

Vol. 14, No. 3
pp. 213-237
July &
August 2023

Received: 12 April 2021
Received in revised form: 21 July 2021
Accepted: 19 August 2021

A Structural Equation Modeling of the Dynamic Interplay among EFL Teachers' Classroom Management Approaches, Self- efficacy Dimensions, and Personality Types

Hoda Divsar* 

Abstract

Teachers' classroom management plays a potent role in Teaching English as a Foreign Language, especially in relation to other psychological variables, namely self-efficacy and personality types. Consequently, the present study aimed at generating a structural equation model of evidence to better illustrate the relationship among classroom management, self-efficacy, and personality types as well as the pertinent sub-scales. A sample of 249 Iranian EFL teachers completed three questionnaires including the Behavior and Instructional Management Scale, Myers-Briggs Type Indicator Personality Type, and Teacher Efficacy Scale. The structural Equation Modeling (SEM) and the schematic illustration confirmed the hypothesized model ($\chi^2/df = 1.28$; RMSEA=.03; RMR =.03; GFI =.98; AGFI=.95; NFI =.98; CFI =.99; IFI =.99; TLI=.98), revealing significant internal interplay among the classroom management approaches, self-efficacy, personality types, and their sub-scales. The results of multiple regression further confirmed the direction of the path model illuminating the predictability power of the teachers' personality types and their self-efficacy concerning the EFL teachers' classroom management approaches. In other words, EFL teachers' personality types and self-efficacy can predict their classroom management approaches. The study offered pedagogical implications for teachers, policymakers, and stockholders.

Keywords: classroom management, EFL, personality types, self-efficacy, structural equation modeling.

* Corresponding Author: Assistant professor, Department of TEF, Payame Noor University (PNU), Tehran, Iran; E-mail: h.divsar@pnu.ac.ir, [Orcid: https://orcid.org/0000-0003-3978-9283](https://orcid.org/0000-0003-3978-9283)

1. Introduction

Creating a successful teaching and learning atmosphere is among the primary focus of the teachers' responsibilities that highlight the inevitable role of teachers in the educational context (Fan & Wang, 2022; Razmjoo & Ayoobian, 2019; Shakki, 2022; Soleimani & Razmjoo, 2016). Numerous factors such as teacher's personality, teachers' classroom management ability, teachers' self-efficacy, teachers' attitude, and teaching experience play influential roles in accelerating success in the classroom context and creating a successful teaching and learning atmosphere (Derakhshan & Fathi, 2023; Han & Wang, 2021; Kazemi & Soleimani, 2016; Miller et al., 2017). As one of the commonly voiced factors, classroom management is defined as the efforts to oversee the activities of a classroom such as learning, student behavior, and social interaction to provide a healthy, safe environment for learning (Tschannen-Moran & Hoy, 2007). It contains a broad spectrum of issues including the organizing physical atmosphere, establishing classroom procedures, observing learners' behavior, handling undisciplined behavior, stimulating learners' motivation, and increasing their engagement in learning.

In addition to classroom management, teachers' self-efficacy was considered among the prominent factors that promoted students' learning and achievement. Alongside classroom management, teachers' sense of efficacy and their judgments about their abilities to promote students' learning and achievement were identified among the influential factors (Razmjoo & Ayoobiyan, 2019; Tschannen-Moran & Woolfolk Hoy, 2001; Wang & Derakhshan, 2023; Zee & Koomen, 2016). Bandura (1997) defined self-efficacy as "the conviction that one can successfully execute the behavior required to produce outcomes" (p. 193). It refers to the teachers' confidence in their ability that enables them to plan, organize and execute a task successfully in any learning situation and to cope with unmotivated learners. This quality enables them to promote learning and influence teachers' performance as well as the quality of classroom environments (Al-Obaydi et al., 2023; Bandura, 1997; Gavora, 2010).

Since personality type is pervasive in its effect on human experience (Alibakhshi, 2011; Montuoro & Lewis, 2017; Pan et al., 2023; Vakilifard & Heydari Khosro, 2022), it is relevant to examine its relationship to important teaching variables, such as efficacy and classroom management. Harkin and Turner (1997) stated that teachers may use distinct methods or techniques in a similar

context according to their distinctive personality types, teaching styles, and beliefs in their abilities to affect learners' achievement (cited in Alibakhshi, 2011). Therefore, as Chambers et al. (2001) stated, the systematic study of teachers' personality types can result in a better understanding of the effectiveness of teachers' teaching methods.

Although classroom management approaches, teachers' self-efficacy and personality types are among the contributing factors in the process of teaching and they are examined with other pertinent variables such as teaching style (Fatemi et al., 2016; Kazemi & Soleimani, 2016; Rahimi & Asadollahi, 2012), English proficiency (Eslami & Fatahi, 2008), emotional intelligence (Rastegar & Memarpour, 2009), transformational leadership style (Aliakbari & Darabi, 2013), and gender (Khodabandeh & Jamali, 2019), most teachers are not completely aware of these constructs and their subcomponents let alone to actualize the management of their real classroom context (Dibapile, 2012; Dicke et al., 2014; Hicks, 2012; Lazarides et al., 2020; Magday & Pramoolsook, 2021; Mahmoudi & Zamanian, 2018; Tilaki, 2019; Valente et al., 2022). The problem is that although most teachers have acceptable potentiality and a sense of self-efficacy, they do not know how to make a fruitful relationship with their personality types to control the class (Marashi & Azizi Nasab, 2018; Nkomo & Fakrogha, 2016). Few studies seem to have been carried out regarding nonnative English-speaking teachers in the context of the teaching of English as a foreign language (Byrne, 2017; Ghonsooly et al., 2014; Mahmoudi & Zamanian, 2018; Marashi & Azizi Nasab, 2018). Promoted by the paucity of research in exploring the relationship among the three aforementioned variables, the present study investigated the relationship among EFL teachers' classroom management approaches, their perceived self-efficacy, and their personality types.

2. Literature Review

One of the important issues in education is the ability of teachers to successfully employ classroom management strategies competently (Aloe et al., 2014; Byrne, 2017; Carr, 2013). Classroom management encompasses a variety of activities to establish a friendly and effective atmosphere to run the class smoothly, maximize learning, and reduce disruptive misbehaviors (Martin & Sass, 2010). Shindler (2010) defined it as "the capability of teachers to rule the classroom and control

students' behavior to attain positive educational outcomes" (p. 34). Giallo and Little (2003) admitted that all the activities that a teacher applies to create a good classroom setting where instruction and learning can take place are connected with classroom management. For this purpose, teachers need to employ certain strategies to organize space, time, and materials. Skilled teachers who follow an efficient management system from the very beginning of the school year more efficiently can focus on the student's learning more than those who have not yet established a stable management system (Zee & Koomen, 2016).

Martin and Sass (2010) stated that classroom management covers teachers' actions to manage the class, the students' behavior, and their learning. These actions cover establishing order, dealing with misbehavior, offering appropriate instruction, and taking care of students' emotional and cognitive needs. The theoretical framework of the present study is based on Martin and Sass's (2010) model of behavior and instructional classroom management based on which the Behavior and Instructional Management Scale (BIMS) was developed. This two-dimensional framework deals with behavior and instructional management simultaneously. Teachers' preventing strategies to control the students' misbehaviors, setting rules, and forming a reward structure, are related to behavior management, and setting regular rules, monitoring seatwork, and selecting the materials are associated with instructional management. Based on the proposed model, Soleimani and Razmjoo (2016) investigated the classroom management challenges EFL teachers faced and their employed strategies to overcome them. They exposed three central themes, namely, instructional challenges, behavioral/psychological challenges, and contextual challenges. Instructional challenges were pertinent to the incomplete assignments, the discrepancy in learners' level of proficiency, and the students' persistence in speaking in their first language. Behavioral/ psychological challenges were pertinent to the learners' reluctance to speak, dispirit and demotivated learners, latecomers, and the use of cellphones in the classroom. To get along with these challenges, EFL teachers suggested numerous strategies including warning, eye contact, and teacher-learner conference.

Following a sequential exploratory correlational design, Kazemi and Soleimani (2016) investigated the relationship between EFL teachers' classroom management approaches and their teaching styles. They found that EFL teachers tended to adopt a controlling and interventionist approach to behavior and instructional management dimensions and that EFL teachers followed a more teacher-centered approach. Moreover, the relationship between the classroom management

approaches and the dominant teaching style was found to be significant.

The concept of self-efficacy was derived from a renowned cognitive psychologist, Albert Bandura, who defined self-efficacy as people's judgments and ideas about their ability to accomplish a task or carry out their jobs. According to Bandura (1997), self-efficacy does not refer to specific skills, but to "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 71). As Bandura (1997) stated, self-efficacy signifies convictions in one's capacity to arrange and implement the courses prerequisite to organizing and controlling the prospective circumstances. He further elaborated on the concept to imply how self-efficacy at three context levels can affect the performance accomplishments and the individuals' success in undertaking responsibilities. In the same way, Bandura (2008) argued that having knowledge and skills is one factor while being able to employ and utilize them perfectly is something else that necessitates not only skills but "self-beliefs of efficacy to use them well" (p. 32). That is why people with similar skills, may act differently depending on their self-efficacy beliefs.

Tschannen-Moran and Woolfolk Hoy (2001) designed teachers' sense of efficacy scale (TSES) that took educational approaches, classroom management, and student engagement into account. The three-factor structure of their proposed scale offered valuable information about the self-efficacy of a teacher. According to Tschannen-Moran and Woolfolk (2001), teachers' self-efficacy has the capability of renovating instructions, and as a result, it can impact class management. They referred to the teachers' self-efficacy as the "abilities to organize and perform activities required for the fulfillment of teaching duties against the specific background" (p. 233) such as different teaching contexts. This study followed Tschannen-Moran and Woolfolk Hoy's (2001) classification which is the source of the employed instrument. Researchers (e.g. Eslami & Fatahi, 2008; Miller et al., 2017) documented the vital role that self-efficacy plays as the indicator of academic achievement. The development of self-efficacy scales gave rise to the appearance of numerous empirical studies in the academic fields that focused on investigating how this variable affects learners' achievement and success (e.g. Babaei & Abednia, 2016; Demirdage, 2015; Rahimi & Weisi, 2018)

Miller et al. (2017) investigated how students' perceptions of two aspects of the instructional environment (i.e. perceived teaching competence, and perceived respect) are influenced by the variations in teachers' reported levels of self-efficacy.

Their findings revealed that teacher self-efficacy played a significant role in students' perceptions of teacher competence and teacher respect, but not in students' perceptions of classroom goal structures. They also revealed that teachers who had a higher level of self-efficacy showed this confidence in their actions and interactions with the students. On the other hand, when students noticed how confident their teachers were when encountering difficult subjects such as science and mathematics, their self-efficacy was boosted.

As Chambers et al. (2001) indicated, personality types refer to personal dispositions and the inner qualities that can be grasped from people's expressions of beliefs, values, behavior, and attitude. They referred to the consistent patterns of behavior manifested across the different situations that had the potential to be incorporated into the teaching profession as they took a substantial role in how teachers react to the encountered pressure (Rashtchi & SanayiMashhoor, 2019). Lazarides et al. (2020) also defined personality type as the aspects of each person's beliefs, behavior, views, action, and opinion that are perceived as typical of that person. The most famous theory of personality types is Jung's Theory of Psychological Types (1923) (cited in Darly, 1987) which focused on the ways that individuals gather and process information. Jung (1923) postulated that each individual apprehends the world in his/her specific way from different sources and this difference led to the creation of a unique personality. Jung's Theory of Psychological Types (1923) includes two personal attitudes introversion and extraversion and four functions or modes of orientation thinking, sensation, intuition, and feeling each of which may operate in an introverted or extraverted way (Darly, 1987, pp. 12-13).

Based on Jung's Theory of Psychological Types (1923), Myers and Briggs designed a self-report questionnaire in 1942 to identify the individuals' potential qualities of behavioral preferences. The combination of the four bipolar scales led to the advent of 16 personality types. This type indicator, which is used as the theoretical framework regarding personality type, includes four paired binaries categorized as extrovert/introvert, thinking/feeling, sensing, intuitive, and judging/perceiving differentiating people from one another as one of sixteen four-letter types. Rashtchi and SanayiMashhoor (2019) revealed that personality types predicted the teachers' inclination to burnout and reflection. They continued that introvert and extrovert teachers responded differently to the teaching challenges. Ebrahimi (2015) also found that personality types were stronger predictors of teachers' job satisfaction. The study added the potential influence of personality

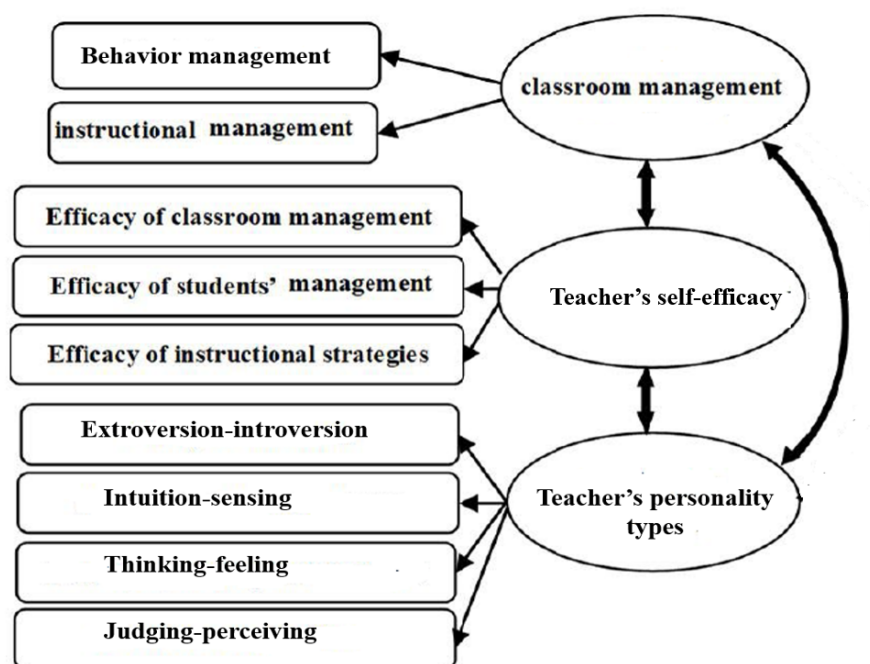
types in promoting teachers' job satisfaction and the sense of belonging in accomplishing positive outcomes.

The importance of personality types in teaching and learning processes has been recognized in several studies (Aliakbari & Darabi, 2013; Alibakhshi, 2011; Chambers et al., 2001). Fatemi et al. (2016) investigated the relationship between EFL teachers' personality types and their effect on teaching. They discovered that there was a significant relationship among the four sub-scales of personality variables, namely, neuroticism, extraversion, psychoticism, and lie and it was the extraversion type that helped the learners perform academically better. In another study, Le Sage et al. (2008) examined the web-based students' preferred personality type and their personality features. Using Jung's psychological Type Inventory, they categorized the students' personality types into eight categories, namely, extrovert, introvert, feeling, thinking, intuitive, sensing, perceiving, and judging. The most frequent types were introvert/feeling, sensing/perceiving, and introvert/feeling. While the female is inclined toward sensing/perceiving types, the male lent toward thinking/perceiving ones.

With the growth of the international demand for learning English as a foreign language, the need for competent English teachers has been considerably emphasized (Byrne, 2017; Dicke et al., 2014; Shakki et al., 2016). Among the numerous influential factors that affect EFL teachers' teaching quality, thanks to their influential roles in teacher professional development, classroom management, self-efficacy, and personality types have aroused much more attention (Dearakhshan & Shakki, 2019). Although there is a wealth piece of information concerning the effect of each of these variables separately, few studies focused on the interrelationship among the aforementioned scales and their pertinent sub-scales. The present research can be innovative in that, the previous studies have not considered all these variables in a single study utilizing the potentiality of structural equation modeling and multiple regressions that can shed light on how these variables may interact and influence each other in the sense to lead to better conducive teaching context and EFL teachers' professional development. The present study tried to extend the previous research by employing a structural model of possible associations among the aforementioned variables utilizing structural equation modeling (SEM). Consequently, a more detailed model (Figure 1) was displayed to unveil the probable relationships among teachers' efficacy of classroom management, self-efficacy, and personality types.

Figure 1

The Hypothesized Model of the Relationships among the Variables and the Pertinent Sub-scales



Concerning the paucity of pertinent studies, particularly in the EFL context (Byrne, 2017; Ghonsooly et al., 2014; Mahmoudi & Zamanian, 2018; Marashi & Azizi Nasab, 2018) and to address this lacuna, the current study tried to find answers to the following questions:

Is there any statistically significant relationship among EFL teachers' classroom management, self-efficacy, and personality types?

Can teachers' self-efficacy and personality predict EFL teachers' classroom management?

3. Methodology

3.1. Participants

Two hundred and forty-nine EFL teachers (119 male and 130 female) were selected randomly from Tehran and Karaj to complete the Behavior and Instructional Management Scale, Myers-Briggs Type Indicator personality type and Teacher Efficacy Scale questionnaires sent to them via telegram, email, and WhatsApp.

They were selected randomly because their email address and phone numbers were obtained randomly from the available websites or the administrative board of the schools. To control the effect of the extraneous variables such as the teaching context, the participants were selected from public high schools. They ranged in age from 29 to 50 with teaching experience between 5 to 26 years.

3.2. Instruments

Four research instruments were employed in the study to collect the necessary data.

3.2.1. Myers- Briggs Type Indicator (MBTI-M)

Developed by Myers et al. (1998), this instrument was used to discover the participants' personality types. The first part of the MBTI includes five items on demographic information of the participants such as name, gender, age, degree, and years of experience. The second part which consisted of 93 items focused on the four bipolar personality dimensions namely extraversion/introversion (26 items), intuition/sensing (32 items), thinking/feeling (20 items), and judging/perceiving (15 items). It is a seven-point Likert scale ranging from 'agree' (1) to 'disagree' (7). The Cronbach's Alpha reliability coefficient of the MBTI-M questionnaire was computed to be 0.84 indicating a high reliability estimate. The validity of the questionnaire was established by a panel of four university instructors, each with a Ph.D. degree in TEFL. The experts checked the whole content of the questionnaire and commented on it.

3.2.2. Teachers' Self-efficacy Scale (TSES)

Teachers' Self-efficacy Scale (Tschannen-Moran & Hoy, 2007) contains 24 items on three sub-scores including the efficacy of classroom management (8 items), efficacy to promote students' engagement (8 items), and efficacy in using instructional strategies (8 items). It is a nine-point Likert scale ranging from *nothing* (1) to *a great deal* (9). The internal consistency of the questionnaire was assessed through Cronbach's alpha coefficient and it was found to be .91 suggesting that the items had relatively high internal consistency.

3.2.3. Behavior and Instructional Management Scale (BIMS)

The questionnaire was developed by Martin and Sass (2010) and has 24 items based on a six-point Likert scale whereby "1" means *strongly disagree* and "6" means *strongly agree*. The questionnaire contains two subscales, namely, behavior management (BM) and instructional management (IM) each of which covers twelve items. The first twelve items deal with teachers' behavioral management approaches, focusing on teachers' performance in defining rules in the classroom, governing learners' behavior, and setting punishment for off-task misbehaviors. The approaches related to the use of instructional management in the classroom are to be explored through the second part of the subscales. The instructional management subscale (IM) entails twelve items probing teachers about what they do to monitor learning tasks and activities, to established routines, and pick out teaching materials. To evaluate the reliability of the BIMS Inventory, Cronbach's α coefficient was run and it was found to be .87 which is a high-reliability index.

3.3. Data Collection and Data Analysis Procedure

At first, the questionnaires were prepared and translated into Persian. The validity of the translated versions was ensured by back translation and their reliability was checked through Cronbach alpha after the pilot study and it was found to be ($r = .91$). The online questionnaires were prepared and then sent via telegram, WhatsApp, and e-mail. The searcher also conducted an online meeting through SKYP to explain how to fill in the questionnaires and answer any probable questions. The link to the online meeting was sent to the WhatsApp and the telegram groups. The confidentiality of the received responses was assured and after three months, two hundred and forty-nine questionnaires were returned completed. For the quantitative statistical analyses, after running descriptive statistics and reliability analyses of the scales, structural equation modeling (SEM) analysis was run using Analysis of Moment Structures (AMOS) software (version 21). KMO-Bartlett Test and Reproduced Correlational Matrix were run to determine the appropriate number of variables in a study. In the present study, to confirm the hypothesized model and investigate all the relationships among the main scales and their subscales, the following fit indices were employed: chi-square (χ^2/df), goodness-of-fit index (GFI), Tucker-Lewis index (TLI), the incremental fit index (IFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), Adjusted Goodness-of-Fit Index (AGFI), and Normal Fit Index (NFI). Other statistical

analyses were run such as Spearman bivariate correlations and multiple regression analysis to unveil the model path predictions. The findings are demonstrated in detail in the following section.

4. Results

To answer the first research question, the correlational matrix, KMO, Bartlett's test, and SEM were run after the descriptive statistics of the subscales of the main variables of the study. Descriptive statistics of all the sub-scales of the main variables are provided in Table 1.

Table 1
Descriptive Statistics for All Measures

Variables	N	Mean	SD	Skewness	Kurtosis	sig
Efficacy in classroom management	249	6.39	1.55	-.53	-.39	.00
Efficacy in student engagement	249	6.39	1.47	.48	-.31	.00
Efficacy in instructional strategies	249	6.47	1.54	-.60	-.27	.00
Behavior management	249	3.93	.49	-.87	1.86	.00
Instructional management	249	4.00	.57	-1.06	2.35	.00
extraversion/introversion	249	3.99	.60	-.198	6.80	.00
intuition/sensing	249	3.58	.68	-.71	2.97	.00
thinking/feeling	249	3.97	.72	-.14	-.64	.00
judging/perceiving	249	3.58	.54	-.20	.56	.00

As Table 1 reveals, the continuous variables have not been distributed normally (Skewness and Kurtosis < 2), accordingly, Spearman bivariate correlation was run. Table 2 provides a correlation matrix of the sub-scales of the study.

Table 2
Correlation Matrix of All the Sub-scales

Variables	TSS	1	2	3	TCM	4	5	TPT	6	7	8	9
Teachers' self-efficacy scale	-											
1. Efficacy in classroom management	.86**											
2. Efficacy in student engagement	.89**	.90*										
3. Efficacy in instructional strategies	.85**	.86**	.89**									
Classroom Management Scale												
4. Behavior management	.35**	.23*	.06	.07	.54**							
5. Instructional management	.28**	.19**	.09	.18**	.35**	.44**						
6. Teachers' personality types	.25**	.13**	.03	.03	.39**	.23**	.53**					
7. Extraversion/introversion	.25**	.18*	.04	.07	.14**	.19**	.17**	.25**				
8. Intuition/sensing	.25**	.30*	-.05	.05	.35**	.35**	.31**	.14**	.55**			
9. Thinking/feeling	.12**	.13*	-.03	.04	-.75	.26*	.26**	.24**	.04	.64**		
10. Judging/perceiving	.28*	.30**	.32**	.35**	.06*	.04	.36*	.39**	.28*	.36**	.25**	
11. Teachers' personality types	-	.21*	-.03	.05	.76**	.68**	-	.19**	.05	.40**	.26**	.17**
	.27**				.27**							

$P < .05$ $p < .01$ Note= TSS= Teachers' Self-Efficacy Scale, CMS= Classroom Management Scale, TPT=Teachers' Personality Types

As Table 2 reveals, significant correlations were found among the main variables of the study, namely, teachers' self-efficacy, classroom management, and personality type and their pertinent sub-scales. The highest correlation is associated with classroom management and teachers' self-efficacy ($r = .54$). Teachers' self-efficacy is correlated with all the sub-scales of classroom management and personality type. It should be noted that the sub-scales of classroom management have a higher correlation with teachers' self-efficacy in comparison with the sub-scales of personality type. The highest correlation is associated with behavioral management ($r = .28$) followed by instructional management consideration ($r = .25$). Furthermore, all the sub-scales of classroom management have significantly correlated with the subscales of the personality type. Instructional management attains the highest correlation ($r = .39$) followed by behavioral management ($r = .35$).

Despite the multiple relationships among the main variables and their subscales, due to error measurement, simple correlation analysis was not strong enough to spot confirmatory measures. Consequently, to ensure the appropriateness of the factor model for each of the main variables, the significant relationship in the interrelated network of the sub-scale associations, and the adequacy of sampling, the Bartlett test and KMO were employed. The tests appraise the correlations and partial correlations to confirm if the data are liable to coalesce on factors. According to Lowie and Bregtje (2013), test values should be between .50 and .90 to indicate acceptable construct validity and to support the sufficiency of sampling (Lowie, & Bregtje, 2013). A small value for the Bartlett test and KMO ($p < .5$) means the inappropriateness of the factor model for all main variables and problems with the sampling. Table 3 presents KMO and Bartlett's test results on the performance of SMEs.

Table 3
KMO and Bartlett's Test of Study Variables

Variable		TCM	TSS	TPT
KMO measure of sampling adequacy		.79	.758	.72
		748.112	435.303	305.212
		2	3	7
Bartlett's Test	Df	.00	.00	.00
	Sig.			

Note= TCM= Teachers' classroom management, TSS= Teachers' self-efficacy, TLS=Teachers' personality type

As Table 3 displays, all KMO indices were higher than 0.5 which supported the sufficiency of sampling. Moreover, the confidence level of 0.000 for Bartlett's test validated the appropriateness of the factor model for all of the main variables of the study and thus supported the factorability of the correlation matrix. The KMO and Bartlett's Test of Sphericity values suggest that the data on the performance of SMEs in this study is suitable for further analysis.

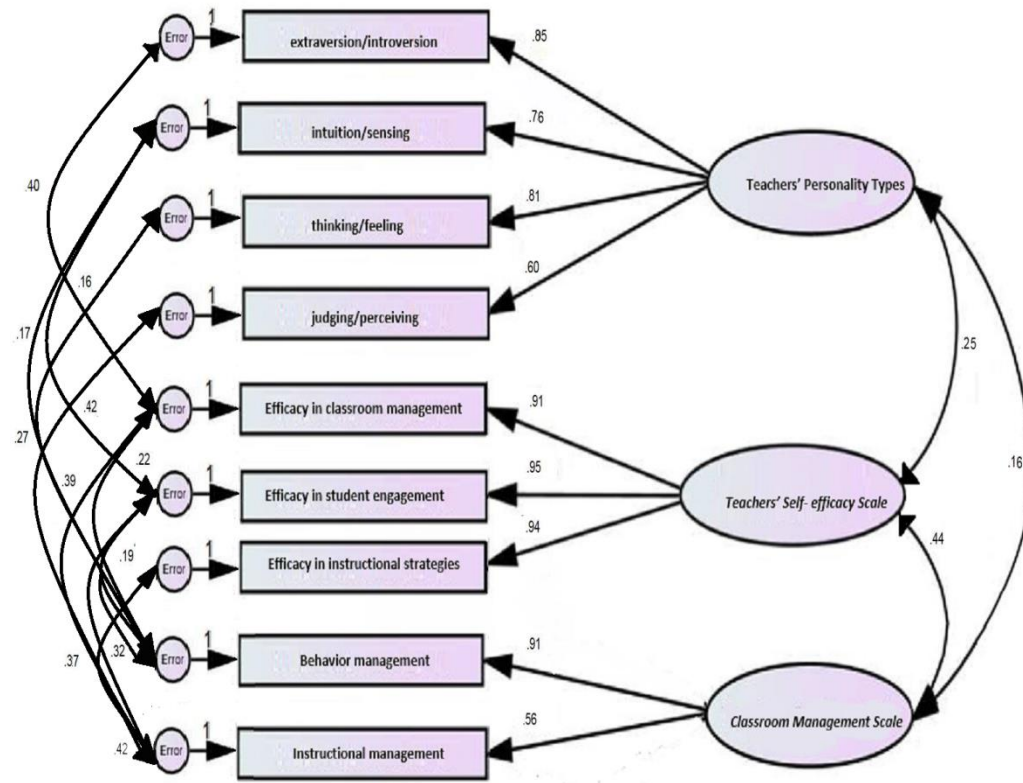
In the confirmatory stage, the accuracy of the relationships among the main variables as well as among different sub-scales was investigated. The goodness of fit indices for the model was assessed by using the maximum likelihood estimation technique in AMOS version 21. The calculated fitness indices (Table 4) indicated that the structural equation model of the relationships among the study's main

variables fitted the data. Accordingly, the following fit indices were applied to evaluate the fit of the structural equation hypothesized model: chi-square (χ^2/df) Root Mean Squared Error of Approximation (RMSEA), Root Mean Squared Residual (RMR), the goodness-of-fit index (GFI), Adjusted Goodness-of-Fit Index (AGFI), the normal Fit Index or Bentler-Bonett Index (NFI), the incremental fit index (IFI), Tucker-Lewis index (TLI), and the comparative fit index (CFI). The values of GFI, NFI, IFI, and CFI range from 0 to 1.0, with values closer to 1.0 generally demonstrating better-fitting models (Hoyle & Panter, 1995). As Table 4 demonstrates, eight criteria assessed the fit statistics of the model.

Table 4
Structural Equation Model: Fit Statistics

Evaluation	Current level	Acceptance level	Fit statistics
Normal chi-Square	$\chi^2/df < .05$	1.28	Accept
Root Mean Squared Error of Approximation	RMSEA < .05	.03	Accept
Root Mean Squared Residual	$RMR \geq 0$	.03	Accept
Goodness-of-Fit Index	GFI > .98	.98	Accept
Adjusted Goodness-of-Fit Index	AGFI > .85	.95	Accept
Normal Fit Index or Bentler-Bonett Index	NFI > .90	.98	Accept
Comparative Fit Index	CFI > .90	.99	Accept
Incremental Fit Index	IFI > .90	.99	Accept
Tucker-Lewis index	TLI > .89	.98	Accept

As Table 4 reveals, it was found that the model exhibited an acceptable good fit to the data set as follows ($\chi^2/df = 1.28$; RMSEA = .03; RMR = .03; GFI = .98; AGFI = .95; NFI = .98; CFI = .99; IFI = .99; TLI = .98). The loading factors signify the high correlation between each sub-scale and the latent variables. The schematic illustration of the accepted structural model with standardized path coefficients among the main variables and sub-scales of the study is shown in Figure 2. The non-significant paths were eliminated from the final accepted model.

Figure 2*Revised SEM in Standardized Estimates After Removing the Insignificant Path*

As it is displayed in Figure 1, significant paths leading from teachers' classroom management to hypothesized destinations of teachers' self-efficacy have been found. The factor loadings of the items constructing all the variables were checked and shown to be greater than .5. Most of the inter-group correlations were found between the sub-scales of classroom management and teachers' self-efficacy (see Figure 2).

To answer the second research question and to find out how the main variables of the study load each other and how predictions are made, a multiple regression was run. Table 5 shows the findings. To check the strengths of the causal correlations among the main variables, the t -values and standardized estimates (β) were analyzed. The standardized coefficient (β) illuminates the predictive power of the independent variable and provides the effect size. The closer the magnitude to 1.0, the higher the correlation and the greater the predictive power of the variable. The second measure, t -value (t) submits the statistically significant result if $t > 2$ or $t < -2$.

Table 5*Multiple Regression Coefficients for Predicting Teachers' Personality Types*

predictor	t	β	Sig
Constant	1.78	1.52	.05
Teachers' personality types	3.85	.74	.01
Teachers' self-efficacy	2.41	.35	.00
F=.00			F= 16.80
R2=.121			R=.83

As can be perceived in Table 5, the standardized regression coefficients of teachers' personality types (Sig = 0.01, β = -0.74, t = 3.85) was stronger than teachers' self-efficacy (Sig = .000, β = .35, t = 2.48). However, concerning their β and t values of the independent variables, they are positive predictors meaning that the linear combination of EFL teachers' personality types and self-efficacy have a significant role in predicting classroom management approaches.

6. Discussion

Effective teachers play a pivotal role in the creation of a favorable and encouraging atmosphere that upsurges their teaching outcomes. The results confirmed the initial hypothesized structural equation model of the association among the main variables of the study, namely, classroom management approach, self-efficacy, and personality type. Furthermore, this study extended the preceding research by demonstrating association not only among these three variables concomitantly but also among all the sub-scales simultaneously through structural equation modeling. Among these correlations, the highest association was found between teachers' classroom management and their self-efficacy. This finding is, in part, in line with the result of Fatemi et al. (2016) who found that there was a significant relationship between teacher's personality type and their effectiveness in teaching. The results are in line with those of Chacon's study (2005) who revealed that the relationship between teachers' self-efficacy and instructional strategies was positive. These results are also in accordance with those of Marashi and Azzizi Nasab (2018) who confirmed that teachers' self-efficacy was correlated with teachers' classroom management. The results are also supported by Lazarides et al. (2020) and Fathi and Derakhshan (2019) who revealed reciprocal relationships between teachers' classroom management strategies and self-efficacy for classroom management particularly during the early career.

The inter-related association was found to be higher between instructional classroom management and self-efficacy. The results are consistent with the findings of Eslami and Fatahi (2008) who suggested that EFL teachers in Iran assessed themselves more efficacious in instructional strategies. The results are also supportive of those of Yilmaz (2011) who uncovered the dominance of self-efficacy was found to be more prevalent in instructional strategies than for those in classroom management. Razmjoo and Ayoobian (2019) also suggested that except for classroom management, efficacy for student engagement and efficacy for instructional strategies were good predictors of teacher resilience.

According to the results, concerning the inter-group correlations, it can be concluded that teachers who felt confident in their abilities to manage classrooms encountered fewer conflicts and disturbances in the classroom. This fits well with the findings of Dicke et al. (2014) who declared the reciprocal aspect of the relationship between teachers' self-efficacy for classroom management and facets of classroom disturbances. Dibapile (2012) also pointed to the importance of classroom management in teacher efficacy proclaiming that having a high self-efficacy belief is pivotal in teaching as teachers can be more resourceful, greater classroom managers and consequently can involve students better in learning. Nkomo and Fakrogha (2016) also provided evidence that the potency of managing a classroom considerably leans on the personality of the teacher that determines the teacher's "level of organization, charisma and unique adjustment to classroom processes" (p. 12). Concerning the teachers' classroom management and personality type, the results were in line with those of Jalili and Mall-Amiri (2015) who documented that teachers' personality simultaneously influences both their attitude towards teaching and their classroom management approach.

With regard to the inter-group correlations, the association was found among teachers' instructional and behavioral classroom management (sub-scales of Classroom management) with efficacy in students' engagement, instructional, and classroom management (sub-scales of reflective thinking). One possible explanation could be that those teachers who always manage the class efficiently either in the form of instructional or behavioral, have higher self-efficacy reflected in their way to engage learners, sustaining students' interest, establishing regular rules, selecting materials, and stimulating engagement in classroom (Maulana et al., 2016). Teachers with high instructional self-efficacy demonstrate higher ability in controlling students' misbehaviors, creating a friendly and effective atmosphere to

maximize learning and minimize misbehaviors and disruptions. Teachers' efficacy in engaging students is more inclined to promote their students to participate in a context and also assist them to be more risk-takers and creative (Giallo & Little, 2003). These sub-scales are all considered as criteria of a teacher's ability in stimulating instructional, administrative, and behavioral capability. It can be inferred that the nature of the aforementioned sub-scales concentrates on increasing interaction, and engagement, establishing an appropriate atmosphere in the class to encourage the learners to engage more in-class activities and in their learning processes (Lazarides et al., 2018). As documented by Zee and Koomen (2016), teachers' self-efficacy is regarded as a central predictor of the facets of the teachers' personality type. The results were acknowledged by Marashi and Naghibi (2019) and Chambers et al. (2001) who recognized that introvert and extrovert teachers' adversity quotient was a significant predictor of their classroom management.

Teachers' personality type plays a potent role in classroom management. Teachers' knowledge about their personality type and as a result their efficacy affects their ability in having different strategies in classes. Harris (1998, as cited in Shindler, 2010) believes that a teacher's classroom management can be affected by their personality because of the specific way that they adopt effective managerial strategies in accordance with their personality. Concerning inter-group correlations between the efficacy of classroom management and teachers' personality type, associations were found between instructional and behavioral strategy with an extravert-introvert sub-scale. Extroverts tend to employ problem-focused strategies to help students to demonstrate high self-esteem and to cope with tasks and activities effectively (Jalili & Mall-Amiri, 2015).

7. Conclusion

The results revealed that teachers' personality types and self-efficacy would be predictors of classroom management approaches due to their role in promoting positive and reducing negative classroom behaviors. The study has some pedagogical implications for teachers to get acquainted with their potential to improve teaching. Teachers can examine their classroom management approaches in the light of their personality and self-efficacy to make the context conducive to successful language learning. School board administrators also can benefit from the findings and can administer in-service training courses and workshops to assist teachers to obtain the necessary knowledge regarding classroom management

strategies and to make sure that training in effective classroom management is built into the programs intended for prospective teachers. Regarding the significance of personality in carrying out the job, teachers and school administrators need to be aware of the impact of personality traits on controlling students' behavior in the classroom. Moreover, understanding how teachers approach classroom management concerning their personality type can prepare the teachers to know how to avoid personality conflicts that impede an auspicious and encouraging atmosphere for students to learn.

As suggestions for future research, subsequent studies can consider additional latent variables to enrich the results of the present study by focusing on the endogenic relationships of other variables such as self-esteem, job satisfaction, teaching styles, critical thinking, reflective thinking, and professional development. Moreover, it would be seductive to investigate the model results and model fit by manipulating the structural equation modeling approach with different groups of teachers, under different teaching contexts, in different disciplines, at different levels, or in different fields of study. Such comparisons can add new perceptions to the development of EFL teachers. The study delimited the participants to EFL teachers teaching at public high schools to control the effect of context. Moreover, the variables were delimited to classroom management, personality types, and self-efficacy. Among the limitation of the present study, that can be improved in future research, the collection instruments can be mentioned which included only self-reported questionnaires. Further studies can employ other data collection tools such as interviews and observations.

References

- Aliakbari, M., & Darabi, R., (2013). On the relationship between the efficacy of classroom management, transformational leadership style, and teachers' personality. *Social and Behavioral Sciences*, 93, 1716–1721.
- Alibakhshi, G. (2011). On the impacts of gender and personality types on Iranian EFL teachers' teaching efficacy and teaching activities preferences. *Iranian Journal of Applied Linguistics (IJAL)*, 14(1), 1–22.
- Al-Obaydi, L. H., & Pikhart, M., Shakki, F. (2023). Digital gaming as a panacea for incidental L2 acquisition in an EFL context. *Applied Research on English Language*, 12(1), 73–94. <https://doi.org/10.22108/are.2022.135344.2001>
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review*, 26(1), 101–126.
- 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.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman & Company.
- Bandura A. (2008). Toward an agentic theory of the self. in H. Marsh, R. G. Craven, and D. M. McInerney (Eds.) *Advances in Self-research, Self-processes, learning, and enabling human potential* (pp. 15-49). Information Age Publishing.
- Byrne, K., C. (2017). *Teacher self-efficacy in classroom management amongst novice middle school teachers* [Doctoral dissertation, Concordia University]. <http://commons.cu-portland.edu/edudissertations>
- Carr, D. (2013). *The effects of teacher preparation programs on novice teachers regarding classroom management, academic preparation, time management, and self-efficacy* (Publication No. 3604827) [Doctoral dissertation, Liberty University]. ProQuest Dissertations and Theses Global.
- Chacon, C. T. (2005). Teachers' perceived efficacy among English as a foreign language teachers in middle schools in Venezuela. *Teaching and Teacher Education*, 21(3), 257–272.
- Chambers, S. M., Henson, R. K., & Sienty, S. (2001, October 20-25). *Personality types and teaching efficacy as predictors of classroom control orientation in*

- beginning teachers. [Paper presentation]. Annual meeting of the Southwest Educational Research Association. New Orleans. <https://sera-edresearch.org/conference>
- Darby, Sh. (1987). *Personality types: Jung's model of typology. Studies in Jungian psychology*. Inner City Books.
- Demirdage, S. (2015). Assessing teacher self-efficacy and job satisfaction: Middle school teachers. *Journal of Educational and Instructional Studies in the World*. 5 (5), 35–43.
- Derakhshan, A., & Fathi, J. (2023). Grit and foreign language enjoyment as predictors of EFL learners' online engagement: The mediating role of online learning self-efficacy. *The Asia-Pacific Education Researcher*. <https://doi.org/10.1007/s40299-023-00745-x>
- Derakhshan, A., & Shakki, F. (2019). A critical review of language teacher education for a global society: A modular model for knowing, analyzing, recognizing, doing, and seeing. *Critical Studies in Texts and Programs in Human Sciences*, 19(6), 109–127. <https://doi.org/10.30465/crtls.2019.4378>
- Dibapile, W. (2012). *Teacher efficacy and classroom management among Botswana junior secondary school teachers* [Doctoral Dissertation, University of Tennessee]. <https://tracce.tennessee.edu>
- Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. (2014). Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology*, 106(2), 569–583.
- Ebrahimi, S. (2015). The relationship between EFL teachers' personality traits emotional intelligence and their job satisfaction. *IJLLALW*, 9(2), 156–163.
- Eslami, Z., & Fatahi, A. (2008). Teachers' sense of self-efficacy, English proficiency, and instructional strategies: A study of nonnative EFL teachers in Iran. *TESL-EJ*, 11(4), 114–122.
- Fan, J., & Wang, Y. (2022). English as a foreign language teachers' professional success in the Chinese context: The effects of well-being and emotion regulation. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.952503>.
- Fatemi, M., Ganjal, R., & Kafi, Z. (2016). EFL teachers' personality type and their effectiveness in teaching: Investigating the relationship. *International Journal of*

Educational Investigations, 3(1), 166–177.

- Fathi, J., & Derakhshan, A. (2019). Teacher self-efficacy and emotional regulation as predictors of teaching stress: An investigation of Iranian English language teachers. *Teaching English Language*, 13(2), 117–143.
- Gavora, P. (2010). Slovak pre-service teacher self-efficacy: Theoretical and research considerations. *The New Educational Review*, 21(2), 17–30.
- Ghonsooly, B., Khajavy, G. H., & Mohaghegh Mahjoobi, F. (2014). Self-efficacy and metacognition as predictors of Iranian teacher trainees' academic performance: A path analysis approach. *Procedia – Social and Behavioral Sciences*, 96, 590–598.
- Giallo, R., & Little, E. (2003). Classroom behavior problems: The relationship between preparedness, classroom experiences, and self-efficacy in graduate and student teachers. *Australian Journal of Educational & Developmental Psychology*, 3(4) 21–34.
- Han, Y., & Wang, Y. (2021). Investigating the correlation among Chinese EFL teachers' self-efficacy, reflection, and work engagement. *Frontiers in Psychology*, 12. 763234. <https://doi.org/10.3389/fpsyg.2021.763234>.
- Hicks, S. D. (2012). *Self-efficacy and classroom management: A correlation study regarding the factors that influence classroom management* (Publication No. 3516823) [Doctoral dissertation, Liberty University]. ProQuest Dissertations and Theses Global.
- Hoyle, R. H., & Panter, A. T. (1995). *Writing about structural equation models*. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 158–176). Sage Publications.
- Jalili, S., & Mall-Amiri, B. (2015). The difference between extrovert and introvert EFL teachers' classroom management. *Theory and Practice in Language Studies*, 5(4), 826–836.
- Kazemi, A., & Soleimani, N. (2016). On the relationship between EFL teachers' classroom management approaches and the dominant teaching style: A mixed method study. *Iranian Journal of Language Teaching Research*, 4(2), 87–103.
- Khodabandeh, F., & Jamali, M. (2019). Exploring the relationship between teachers' creativity, classroom management, age, and gender. *Journal of Foreign Language Teaching and Translation Studies*, 4(1), 67–88.
- Lazarides, R., Watt, H., & Richardson, B. (2020). Teachers' classroom management

- self-efficacy, perceived classroom management, and teaching contexts from beginning until mid-career. *Learning and Instruction*, 69(20), 1–14.
- Lazarides, R., Buchholz, J., & Rubach, C. (2018). Teacher enthusiasm and self-efficacy, student-perceived mastery goal orientation, and student motivation in mathematics classrooms. *Teaching and Teacher Education*, 69, 1–10.
- Le Sage, T. A., Venneman, S. S., Patton, B. A., & Hallock, D. E. (2008). Business undergraduate temperaments, student electronic activity, and selected demographic characteristics on course achievement in an online university learning environment. *European Journal of Social Sciences*, 5(4), 8–20.
- Lowie, W., & Bregtje, S. (2013). *Essential statistics for applied linguistics*. Palgrave Macmillan.
- Magday, W. & Pramoolsook, I. (2021). Exploring teaching demonstrations in the teaching journals: A case of Filipino pre-service teachers. *Language Related Research*, 12 (5), 175–203
- Mahmoudi, T., & Zamanian, M. (2018). The relationship between Iranian EFL teachers' personality and their teaching preferences. *Theory and Practice in Language Studies*, 8(6), 686–693.
- Marashi, H., & Azizi Nassab, F. (2018). EFL teachers' language proficiency, classroom management, and self-efficacy. *International Journal of Foreign Language Teaching and Research*, 6(22), 89–102.
- Martin, K., & Sass, D. (2010). Construct validation of the behavior and instructional management scale. *Teaching and Teacher Education*, 26, 1124–1135.
- Maulana, R., Opdenakker, O., & Bosker, B. (2016). Teachers' instructional behaviors as important predictors of academic: Changes and links across the school year. *Learning and Individual Differences*, 50(6) 147–156.
- Miller, A. D., Ramirez, E. M., & Murdock, T. B. (2017). The influence of teachers' self-efficacy on perceptions: Perceived teacher competence and respect and student effort and achievement. *Teaching and Teacher Education*, 64, 260–269.
- Montuoro, P. & Lewis, R. (2017). Personal responsibility and behavioral disengagement in innocent bystanders during classroom management events: The effect of teacher aggressive tendencies. *The Journal of Educational Research*, 1(2), 1–9.
- Myers, M., Briggs, I., McCaulley, M., Naomi, L. Q., & Hammer, A. (1998). *MBTI*

Manual: A guide to the development and use of the Myers Briggs type indicator. Consulting Psychologists Press.

- Nkomo, N., & Fakrogha, E. (2016). Teacher personality and effective classroom management. *International Journal of Innovative Research and Development*, 5(13), 10–14.
- Pan, Z., Wang Y., & Derakhshan A. (2023). Unpacking Chinese EFL students' academic engagement and psychological well-being: The roles of language teachers' affective scaffolding. *Journal of Psycholinguistic Research*. <https://doi.org/10.1007/s10936-023-09974-z>
- Rahimi, M., & Asadollahi, F. (2012). On the relationship between Iranian EFL teachers' classroom management ordinations and teaching style. *Procedia-Social and Behavioral Sciences*, 31, 49–55.
- Rahimi, M., & Weisi H. (2018). Reflective practice, self-efficacy and research practice of EFL teachers: Examining possible relationships. *Issues in Educational Research*, 28(3), 756–780.
- Rashtchi, M., & SanayiMashhoor, H. (2019). Extravert and introvert EFL teachers: How do reflective teaching and burnout relate? *Journal of Applied Linguistics and Language Research*, 6(4), 73–88.
- Rastegar, M., & Memarpour, M. (2009). The relationship between emotional intelligence and self-efficacy among Iranian EFL teachers. *System*, 37, 700–712.
- Razmjoo, A., & Ayoobian, H. (2019). On the relationship between teacher resilience and self-efficacy: The case of Iranian EFL teachers. *Journal of English Language Teaching and Learning*, 11(23), 277–292.
- Shakki, F. (2022). Iranian EFL students' L2 engagement: The effects of teacher-student rapport and teacher support. *Language Related Research*, 13(3), 175–198. <https://doi.org/10.52547/LRR.13.3.8>
- Shakki, F., Derakhshan, A., & Ziabari, R. S. (2016). The interplay between language skills and dynamic assessment. *International Journal of Linguistics*, 8(2), 141–157.
- Shindler, J. (2010). *Transformative classroom management: Positive strategies to engage all students and promote a psychology of success*. John Wiley & Sons.
- Soleimani, N., & Razmjoo, A. (2016). Classroom management challenges: An account of EFL teachers at private language institutes. *Anatolian Journal of*

Education, 1(1), 112–123.

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching & Teacher Education*, 23(6), 944–956.

Tilaki, M., (2019). *The effect of personality type on classroom management*. Lambert Academic Publishing.

Tschannen-Moran, M., & Woolfolk Hoy, A., (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(2), 783–805.

Vakilifard, A., & Heydari Khosro, P. (2022) Investigating the relationship between personality type, learning styles, and strategies in Chinese learners of the Persian language. *Language Related Research*, 13(4), 659–690.

Valente, S., Lourenço, A. A., Dominguez-Lara, S., Derakhshan, A., Németh, Z., & S. Almeida, L. (2022). Teachers' emotion regulation: Implications for classroom conflict management. *Australian Journal of Teacher Education*, 47(8), 18–32. Retrieved from <https://ro.ecu.edu.au/ajte/vol47/iss8/2>

Yilmaz, C. (2011). Teachers' perceptions of self-efficacy, English proficiency, and instructional strategies. *Social Behavior and Personality: An International Journal*, 39(1), 91–100.

Wang, Y., & Derakhshan, A. (2023). Enhancing Chinese and Iranian EFL students' willingness to attend classes: The role of teacher confirmation and caring. *Porta Linguarum*, 39, 165–192. <http://doi.org/10.30827/portalin.vi39.23625>

Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, 86(4), 981–1015.

About the Author

Hoda Divsar is an Assistant Professor of the TEFL Department at Payame Noor University. Her areas of interest cover critical thinking, language learning strategies, and multiple intelligences theory.