



Fluid Intelligence and Self-Efficacy in Iranian Female and Male EFL Teachers' Burnout: Possible Relationships and Differences

Seyedeh Maryam Mousavi¹, Ali Amirghassemi^{2*}, and Mahnaz Saeidi³

PhD Candidate in TEFL, Tabriz Branch, Islamic Azad University, Tabriz, Iran

ORCID:0000-0001-5454-6867

Email: smaryammousavi@yahoo.com

²*Corresponding author: Assistant Professor of TEFL, English Department, Marand Branch, Islamic Azad University, Marand, Iran, ORCID:0000-0002-8043-9608*

Email:amirqasemi@marandiau.ac.ir

³*Professor of TEFL, English Department, Tabriz Branch, Islamic Azad University, Tabriz, Iran, ORCID: 0000-0002-1034-9404*

Email:m_saeidi@iaut.ac.ir

Abstract

Teachers' psycho-affective state is important to the quality of their classroom performance. Self-efficacy and fluid intelligence are thought of as being protective in adverse conditions. The purpose of this study was to investigate the correlation among Iranian EFL teachers' self-efficacy, fluid intelligence, and burnout. To this end, a quantitative research was conducted, and 140 EFL teachers within the 20-40 age range in Mashhad, Iran, were selected through convenience sampling. They filled up three questionnaires of RAPM (Raven's Advanced Progressive Matrices), OSTES (Ohio State Teacher Efficacy Scale), and MBI-ES (Maslach Burnout Inventory-Educator's Survey) for fluid intelligence, self-efficacy, and burnout, respectively. Pearson correlation coefficient, Multiple Regression, and MANOVA were used for analyzing the data. The results showed a significant positive relationship between the male and female teachers' self-efficacy and fluid intelligence. Findings also revealed a significant negative correlation between the male and female teachers' self-efficacy and burnout. Moreover, the correlation between fluid intelligence and burnout for both male and female teachers was negative. It was also found that gender is not a determining factor in Iranian EFL teachers' burnout. The study finds it essential for educational policymakers in Iran to devise programs to enhance language teachers' self-efficacy and fluid intelligence as potential protectors against burnout.

Keywords: burnout, fluid intelligence, gender, Iranian EFL teachers, self-efficacy

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Introduction

Teaching is one of the most demanding and boring jobs in the world (Coombe, 2008). It involves various stressors such as teachers' dealing with widely varying demands of large numbers of students (Roeser et al., 2012), contention between teachers and students, teachers and parents or colleagues (Unterbrink et al., 2012), disruptive student behavior and discipline problems, restricted time, work overload, and absence of inspiration or attention on the part of students (Skaalvik & Skaalvik, 2017). Borg (2006) argues that foreign language teachers are unique within the world of teaching, and according to Acheson et al. (2016), L2 teachers suffer a higher attrition rate than other teachers. As Byram (2013) and Cook (2013) believe, the EFL context makes teaching challenging to English language teachers, which can, in return, affect the quality of teaching and cause them to face burnout. Burnout is a psychological condition that is characterized by emotional and mental exhaustion due to prolonged stressors on the job (Maslach, 1999).

Burnout is a determining factor in a foreign language teacher's performance. As Heidari and Gorjian (2017) found, low-burnout EFL teachers teach more effectively than high-burnout ones. Similarly, Genç (2016) argues that the emotional and financial costs are very high when burnout is ignored or dismissed for a long time. Hakanen et al. (2006) propose that to better understand teacher burnout, it is vital to find the relationship between burnout and various biological, psychological, and social variables.

Within affective domain, self-efficacy (SE) is thought of as an important coping trait. It is defined as people's beliefs about their capacity to accomplish an achievement level (Tschannen-Moran et al., 1998). Low SE could be a potential source of stress (Colangelo, 2004) and may cause teachers to come up with incomplete plans and show inappropriate behavior (Azeem, 2010). Some studies show that teachers who have higher self-efficacy demonstrate more resilience to the difficulties of teaching (Wang et al., 2015).

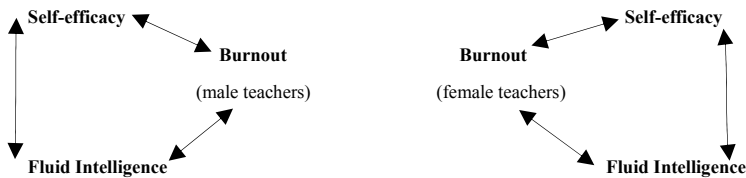
Within cognitive domain, intelligence figures prominently in controlling one's thoughts and emotions. It can thus provide another major impetus for exploring the contributors to teacher burnout. Gottfredson (1997) regards intelligence as a unique ability that no other abilities have been shown to produce such a powerful and profound effect. A version of intelligence that helps people process and solve on-the-spot problems dynamically and flexibly is referred to as fluid intelligence (FI). Cattell (1971) defines it as the perception of a complexity of relationships that individuals create when they do not have any recourse to answers to such intricate issues formerly stored in memory. Thus, FI involves adjustable coping strategies and adaptive conduct in the face of changing environment (Johnson, 2013). Some research studies have addressed how individuals draw upon their FIs when being engaged in unfavorable situations in their educational, occupational, and social life (e.g., Colom & Flores-Mendoza, 2007; Gottfredson & Saklofske, 2009).

Given the importance of SE and FI in controlling one's emotional and cognitive states, the present study attempts to contribute to research on teacher burnout by addressing the relationships among Iranian male and female foreign

language teachers' SE, FI, and burnout. The objective is to find out whether SE and FI, known to be protective abilities, can significantly help teachers relieve their burnout, and whether such a relationship can be moderated by their gender. Figure 1 gives a graphical representation of the interrelationships among the variables involved in the study.

Figure 1

The Model of Relationships Among the Variables



For the purposes of the study, the following research questions (RQs) are posed:

- 1) Is there a significant relationship between FI and SE of male and female Iranian EFL teachers?
- 2) Is there a significant relationship between FI and burnout of male and female Iranian EFL teachers?
- 3) Is there a significant relationship between SE and burnout of male and female Iranian EFL teachers?
- 4) Do SE and FI significantly predict burnout for male and female teachers?
- 5) Is there a statistically significant difference between Iranian male and female EFL teachers in SE, FI, and burnout?

Literature Review

Burnout is a potential threat to those who deal with vital aspects of people's lives such as health and education, and, for those who are not sufficiently energetic and resourceful, it may lead to sad moods, poor performance, fatigue, burnout, and personality disorders, making them end up with illness and early retirement (Bakker & Schaufeli, 2000). Mashhady et al. (2012) believe that teacher burnout hits hard those who fail to efficiently draw upon the emotional and cognitive resources to meet the requirements of the profession. As Marek et al. (2017) assume, if teacher burnout is not recognized and controlled in time, it leads to chronic anxiety and physical problems.

In 1981, Maslach and Jackson proposed an empirically-developed three-dimensional model of burnout, which encompassed emotional exhaustion (EE),

depersonalization (DP), and reduced personal accomplishment (RPA). This model of burnout has acquired popular acceptance (Chan, 2007) and served as the "gold standard" in investigating and measuring burnout (Schutte et al., 2000, p.53). However, investigating the distinctive predictors of burnout is still ongoing. In 2005, Maslach and Leiter identified organizational, social, and personal sources contributing to burnout. These sources have been addressed by various studies (e.g., Skaalvik & Skaalvik, 2011). Chang (2009) added transactional sources of burnout involving interactions between individual traits and organizational factors. The interrelationships among teacher characteristics (e.g., self-efficacy, attitudes, and beliefs) and organizational variables have gained popularity by opening new horizons for research on burnout in education (Mahmoody-Shahreabaky, 2019).

Among affective traits, SE is a vital resource that affects a person's reaction or performance when faced with environmental problems (Bandura, 2012). Paunonen and Hong (2010) and Jongen et al. (2015) showed that SE and cognitive functioning mutually affect each other; that is, high SE could lead to better cognitive performance and even help healing of some mental disorders, and cognitive state influences one's perception of his / her capabilities. In the teaching context, Saleem and Shah (2011) showed that SE could play a moderating role in controlling stress, which, in turn, might lead to teachers' emotional exhaustion. Motallebzadeh et al. (2014) found a negative relationship between teachers' SE and burnout, with age and gender having a moderating effect on burnout. Atmaca's (2017) study, too, demonstrated that teachers with high levels of SE are more resistant to burnout. The study found no effect of gender on teacher SE but on teacher burnout, with male teachers suffering from burnout more than female ones. In a comparative research, Seifalian and Derakhshan (2018) investigated the relationship between Iranian teachers' self-efficacy and burnout in different academic disciplines. They showed a significant correlation between the self-efficacy and burnout of teachers whose majors were EFL. However, such correlation was not significant for the teachers whose majors were not English. Their findings illuminate the concepts of self-efficacy and major as possible contributors to teachers' burnout, which can, in turn, influence their performance in the class. Ghasemzadeh et al. (2019) found teacher SE to be a stronger predictor of burnout than teacher reflection. Buric and Kim (2020) reported that teachers having positive perceptions of their efficacy tend to build high expectations and ambitious goals for themselves and to be more concerned with student progress than covering the syllabus.

Regarding the cognitive realm, intelligence and problem solving ability are of salient importance. Different scholars have proposed different models of intelligence; for example, Spearman (1904-1927) thinks of intelligence as one general ability (g), which refers to the ability to gain knowledge and use it for solving any problems and adapting to the world (Woolfolk et al., 2003), and Gardner (1998) sees it as several intellectual abilities. Raymond Cattell (1963) conceptualizes a dichotomous theory of fluid intelligence (FI) - crystallized intelligence (CI) of human cognitive ability, referring to FI as abstract thinking and

deliberate use of the mental process to decode and solve any new problems. Cattell (1987) nominates the ability to reason as fluid intelligence because it has the “fluid” quality that can be directed to almost any problem and is not related to any special habits or specific sensory-motor area. Schneider and McGrew (2012) describe FI as deliberate attention to solve the problems which cannot be performed by trusting solely on formerly learned habits and schemas. Individuals use FI when confronted with a proportionally new task that cannot be done automatically (e.g., forming and recognizing concepts, extrapolating, problem-solving, or transforming information). Human FI exists from birth and is not affected by learned knowledge (Sternberg, 1985); however, it does not remain stable and often begins to diminish around the age of 40 (Kaufman & Horn, 1996). Kvist and Gustafsson (2008) have reported a correlation coefficient of .83 between FI and general intelligence (g). CI, on the other hand, is an ability that is related or tied to a string of special areas (Cattell, 1987). He (1987) defines it as a frozen ability in comparison with what was once a fluid ability. CI is obtained knowledge and skills by means of experience and education, and is specific to special parts and domains such as knowledge of history or mathematical skills (Dornyei, 2005).

The effect of FI on burnout and whether more intelligent people can better cope with it is empirically under-researched. Maroney (2005) proposed that those who do not perceive themselves as effective problem-solvers may be more vulnerable to affective disturbances. Khezerlou (2013) found that problem-solving was the dominant dimension in predicting DP and RPA parts of Iranian EFL teachers’ burnout. Deligkaris et al. (2014) found some relationship between burnout and mental traits of attention and memory. Liu et al. (2016) found a correlation between FI and neural mechanisms of time-bound conflict adaptation (i.e., involving faster response to stimuli).

Although a number of studies have examined the relationship between FI and different language learning traits (e.g., Ebrahimpur et al., 2017; Khodadady & Tafaghodi, 2013; Motallebzadeh & Tabatabaee, 2016), the relationships between Iranian EFL teachers’ SE, FI, and burnout with respect to their gender has hardly been explored. The impacts of gender on teachers’ cognitive and emotional states have been addressed by a number of researchers, but conflicting results have been yielded. For example, Kirilmaz et al. (2020) found no significant differences between male and female teachers in burnout, while Atmaca (2017) showed male teachers to experience higher levels of burnout than female teachers. Maroofi and Ghaemi (2016) demonstrated that gender and experience can significantly predict teacher burnout.

Iranian L2 teachers are increasingly experiencing burnout due to psychological, organizational, and social problems (Roohani & Dayeri, 2019). Identifying the origins of teacher burnout and suggesting effective coping strategies have been the concern of many researchers and teachers (Schaufeli et al., 2009). This study is an attempt to find out how much of variance in Iranian EFL teachers’ burnout is accounted for by their SE and FI, and whether gender can moderate such a relationship.

Method

Participants

The participants were 140 EFL teachers who were selected from three universities (Mashhad Azad University, Ferdowsi State University of Mashhad, and Tabaran University), four language teaching Institutes (Hafez, Jihad Daneshgahi, Safir, Sama, and Mahan), and three high schools (Kanoon-e Elm, Shahed, and Sama) in Mashhad, Iran. Non-probability convenience sampling was employed to select the participants. Female teachers made up 58.6% of the participants, and male teachers constituted 41.4%. The age range of the participants varied between 20 and 40 years. Since FI tends to decline with age (after 35), thus affecting one's cognitive and affective states (Kaufman & Horn, 1996), the teachers involved in the study were selected from the EFL teachers within the 20-40 age range (See Appendix for detailed demographic information of the participants). The participants were informed about the purpose of the study and all filled in the informed consent forms.

Instrumentation

To gather the required data, the following instruments were used:

To measure the participant teachers' SE, Tschannen-Moran and Woolfolk Hoy's (2001) Ohio State Teacher Efficacy Scale (OSTES) was used. The scale consists of 24 items divided into three 8-item categories measuring teachers' confidence in classroom management, instructional strategies, and student engagement. This questionnaire is a 0-9 Likert scale (0 = *Nothing*, 9 = *A great deal*). The internal consistency of the scale was estimated using the Cronbach alpha, which yielded a reliability coefficient of 0.87.

To determine the teachers' burnout level, Maslach Burnout Inventory-Educator's Survey (Maslach & Jackson, 1986; Maslach et al., 1997) was employed. It consists of 22-items addressing three constructs: Depersonalization (DP), Personal Accomplishment (PA), and Emotional Exhaustion (EE). The instrument enjoys high levels of validity and reliability as estimated by a number of studies (e.g., Akbari & Tavassoli, 2011).

To measure the participants' FI, Raven's (1962) Advanced Progressive Matrices (RAPM) was used. This instrument requires the identification of the correct shape in a pictorial pattern. The items get increasingly difficult and the test taker should complete the test in a limited time. The test needs quick and efficient manipulation of mental resources, especially attention and working memory (Jastrzębski et al., 2018). The advanced form of the matrices contains 48 pictorial items presented in two parts. The first part, which includes 12 items, is not obligatory and usually serves as a warm-up. The second (or primary) part comprises 36 items that become more difficult as progress is made through them. These items are appropriate for adults and adolescents of above-average intelligence. The time

limit for the completion of this part is 45 minutes. To estimate the instrument's reliability, the Cronbach alpha coefficient was calculated, and a value of .89 was obtained

Procedure

The administrations of the universities, schools, and institutions helped the researchers to contact their English teachers via the Internet through social networks such as WhatsApp and Telegram. The researchers sent a request note to the teacher's groups asking for cooperation. One hundred and sixty English teachers expressed their willingness to cooperate. The participants were first to respond to a bio-data questionnaire that elicited their demographic information. Then, the main instruments (FI test and SE and burnout questionnaires) were sent to them electronically. A pilot study was conducted with a sample of 30 EFL teachers to estimate the reliability of the instruments.

Data Analysis

Data analysis was carried out using the SPSS software (Version 21). To examine the relationships between the independent variables (the teachers' SE and FI) and the dependent variable (burnout), the Pearson Product-Moment Correlation was used. To find out how well the independent variables can predict the dependent variable (i.e., to what extent teachers' burnout is dependent on their SE and FI), Multiple Linear Regression was run. Finally, to examine whether the male and female teachers differ in SE, FI and burnout, Multivariate Analysis of Variance (MANOVA) was employed.

Results

A correlational research method was employed to determine the relationships among the teachers' SE, FI, and burnout. The data were subjected to the One-Sample K-S Test for checking the normality assumption. As Table 1 shows, the distributions of scores for all the measures were normal, thus allowing for the application of the Pearson Correlation to find the probable relationships among the variables.

Table 1

Tests of Normality of Scores for FI, SE, and Burnout Instruments

	Fluid intelligence	Burnout	Self-efficacy
N	140	140	140
Kolmogorov-Smirnov Z	0.965	0.988	0.720
Asymp. Sig. (2-tailed)	0.309	0.283	0.678

Examining RQ1: *Is there a significant relationship between the FI and SE of male and female Iranian EFL teachers?*

First, the linearity assumption for using Pearson correlation was checked by inspecting the scatterplot of the relationship between the two variables for both male and female teachers (Figure 2). The Pearson correlation revealed a significant relationship between SE and FI of male teachers ($r = 0.322$; $n = 58$; $p = 0.014$) and those of female teachers ($r = 0.224$, $n = 82$, $p = 0.043$) (Table 2).

Figure 2

Scatterplots for the Relationships Between SE and FI for Males and Females

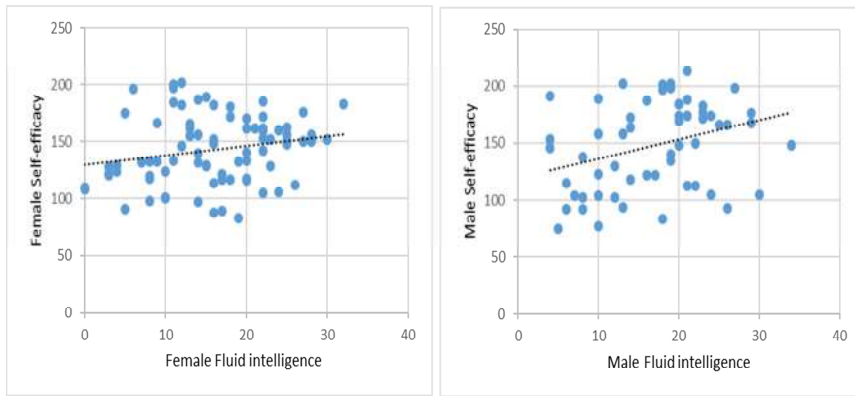


Table 2

Pearson Correlation for Males and Females' Scores on FI and SE

Gender		Self-efficacy	
Female	Fluid intelligence	Pearson Correlation	0.224*
		Sig. (2-tailed)	0.043
		N	82
Male	Fluid intelligence	Pearson Correlation	0.322*
		Sig. (2-tailed)	0.014
		N	58

Examining RQ2: *Is there a significant relationship between FI and burnout of male and female Iranian EFL teachers?*

Given that the linearity assumption was met for the variables of FI and burnout (Figure 3), the Pearson Correlation demonstrated a significant negative relationship between FI and burnout of both female teachers ($r = -.228$, $n = 82$, $p = .039$) and male ones ($r = -.304$, $n = 58$, $p = .020$) (Table 3)

Figure 3

Scatterplots for the Relationship Between the Teachers' FI and Burnout

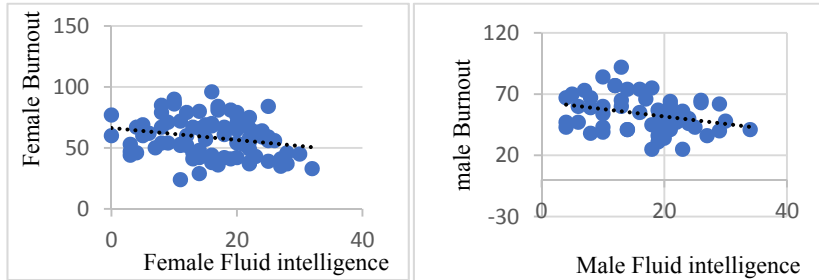


Table 3

Pearson Correlation for Male and Female Teachers' Scores on FI and Burnout

Gender		Burnout	
Female	Fluid intelligence	Pearson Correlation	-.228*
		Sig. (2-tailed)	.039
		N	82
Male	Fluid intelligence	Pearson Correlation	-.304*
		Sig. (2-tailed)	.020
		N	58

Examining RQ3: *Is there a significant relationship between SE and burnout of male and female Iranian EFL teachers?*

The linearity assumption was also met for the relationship between the teachers' SE and burnout, allowing for running the Pearson correlation (Figure 4). The analysis indicated a significant negative correlation between the SE and burnout of both female teachers ($r = -0.415$, $n = 82$, $p = 0.001$) and male teachers ($r = -0.588$, $n = 58$, $p = 0.020$) (Table 4).

Figure 4

Scatterplots for the Relationship Between the Teachers' SE and Burnout

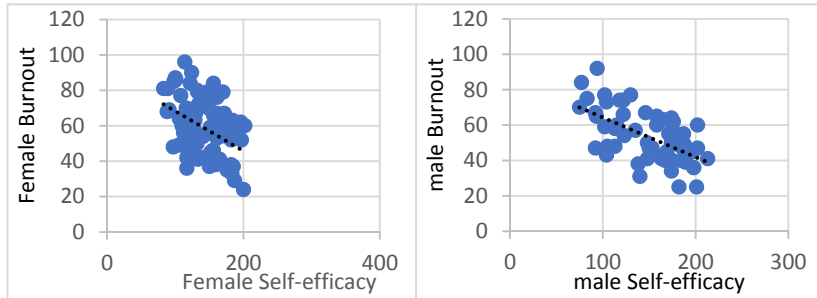


Table 4

Pearson Correlation for Male and Female Teachers' Scores on SE and Burnout

Gender		Burnout	
Female	Self-efficacy	Pearson Correlation	-0.415**
		Sig. (2-tailed)	0.000
		N	82
Male	Self-efficacy	Pearson Correlation	-0.588*
		Sig. (2-tailed)	0.020
		N	58

Examining RQ 4: *Do SE and FI significantly predict burnout for male and female teachers?*

Multiple regression was applied to determine how much variance in the dependent variable (i.e., burnout) is explained by independent variables of SE and FI. As Table 5 shows, R square values are .192 for females and .360 for males, implying that about 19 % of the variance in female Iranian EFL teachers' burnout and 36% of the variance in male teachers' burnout are explained by the teachers' SE and FI.

Table 5

Model Summary

	R	R Square	Adjusted R Square	Durbin-Watson
Female	.438a	.192	14.64074	1.989
Male	.600a	.360	11.90590	2.029

ANOVA revealed that these results were statistically significant for females ($F(2, 79) = 9.369; p = .000$) and for males ($F(2, 55) = 15.486; p = .000$) (Table 6).

Table 6

ANOVA

Gender	Model	Sum of square	df	Mean square	F	Sig.	
Female	1	Regression	4016.702	2	2008.351	9.369	.000
		Residual	16933.749	79	214.351		
		Total	20950.451	81			
Male	1	Regression	4390.210	2	2195.105	15.486	.000
		Residual	7796.272	55	141.750		
		Total	12186.57	57			

As shown in Table 6, the independent variable of FI contributed more to both male ($B = -.25; p = .000$) and female ($B = -.30; p = .000$) teachers' burnout than their SE, although the contribution of both variables was significant (Table 7).

Table 7

Standardized and Unstandardized Coefficients

Gender		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	93.219	8.229		11.328	.000		
Female	Self-efficacy	-.208	.056	-.383	-3.695	.000	.950	1.053
	Fluid intelligence	-.307	.124	-.142	-2.475	.000	.950	1.053
	(Constant)	88.770	6.544		13.565	.000		
Male	Self-efficacy	-.208	.043	-.546	-4.796	.000	.897	1.115
	Fluid intelligence	-.256	.127	-.129	-2.022	.000	.897	1.115

Examining RQ5: *Is there a statistically significant difference between Iranian male and female EFL teachers in SE, FI, and burnout?*

A one-way between-groups multivariate analysis of variance (MANOVA) was run to investigate the effect of gender on the teachers' SE, FI, and burnout. The preliminary assumption tests revealed no violations of normality, linearity, homogeneity of variance-covariance matrices, and multicollinearity. Table 8 shows teachers' performances on SE, FI, and burnout tests.

Table 8

Descriptive Statistics for Male and Female Teachers' Scores on SE, FI and Burnout

Dependent variable	Gender	Mean	Std. Error	95% confidence Interval	
				Lower bound	Upper bound
Burnout	female	58.476	1.711	55.092	61.859
	male	53.517	2.035	49.494	57.540
Fluid Intelligence	female	15.902	.818	14.285	17.520
	male	17.000	.973	15.077	18.923
Self-efficacy	female	143.512	3.699	136.197	150.827
	male	148.224	4.399	139.527	156.922

The results indicated no significant difference between male and female teachers on the variables ($F(3, 136) = 1.20; p = .311$; Wilks' Lambda = .97; Partial eta squared = .026) (Table 9).

Table 9

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Gender	Pillai's Trace	.026	1.204 ^a	3.000	136.000	.311	.026
	Wilk's Lambda	.974	1.204 ^a	3.000	136.000	.311	.026
	Hotelling's Trace	.027	1.204 ^a	3.000	136.000	.311	.026
	Roy's Largest Root	.027	1.204 ^a	3.000	136.000	.311	.026

Discussion

This study aimed at exploring the relationships among Iranian male and female teachers' SE, FI, and burnout. The results showed a significant positive relationship between teachers' FI and SE. The finding confirms the results of a couple of studies (e.g., Jongen et al., 2015; Nabavi et al., 2017; Paunonen & Hong, 2010), which demonstrated that higher degrees of SE could lead to improvement in cognitive ability and mental health, which, in turn, promotes better tolerance of stressful conditions.

The present study also found a significant negative relationship between the participant teachers' SE and burnout, indicating that SE could significantly predict both male and female teachers' burnout. Many studies have supported this reverse relationship between teacher SE and burnout (e.g., Atmaca, 2017; Ghasemzadeh et al., 2019; Motalebzadeh et al., 2014). Such a relationship can be justified with reference to Bandura (2006), arguing that people with lower degrees of SE tend to

amplify their weaknesses and inadequacies. According to Saleem and Shah (2011), low SE could be a potential source of stress and anxiety. Chronic stress, in turn, has damaging effects on such brain regions as Hippocampus (Lupien & Lepage, 2001), Prefrontal cortex (Arnsten et al., 2015), and Amygdala (Roozendaal et al., 2009), causing hypertrophy and functional connectivity disorder in these parts. These regions are central for coordinating the physiological, behavioral, cognitive, and emotional responses necessary for effective coping (McEwen & Gianaros, 2011).

Another finding of the current study was a significant negative correlation between the teachers' FI and burnout. Both male and female teachers' FI significantly predicted their burnout, and the contribution of FI was even more than that of SE. Fleischhauer et al. (2019) report that individuals who have difficulties with attention, concentration, and memory are more prone to burnout.

Concerning the role of gender as the moderating variable in the study, no difference was found between male and female teachers in their measures of SE, FI, and burnout. This finding aligns with the study carried out in Iran by Motalebzadeh et al. (2014), who showed no difference in SE between male and female teachers; however, it is in contrast with another result obtained in the same study indicating that male teachers suffer burnout more than female ones. It seems that the relationship between gender and burnout needs more replications in Iran for arriving at more robust evidence.

It could be summarized that reduced SE could negatively affect a teacher's problem-solving abilities via anxiety and stress, which could, in turn, pave the way for their burnout. Reciprocally, burnout could lead to cognitive weariness and emotional exhaustion, causing diminished self-esteem and self-efficacy, depressed mood, insufficiency, poor performance, and fatigue (Van Dam et al., 2013). It can also be argued that fatigued individuals make lesser demands on their working memory (Matthews et al., 2000), which serves as a core of problem-solving and executive functioning (Diamond, 2013).

In L2 teaching, the success or failure of teaching has often been attributed to methodology and learner variables, and teachers' psychological health has not received due attention. L2 pedagogy strongly emphasizes integrating communicative language teaching (CLT) into syllabi to improve L2 learners' communicative competence; however, efficient implementation of CLT requires motivated, active, and energetic teachers with high levels of self-efficacy and intelligence. Many Iranian English teachers at Iranian schools are reluctant to use CLT principles due to the demanding nature of CLT methods (Foroozandeh & Forouzani, 2015), but such reluctance can be traced to another important factor; that is, their lack of sufficient SE and motivation for planning and organizing communicative activities because of various organizational problems including low payment (Salehi et al., 2015) and work environment (Sabokruh et al., 2019).

Bandura (1997) argues that high self-efficacious people opt for tasks that are emotionally and intellectually challenging; thus, in order for L2 teachers to be able to make the most of their potential, the educational settings, including those in Iran, should provide them with techniques of developing their SE and problem-solving

abilities. Several suggestions have been made by researchers for boosting L2 teachers' SE such as professional development (paving the way for teachers to get promotions) (Karimi, 2011), modeling successful colleagues through vicarious experience (Donnelly, 2007), or peer observation (Mousavi, 2014), peer coaching (Bagheridoust & Jajarmi, 2009), training teachers to increase their knowledge and teaching styles (Heidari et al., 2012), developing reflective teaching (Moradian & Ahmadi, 2014), and professional learning community (Zonoubi et al., 2017).

Programs should also be offered to enhance L2 teachers' FI and mindfulness, as the current study showed that a significant amount of variance in the teachers' burnout is explained by their FI. L2 teachers need to be trained to strengthen the capacity and flexibility of their working memory (WM), as Loesche et al. (2015) showed a strong relationship between WM capacity and the RAPM performance test of FI. Offering teachers WM practices (e.g., n-back tasks) and problem-solving exercises could contribute to the improvement and plasticity of FI (Stepankova et al., 2014; Gavelin et al., 2018), and such practices can work better when accompanied by relaxation and meditative exercises (e.g., Yoga and aerobic training) (Hillman et al., 2008).

Conclusion

The concluding remark is that Iranian EFL teachers' lowered SE and problem-solving abilities, as an outgrowth of the interaction of various stressful conditions (biological, social, organizational, educational, etc.) have great potential to cause burnout. Burnout has been shown to lead to cerebral changes, including thinning of the medial frontal cortex of the brain (Savic, 2015), which can impair one's emotional and cognitive health, negatively affecting their professional performance. Akbari and Eghtesadi (2017) emphasize the importance of familiarizing Iranian EFL teachers with coping strategies related to burnout. It is high time that academia and educational institutions' attention was shifted from methodology to L2 teachers' psychological health so that significant sources of burnout and job dissatisfaction are identified and remedied. It is beyond doubt that successful teaching without lively, active, self-confident, and intelligent teachers is doomed to failure.

This study focused on teacher gender as the moderating variable. Further research is needed to replicate the findings with other moderating variables like teachers' personality type or their teaching experience to explore whether and how they can affect the relationships between the variables addressed in this study and burnout.

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Appendix

Demographic information of the teachers involved in the study

Female Teachers (n = 82)			Male Teachers (n = 58)		
Experience	3 months-37 years		Experience	1-28 years	
Age range	N	%	Age range	N	%
18-20	9	10.9	18-20	4	6.8
21-25	25	30.4	21-25	20	34.4
26-30	18	21.9	26-30	23	39.6
31-35	16	19.5	31-35	8	13.7
36-42	14	17	36-39	3	5.1
Major	N	%	Major	N	%
Teaching	49	59.7	Teaching	39	67.2
Translation	16	19.5	Translation	7	12
Literature	11	13.4	Literature	7	12
Linguistics	2	2.4	Linguistics	1	1.7
Missing	4	4.8	Missing	4	6.8
Degree	N	%	Degree	N	%
BA	43	52.4	BA	26	44.8
MA	32	39	MA	28	48.2
PhD	5	6	PhD	2	3.4
missing	2	2.4	Missing	2	3.4
Workplace	N	%	Workplace	N	%
High School	6	7.3	High School	7	12
Institute	63	76.8	Institute	44	75.8
University	9	10.9	University	4	6.8
Missing	4	4.8	Missing	3	5.1

Authors' Biographies



Seyedeh Maryam Mousavi is a Ph.D. candidate in the Department of English Language and Literature of Tabriz Islamic Azad University. In 2015, she joined the English Department of the Islamic Azad University of Mashhad as an English instructor. She has participated in some conferences and published an article on her main research interest, Teachers' Professional Development.



Ali Amirhassemi holds a Ph.D. degree in Applied Linguistics. He is an Assistant Professor at the Islamic Azad University, Marand Branch. He has been teaching English courses at university for many years and has published a number of articles in national and international journals. His main research interests include Form-Focused Instruction, Corrective Feedback, and L2 Writing.



Mahnaz Saeidi is a Professor of Applied Linguistics at Islamic Azad University of Tabriz, Iran. She is the editor-in-chief of the *Journal of English Language Pedagogy and Practice* as well as the director of Academic Translation Center of the university. She has published many books and articles and presented papers at national and international conferences. Her main research interests are Multiple Intelligences, Feedback, and Intercultural Competence.
