the relationship between above mentioned variables simultaneously and applying more accurate and precise analysis techniques.

The first research question intended to explore any association between EFL teachers' self-efficacy and job satisfaction. As it was clearly represented in correlation matrix of latent variables and their sub-scales, there was a rather high positive correlation between self-efficacy and job satisfaction (r=.64). Furthermore, not only these two latent variables but also all their sub-scales were strongly related to each other. On the other hand, SEM standardized estimates revealed that self-efficacy has higher association with job satisfaction (.76). In other words, teachers with higher self-efficacy are expected to be more satisfied with their job. This might be due to the fact that teachers with high job satisfaction employ better instructional strategies, as one of the subscales of self-efficacy, compared to other teachers. They implement alternative teaching and assessment strategies in the classroom to create appropriate challenges for more gifted students. These teachers are also more successful in motivating students with low interest. In a similar study, MirSami and Ebrahimi Ghavam (2007) stated that people with higher level of self-efficacy have more job satisfaction. MirSami and Ebrahimi Ghavam also claimed that self-efficacy can also increase ability of people to do things and make people more resistant to job stress.

The second research question aimed to explore the statistical association among EFL teachers' self-efficacy and reflective thinking. The correlation matrix of all latent variables and their sub-scales represented a statistically significant and positive association between EFL teachers' self-efficacy and their reflective thinking (.58). Additionally, findings of SEM in standardized estimates confirmed the results of correlation matrix in which there was a high correlation between EFL teachers' self-efficacy and their reflective thinking (.72). Moreover, not only these two latent variables were strongly correlated with each other, but all of their sub-scales were associated. So, it would be wise to assume that teachers with high degree of self-efficacy would exercise more reflection on professional career. The findings of this research are in parallel with the results obtained by Babaei and Abednia (2016), who argued that there is a significant association between the teachers' reflectiveness and self-efficacy. SEM results showed that most of the sub-scales of both variables were positively correlated. In another related study, Rahimi and Weisi (2018) stated that there was a significant relationship between people' self-efficacy and

reflective practice. These results further represented that self-efficacy significantly correlated with all sub-scales of reflective practice. Moreover, reflective practice significantly correlated with all sub-scales of self-efficacy. Similar findings have been reported in previously conducted researches (e.g., Baleghizadeh & Javidanmehr, 2014; Choy, Yim & Tan, 2017; Gkolia, Belia & Koustelios, 2014; Noormohammadi, 2014; Singh, Doyle, Kennedy, Ludlow & Rose, 2000). Consequently, it could be concluded that teachers with high degree of reflective thinking could establish a better classroom management, gauge students' understanding of what they have taught and provide appropriate challenges for more competent students.

The third research question targeted the association between EFL teachers'reflective thinking and job satisfaction. Concerning the results of correlation matrix of all latent variables and their sub-scales, EFL teachers'reflective thinking was found to be positively correlated with their job satisfaction. Further, the achieved results of the correlation matrix were confirmed by the structural equation modeling in standardized estimates (r=.45). Although the number obtained for the association between job satisfaction and reflective thinking has been the lowest in this study, it can still be claimed that this relationship is positive and statistically significant. It means that those teachers who are satisfied with their job, are more frequently enjoy higher degrees of reflective thinking. As confirmed by SEM in standardized estimates, job satisfaction affected one of the sub-scales of the reflective thinking namely, "reflection on self-efficacy" (.33). One possible reason for these results could be that those teachers who are satisfied with their job, tend to develop lifelong learning skills more than unsatisfied teachers. It could also be assumed that these teachers try to reflect on what they do in their classes so that this can boost the strategies they use with more effective and new individuals. On the other hand, satisfied teachers prefer to follow orders rather than being innovative because they don't want to get in trouble and try to explore connectivity between what and how they teach with their life experiences. According to the results, those teachers who are more satisfied with their job always assess the strengths and weaknesses of their teaching and have a higher degree of self-assessment and selfefficacy. The results are in contrast with Bilač and Miljković (2017), whose findings did not represent any effect for reflective practice on job satisfaction of lower elementary teachers.

Conclusions

Teachers have a central role in the performance and success of educational systems and different psychological and sociological factors can contribute to their success or failure. Accordingly, this study aimed to explore three important factors influencing the success and performance of EFL teachers. In particular, it aimed to explore the interaction and relationship between three determining aspects of EFL teachers' behavior, namely self-efficacy, reflective thinking, and job satisfaction.

The results obtained represented that there is a significant and positive association among Iranian EFL teachers' self-efficacy, reflective thinking, and job satisfaction. These results highlighted the significant role these variables play in the teachers' job satisfaction. In other words, to develop teachers' job satisfaction, it is necessary to take their self-efficacy and reflective thinking into account.

Also, according to the results, self-efficacy has the highest relationship with job satisfaction as compared to reflective thinking. Put differently, self-efficacy predicted job satisfaction more strongly than reflective thinking. As a result, it could be concluded that those teachers who have a high degree of self-efficacy are more satisfied with their job.

Additionally, the results revealed that although in the hypothesized model of the study, it was predicted that reflective thinking can affect their job satisfaction, the findings proposed that

this effect can be extremely low. This means that those EFL teachers who applied reflective thinking in their job, are more likely to be slightly satisfied with their job. It was also observed that job satisfaction has an effect on "reflection on self-efficacy", as one of the sub-scales of reflective thinking. So, it can be concluded that reflective thinking of EFL teachers can affect their job satisfaction though in a very small scale.

Language teaching stakeholders or investors, such as educational policy makers, teachers, and researchers might benefit from the results of the present research. Additionally, this research can help administrators and educators to better understand the psychological and sociological aspects of EFL teachers and take measures to remove barriers in this regard and foster the achievement of educational objectives.

Other researchers can consider additional latent variables to enrich the results of the present study. Future studies may revise the model's endogenous variable selection and then explore how self-efficacy, reflective thinking, and job satisfaction might affect these endogenous variables. Additionally, it would be desirable to continuously study the model results and model fit using the structural equation modeling approach with different groups of teachers. For example, model testing might be more informative with teachers of different disciplines or in different fields of studies. Further studies may also replicate the comparison process of this study under different conditions such as teachers of different institutions. Such comparisons can add new ideas and insights to the professional development of the EFL teachers.

References

Aziri, B. (2011). Job Satisfaction: A literature Review. Management Research & Practice, 3(4), 77-86.

Babaei, M., & Abednia, A. (2016). Reflective Teaching and Self-Efficacy Beliefs: Exploring Relationships in the Context of Teaching EFL in Iran. Australian Journal of Teacher Education, 41(9), 1-27. Retrieved from http://dx.doi.org/10.14221/ajte.2016v41n9.1

Baleghizadeh, S., & Javidanmehr, Z. (2014). Exploring EFL Teachers' Reflectivity and their Sense of Self-efficacy. e-*International Journal of Educational Research*. 5(3), 19-38. DOI: http://dx.doi.org/10.17507/jltr.0802.28

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies*. 1-45. New York, NY: Cambridge university press.

Bandura, A. (2005). Guide for Constructing Self-Efficacy Scales. In: T. Urdan & F. Pajares (Eds). *Self-Efficacy Beliefs of Adolescents*. IAP; 307-337.

Bandura, A., & Locke, E. A. (2003). Negative Self-Efficacy and Goal Effects Revisited. Journal of Applied Psychology, 88, pp. 87-99. https://doi.org/10.1037/0021-9010.88.1.87

Bilač, S., & Miljković, D. (2017). Reflective Practice and Job Satisfaction in Classroom Management and Discipline. Croatian Journal of Education. 19(3), 13-27. https://doi.org/10.15516/cje.v19i0.2698.

Boody, R. M. (2008). Teacher reflection as teacher change, and teacher change as moral response. *Education*, 128(3), 498-506.

Brosh, H. (1996). Perceived characteristics of the effective language teacher. *Foreign Language Annals*, 29, 125-138. Https://dx.doi.org/10.1111/j.1944-9720.1996.tb02322.x

Choy, S. Ch. & Oo, P. C. (2012). Reflective thinking and teaching practices: a precursor for incorporating critical thinking into the classroom? *International Journal of Instruction*, 5(1), 167-182.

Choy, S. Ch., Yim, J. S., & Tan, P. L. (2017). Reflective Thinking Among Pre-service

Teachers: A Malaysian Perspective. *Issues in Educational Research*, 27(2), 234-251. Https://www.iier.org.au/iier27/choy.HTML

Crossman, A. & Harris, P. (2006) 'Job Satisfaction of Secondary School Teachers', Educational Management Administration & Leadership, 34(1), 29-46.

Demirel, M., Derman, I., & Karagedik, E. (2015). A Study on the Relationship between Reflective Thinking Skills towards Problem Solving and Attitudes towards Mathematics. Procedia - Social and Behavioral Sciences. 197, 2086-2096. 10.1016/j.sbspro.2015.07.326.

Gkolia, A., Belias, D., & Koustelios, A. (2014). Teacher's job satisfaction and self-efficacy: A review. European Scientific Journal, ESJ, 10(22), 18-46.

Hoyle, R. H., & Panter, A. T. (1995). Writing about Structural Equation Models. In R. H. Hoyle (Ed.), Structural equation modeling: Concepts, issues, and applications. 158-176. Thousand Oaks, CA: Sage.

Jöreskog, K. G., & Sörbom, D. (1996). LISREL 8: User's reference guide. Chicago: Scientific Software International.

Koehler, J. R. (2006). The Measurement of Teacher Efficacy. A Poster Presented at the Harvard Graduate School of Education Student Research Conference and International Forum; Department of Education. Harvard Graduate School of Education. Cambridge, United States. [cited 2014 Jun 9]. Available from: http://www.gse.harvard.edu/news-impact/tag/student-research-conference/.

MirSami, M. & Ebrahimi Ghavam, S. (2007). A Study on the relationship between self-efficiency, Social support and exam anxiety and the psychological health of the Men and Women Students in Allameh Tabatabaei University. *Quarterly Educational Psychology*; 3(7), 73-92.

Mirzaei, F., Aliah Phang, F., & Kashefi, H. (2014). Assessing and Improving Reflective Thinking of Experienced and Inexperienced Teachers. Procedia-Social and Behavioral Sciences. 141, 633-639. Available online at www.sciencedirect.com. https://doi.org/10.1016/j.sbspro.2014.05.111.

Mitchell, T.R., Holtom, B.C., Lee, T.W., et al. (2001) Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover. Academy of Management Journal, 44, 1102-1121. Https://dx.doi.org/10.2307/3069391

Nigama, K., Selvabaskar, S., Surulivel, S. T., Alamelu, R., & Joice, U. (2018). Job Satisfaction among School Teachers. *International Journal of Pure and Applied Mathematics*. 119 (7), 2645-2655. URL: http://www.ijpam.eu

Noormohammadi, S. (2014). Teacher Reflection and its Relation to Teacher Efficacy and Autonomy. Procedia-Social and Behavioral Sciences. 98, 1380-1389. Available online at www.sciencedirect.com. DOI: 10.1016/j.sbspro.2014.03.556

Odanga, S. J. O., Raburu, P. A., & Aloka, P. G. O. (2018). Strategies for Enhancing Teachers' Self-efficacy in Secondary Schools. *Asian Research Journal of Arts & Social Sciences*. *6*(2), 1-13, Complete Peer review History: http://www.sciencedomain.org/review-history/23683

Rahimi, M., & Weisi, H. (2018). Reflective practice, self-efficacy and research practice of EFL teachers: Examining possible relationships [online]. Issues in Educational Research, 28(3), 756-780. Availability: https://search.informit.com.au

Raza, M. Y., Rafique, T., Hussain, M. M., Ali, H., Mohsin, M., & Shah, T. S. (2015). The Impact of Working Relationship Quality on Job Satisfaction and Sales Person Performance: An Adaptive Selling Behaviour. Asia-Pacific Journal of Management Research and Innovation, 11(1), 1-8.

Rose, R. C., Kumar, N., & Pak, O. G. (2011). The effect of organizational learning on organizational commitment, job satisfaction and work performance. Journal of Applied Business Research (JABR), 25(6), 55-66.

Simatwa, E. M. W. (2011). Job Satisfaction and Dissatisfaction among Teachers in Kenya. Kenya Journal of Education Planning Economics and Management; 3(3), 114-123.

Singh, A., Doyle, C., Kennedy, W., Ludlow, K., & Rose, A. (2000). *Teacher training: A reflective perspective*. New Delhi.

Spalding, E. & Wilson, A. (2002). Demystifying reflection: a study of pedagogical strategies that encourage reflective journal writing. Teachers College Record, 104 (7), 1393-1421

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teacher Education and Practice*, 17(3), 783-805.

Ünver, G. (2003). Yansıtıcı Düşünme. [Relective Thinking]. Ankara: Pegema Printing House.

Weiss, R., Dawis, G., England, G., & Lofquist, L. (1967). Minnesota studies in vocational rehabilitation 22: Manual for the Minnesota Satisfaction Questionnaire. Minneapolis: University of Minnesota.

Yücel, I. (2012) Examining the Relationships among Job Satisfaction, Organizational Commitment, and Turnover Intention: An Empirical Study. International *Journal of Business and Management*, 7, 44-58. https://doi.org/10.5539/ ijbm.v7n20p44

