

Paper Type: Original Article



Structural Equation Modelling of Male and Female ESP Lecturers' Self-Efficacy, Personality, and Teaching Motivation by Considering the Meditating Role of their Writing Ability

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Received: 12 December, 2025

Revised: 22 May, 2026

Accepted: 17 June, 2026

Abstract

The present study aimed to determine the extent to which Iranian male and female English for Specific Purposes (ESP) lecturers' self-efficacy and personality predict their teaching motivation by considering the mediating role of their writing ability. Through convenience sampling, 153 male and 182 female ESP lecturers from 26 Iranian universities participated in the study. The data were collected through a battery of validated questionnaires measuring teaching motivation, self-efficacy, and personality, along with a researcher-developed writing task scored based on Brown and Bailey's (1984) analytic writing assessment framework (style, organization, and mechanics). Structural Equation Modelling (SEM) was also conducted using AMOS 22. The results indicated that self-efficacy and personality significantly predicted teaching motivation in both groups. Moreover, writing ability significantly mediated the relationships between self-efficacy, personality, and teaching motivation. Gender-based differences emerged in the strength of structural paths. The findings provide theoretical and pedagogical implications for ESP teacher education and professional development.

Keywords: ESP courses, Male and female lecturers, Personality, Self-efficacy, Teacher factors, Teaching motivation.

I | INTRODUCTION

The scrutiny of some recent empirical studies (e.g. Shirkhani & Mir Mohammad Meigouni, 2020; Slemp et al., 2020; Utami & Winarni, 2023; Wang & Zhang, 2021) indicates that researchers have been concerned with the role of

language teacher factors in the process of language teaching. Those studies have further emphasized that teachers' psychological well-being, reflection, and work engagement significantly contribute to their teaching motivation across diverse instructional contexts (Ahangaran, 2025).

Xiyun et al. (2022) defined these factors as the teacher-internal characteristics that are likely to exert considerable impacts on their educational efficacy in the context of the classroom. Likewise, Yuan and Zhang (2017) pointed out that teacher factors encompass teachers' *cognitive*, *personal*, and *affective* attributes that may significantly affect their language teaching beliefs and instructional practices in the process of language teaching. Menon (2020) pointed out that teachers' cognitive characteristics refer to their information processing capability such as their critical thinking skills that determine their ability to process and use second language information in language instruction. Moreover, he noted



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Cite this article: Javanmard Gholej, S., Ahangaran, F., Pouyan, A., (2026). Structural Equation Modelling of Male and Female ESP Lecturers' Self-Efficacy, Personality, and Teaching Motivation by Considering the Meditating Role of their Writing Ability, *Journal of Studies in Language Learning and Teaching*, 2(2), 151-167. doi: 10.22034/JSLLT.2026.24090.1109

that personal variables comprise a number of features such as age, income, and language background that distinguish teachers from their peers. Lastly, he pointed out that affective factors refer to certain attributes such as grit and teaching enjoyment that influence teachers' ability to deal with various sources of stress and mental health.

Hajovsky et al. (2020) stated that, among different affective factors, language teachers' Teaching Motivation (TM) has attracted considerable attention. They further state that, TM refers to either teachers' intrinsic interest in the process of target language instruction or to their proclivity to teach it due to external rewards or obligations. They stated that TM may be affected by other teacher factors and abilities including teachers' gender, Self-Efficacy (SE) Teacher Personality (TP), and writing ability, among the others.

Hoang and Wyatt (2021) noted that gender refers to male and female teachers' biological characteristics that are likely to affect their cognitive and affective attributes along with their teaching effectiveness. Furthermore, Gumah et al. (2021) stated that teachers' SE determines their positive perspectives on their pedagogical skills and abilities in their classes. Moreover, Tse et al. (2020) argued that TP encompasses language teachers' attitudes, beliefs, and behavior that specify their compatibility with various teaching situations. Lastly, Wang (2022) pointed out that writing ability determines teachers' competence in the expression of their intentions by means of the written modality of the target language.

Despite the growing body of research on teacher-related variables, the interrelationships among self-efficacy, personality traits, and teaching motivation have rarely been examined simultaneously within a single structural model, particularly in ESP contexts. More importantly, previous studies have predominantly investigated these constructs independently and within general English teaching settings, leaving their interaction in discipline-specific ESP environments underexplored.

In addition, although language proficiency is an essential component of teachers' professional competence, the potential mediating role of specific language skills, particularly writing ability, between psychological traits and teaching motivation has not been theoretically or empirically examined. From a social-cognitive perspective (Bandura, 1997), teachers' perceived competence in domain-specific skills can strengthen their professional confidence and intrinsic motivation. Writing ability, especially in ESP contexts where instructors frequently prepare specialized materials, assessments, and academic correspondence, may reinforce teachers' instructional self-efficacy and professional identity, thereby influencing their motivation. Recent ESP-oriented SEM research has also demonstrated that psychological variables and motivational orientations significantly contribute to learners' academic writing ability in specialized language contexts (Ahangaran & Pouyan, 2025).

Therefore, the present study addresses three major gaps as follows:

- (1) the lack of an integrated structural model linking personality, self-efficacy, and teaching motivation
- (2) the absence of research examining writing ability as a mediating variable
- (3) the scarcity of gender-based SEM comparisons in Iranian ESP contexts

II. REVIEW OF THE RELATED LITERATURE

2.1. Empirical findings on teacher factors and abilities

A large number of the recent empirical studies (e.g. Orakci Durnali, 2022; Ozbay et al., 2019; Qanwal & Ghani, 2019; Skellett, 2017; Zhou et al., 2021) have highlighted the significant role of teacher factors and abilities in the process of language instruction. Tse et al. (2020) noted that, among these teacher characteristics gender, TM, SE, TP, and writing ability have attracted considerable attention. Also, Gale et al. (2021) noted that language teachers' gender refers to the biological attributes that distinguish male teachers from female teachers. As they found, the interest in this personal factor stems from the fact that it is likely to have a noticeable impact on teachers' psychological well-being, coping ability, language teaching beliefs, and ability to deal with diverse internal and external sources of teaching anxiety and stress in the context of the classroom.

Moreover, Wu (2003) defined TM as the language teachers' enthusiasm for engaging in second language instruction despite the various types of difficulties such as contextual barriers that interfere with their effective instructional performance. In light of this definition, Oliveira et al. (2021) itemized two main sub-components of TM including *intrinsic TM* and *extrinsic TM*. As they explained, teachers' intrinsic TM

encompasses their eagerness to teach the target language that arouses their interest in it and brings joy to them. On the other hand, as they pointed out, extrinsic TM refers to teachers' interest in language teaching due to an external award such as income or certain obligations including language teaching contracts at their workplace.

Furthermore, teachers' SE has been examined as an affective factor that influences their instructional efficacy (e.g. Anthony et al., 2007; Azari Noughabi & Amirian, 2021; Clark & Newberry, 2019). Elliott et al. (2010) defined teachers' SE as their perspectives on their capabilities to assume their responsibilities and to perform their academic tasks in an effective way. Likewise, Gale et al. (2021) pointed out that teachers' SE refers to the degree to which they believe that they have mastery over their teaching environment and are able to develop and implement teaching techniques that facilitate and expedite langue learners' acquisition of diverse aspects of the target language. Previous research has also highlighted the importance of teacher self-efficacy as a manageable and developable construct within EFL teacher education programs (Ahangaran et al., 2019).

Considering the significance of SE, Tschannen-Moran and Woolfolk Hoy (2001) identified its three underlying components including *efficacy for instructional strategies*, *efficacy for student engagement*, and *efficacy for classroom management*. As they explained, efficacy for instructional strategies determines the degree to which teachers are aware of the effectiveness of their instructional practices and strive to take advantage of the teaching techniques that are compatible with their learners' needs and preferences. Moreover, efficacy for student engagement determines teachers' ability to specify the factors that interfere with learners' language learning and their capability to use certain teaching practices that arouse learners' interest in their tasks and expedite their language acquisition. Finally, as they pointed out, efficacy for classroom management refers to teachers' awareness of certain factors such as student misbehavior that constitute barriers to language teaching and their ability to deal with them in an effective way.

Teachers' TP has always been considered to be a main factor in their psychological health and their relationships with the other individuals in their workplace (Faisal, 2019; Tse et al., 2020). Ding et al. (2022) defined teachers' TP as the totality of their conceptions, perceptions, opinions, beliefs, attitudes, behavior, actions, and decisions that determine their adjustment to various situational contexts and distinguish them from the other individuals in their academic settings.

Considering the significant impact of TP on teachers' instructional practices, Eysenck et al. (1985) particularized three main sub-components of this affective factor including *psychoticism*, *neuroticism*, and *extroversion*. Eysenck et al. (1985) stated that psychoticism refers to the personality trait that is mainly associated with individuals' risk-taking behavior and their tendency to disregard the major rules and norms in their society. They believed that people with high levels of psychoticism tend to be impulsive and may exhibit behaviors that are not compatible with accepted behavior codes in different contexts. Eysenck et al. (1985) noted that neuroticism encompasses the personality trait that is related to various negative emotions. People with high levels of neuroticism are doubtful regarding their capabilities and suffer from anxiety in different occupational and educational settings. Finally, Eysenck's team pointed out that extroversion is the personality trait that determines peoples' tendency to be talkative and sociable.

Individuals with high extroversion levels are able to develop harmonious relationships with other individuals and are interested in group work. As the researchers (ibid) pointed out, individuals with low extroversion levels are called introverts. They concluded that introverts are reflective individuals who are not very sociable and are interested in individual activities.

Lastly, the scrutiny of language teachers' abilities shows that a large number of studies (e.g. Qanwal & Ghani, 2019; Zhang & Zou, 2023) have focused on their writing ability. Zhao (2022) stated that teachers' writing ability refers to their competence in the use of the written modality of the language to develop and share different ideas by using diverse categories of vocabulary items such as individual words and lexical bundles along with various types of grammatical structures. In accordance with this definition, Brown and Bailey (1984) itemized the three main sub-components of writing ability, including *style*, *structure*, and *mechanics*. As they explained, style refers to the writers' ability to use the target language in order to convey messages effectively. Structure determines the degree to which writers are aware of the elements such as various kinds of conjunctions that ameliorate the cohesion of their texts. Lastly, mechanics specifies the extent to which writers communicate their ideas in line with the second language grammar and expounds on their capability to take advantage of features such as capitalization and punctuation marks, among the others.

2.2. Writing ability and psychological factors

Empirical evidence suggests that teachers' language proficiency may influence their instructional confidence and professional engagement. For example, Qanwal and Ghani (2019) reported that extroversion was positively associated with writing performance among ESL learners, suggesting a possible personality–writing link. Similarly, studies grounded in social-cognitive theory indicate that mastery experiences enhance self-efficacy beliefs (Zee & Koomen, 2016). Since writing competence can serve as a mastery experience for language teachers, it may reinforce their instructional confidence and intrinsic motivation. Similarly, Ahangaran and Pouyan (2025) found that ESP learners' motivational orientations and psychological needs significantly predicted their academic writing ability within a Structural Equation Modelling framework, highlighting the close interaction between psychological variables and writing competence in ESP environments.

However, no study to date has examined writing ability as a mediating variable between personality traits, self-efficacy, and teaching motivation in an ESP context. This gap warrants structural modelling to clarify the indirect pathways through which psychological characteristics may influence teaching motivation via professional language competence.

2.3. The present study

Based on the social-cognitive theory (Bandura, 1997) and the trait theory of personality (Eysenck et al., 1985), it was hypothesized that personality traits (extroversion) would positively predict self-efficacy and writing ability, self-efficacy would positively predict teaching motivation, and writing ability would mediate the relationships between personality, self-efficacy, and teaching motivation.

Given documented gender differences in motivational and psychological constructs, gender was treated as a grouping variable and multi-group SEM was conducted to compare structural paths across the male and female lecturers.

Accordingly, the following hypotheses were formulated:

H1: Self-efficacy significantly predicts teaching motivation.

H2: Personality (extroversion) significantly predicts teaching motivation.

H3: Self-efficacy significantly predicts writing ability.

H4: Personality significantly predicts writing ability.

H5: Writing ability significantly predicts teaching motivation.

H6: Writing ability mediates the relationships between self-efficacy, personality, and teaching motivation.

H7: Structural path coefficients differ across male and female lecturers.

III. METHOD

3.1. Participants

In light of the main objectives of the study, the researchers took advantage of convenience sampling to select the participants of the study. To this end, first, they contacted the heads of English language departments at 26 universities in Iran, apprised them of the objectives, and obtained their consent to the study. The managers provided the researchers with the contact information of 379 ESP lecturers including 181 male and 198 female lecturers who taught English for Mechanical Engineering courses. All the participating universities offered Mechanical Engineering programs, and the ESP lecturers included in this study were those officially assigned to teach English for Mechanical Engineering courses. This delimitation was adopted to control for disciplinary variation. However, this focus may limit generalizability to other ESP domains such as medical or business English. Second, the researchers contacted these lecturers in a one-month period, informed them about the aims, and invited them to take part in the study. Twelve of the male and seven of the female teachers did not answer the researchers' calls or messages. Furthermore, 16 of the male and nine of the female teachers did not consent to participate in the study due to various reasons including their busy schedule among the others. Consequently, 153 male and 182 female ESP lecturers constituted the participants and completed the written consent forms of the study. These lecturers ranged in age from 31 to 58 and were native speakers of Persian, Azeri, Arabic, or Kurdish. Moreover, they had an MA or PhD degree in English Language Teaching. Lastly, the experience of these teachers was in the range of 3 to 21 years.

3.2. Design

In the present study, the researchers used the predictive correlational design to answer the research questions. As [Creswell and Creswell \(2017\)](#) explained, this design enables researchers to determine the extent to which a number of independent or predictors variables predict a certain dependent variable. Moreover, as they pointed out, it helps researchers to specify the degree to which other variables mediate the relationships between the predictor and dependent variables. Likewise, in the present study, the researchers made an effort to determine the degree to which the male and female ESP lecturers' SE and TP predicted their TM by considering the mediating role of their writing ability.

3.3. Instruments

The study employed three standardized questionnaires (Teaching Motivation, Self-Efficacy, and Personality) along with a researcher-made demographic questionnaire and a writing task. Two questionnaires used Likert-type scales and one (personality) employed a dichotomous format. Reliability and validity evidence were examined prior to the main data collection. Therefore, the researchers used Cronbach's Alpha (CA) measure to examine their reliability in a pilot study in the context of Iran prior to the onset of the data collection. The pilot study involved 30 ESP lecturers including 15 male and 15 female lecturers who were similar to the participants of the main study in terms of their characteristics. The construct validity of the instruments was examined through Confirmatory Factor Analysis (CFA) prior to structural modelling. All the factor loadings were significant and above .50. The fit indices for each measurement model met acceptable thresholds (CFI > .90, TLI > .90, RMSEA < .08), supporting the construct validity in the Iranian ESP context. The following section expounds on these instruments:

3.3.1. Demographic information questionnaire

In the present study, the researchers used a demographic information questionnaire in order to obtain data on the participants' gender, age, experience, academic degree, and native language background.

3.3.2. TM questionnaire

Considering the main objectives, the researchers used [Oliveira et al.'s \(2021\)](#) TM questionnaire in order to determine the participants' TM. This questionnaire encompasses 26 items that are rated on a 5-point scale in the range of *strongly agree* to *strongly disagree*. The relevant items focus on two underlying sub-components of TM including *intrinsic* and *extrinsic* TM. *The questionnaire consists of 14 intrinsic motivation items and 12 extrinsic motivation items.* The Cronbach's alpha coefficients were .84 for intrinsic motivation and .79 for extrinsic motivation. A sample intrinsic item is "I teach English because I enjoy the process of language instruction". A sample extrinsic item is "I teach English because it provides financial security". The original English version was used since all the participants held graduate degrees in English; however, clarity was checked through expert review.

3.3.3. SE questionnaire

In light of the aims of the study, the researchers used [Tschannen-Moran and Woolfolk Hoy's \(2001\)](#) SE questionnaire to examine the male and female ESP lecturers' SE. This self-report questionnaire encompasses 24 items. These items are rated on a 9-point Likert scale in the range of *nothing to a great deal*. Moreover, they focus on three main sub-components' of SE including *efficacy for instructional strategies*, *efficacy for student engagement*, and *efficacy for classroom management*. The results of the CA analysis indicated that the reliability of this questionnaire was .84 and it could be utilized in the context of Iran. The reliability coefficients for the subscales were .82 for instructional strategies, .80 for student engagement, and .78 for classroom management.

3.3.4. TP questionnaire

In the present study, the researchers took advantage of [Eysenck et al.'s \(1985\)](#) questionnaire to examine the participants' TP. The original Eysenck Personality Questionnaire includes 90 items; however, the short-form version contains 48 items assessing psychoticism, neuroticism, extroversion, and a lie scale (12 items each). In the present study, only the 12-item extroversion subscale was utilized due to its theoretical relevance to teaching motivation. As [Eysenck et al. \(1985\)](#) pointed out the scores in the range of 1 to 6 show *introversion* trait. On the other hand, the scores in the range of 7 to 12 show extroversion trait. Since the personality scale used a dichotomous (Yes/No) format, its internal consistency was calculated using the Kuder-Richardson Formula 20 (KR-20), which yielded a coefficient of .83, indicating acceptable reliability. Although originally developed in 1985, the Eysenck extroversion scale continues to be widely used in personality research and has demonstrated stable psychometric properties across cultures.

3.3.5. Writing test

In order to examine the male and female ESP lecturers' writing ability, the researchers developed a free-writing test. This test prompted the teachers to write an 800-word essay on the following top: *What are the challenges of teaching ESP classes in your context?* The participants took this test in a one-hour period of time.

3.3.6. Writing assessment framework

In this study, the researchers used Brown and Bailey's (1984) framework to assess the participants' writing ability. Brown and Bailey's analytic framework was selected because it provides clear domain-specific criteria suitable for assessing academic writing among language professionals and has been extensively applied in L2 writing research. This framework examines three main sub-components of writing including *style*, *structure*, and *mechanics*. Each of these sub-components is assessed on a 20-point scale. Since each of the three components was rated on a 20-point scale, the total possible writing score ranged from 0 to 60. Both of the researchers rated the participants' essays in a one-month period. As a result, they took advantage of inter-rater correlation coefficient to examine the inter-rater reliability. The two raters were blinded to the participants' gender and identity to prevent scoring bias. Based on the analysis, the inter-rater reliability index was .88, and the essay assessment results were reliable.

3.4. Procedure

In this study, first, the researchers used convenience sampling to select 153 male and 182 female ESP lecturers at 26 universities in Iran as the participants and obtained their informed consent. Second, they administered demographic information questionnaire, Oliveira et al.'s (2021) TM questionnaire, Tschannen-Moran and Woolfolk Hoy's (2001) SE questionnaire, Eysenck et al.'s (1985) TP questionnaire, and the writing test of the study to the participants in a two-week period. The participants returned the completed questionnaire to the researchers in a one-week period. Moreover, they took the writing test in a one-hour period. The researchers took advantage of Brown and Bailey's (1984) framework to assess the participants' writing performance. Finally, the researchers used SPSS 24 and Amos 22 for the data analysis.

3.5. Data analysis

Prior to SEM, the assumptions of normality, linearity, independence of errors, and absence of multicollinearity were examined using SPSS 24. The skewness and kurtosis values were in the range of ± 2 , indicating univariate normality. The variance inflation factor (VIF) values were below 3, suggesting no multi-collinearity concerns.

Descriptive statistics and Pearson correlations were computed. Confirmatory factor analyses were conducted to validate the measurement models before testing the structural model. Structural equation modelling was also performed using AMOS 22 with maximum likelihood estimation. The model fit was evaluated using χ^2/df , CFI, TLI, IFI, and RMSEA.

IV. RESULTS

4.1 Descriptive statistics and correlations

The means, standard deviations, and Pearson correlation coefficients for the main study variables are presented in Table 1. All the variables were significantly correlated in the expected directions ($p < .05$), supporting the appropriateness of structural equation modelling.

Table 1. Means, standard deviations, and Pearson correlations among the study variables

Variable	M	SD	1	2	3
1. Self-efficacy	6.85	0.92	-		
2. Personality (Extroversion)	8.10	2.15	0.54	-	
3. Writing ability	42.30	6.75	0.48	0.36	-
4. Teaching motivation	3.92	0.63	0.68	0.78	0.59

Note: N = 335. $p < 0.01$.

Research question one examined the extent to which the male ESP lecturers' SE and TP predicted their TM by considering the mediating role of their writing ability. To this end, the researchers used SEM to analyze the obtained data. Figure 1 provides the model for the predictors of the male ESP lecturers' TM.

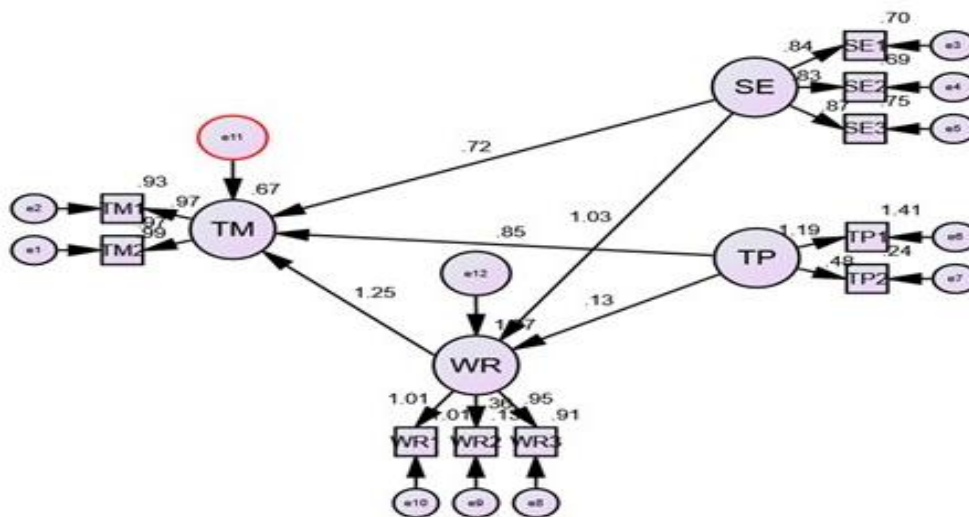


Figure 1. Model of the predictors of the male ESP lecturers' TM

The researchers scrutinized the regression weights of the male ESP lecturers' SE and TP and took account of the mediating effect of their writing ability to determine the degree to which these variables predicted the TM of this group. Table 2 shows these results.

Table 2. Regression weights of the male ESP lecturers' TM model

Correlations			Estimate	S.E.	C.R.	P
WR	<---	SE	1.534	0.083	5.430	0.000
WR	<---	TP	0.127	0.053	2.392	0.017
TM	<---	WR	0.996	0.018	2.613	0.006
TM	<---	SE	-0.862	0.034	3.956	0.007
TM	←-	TP	0.656	0.062	4.045	0.000

As shown in Table 2, the male ESP lecturers' SE and TP were significant predictors of their TM and writing ability (C.R. > 1.96; $p < 0.05$). Consequently, the researchers examined the standardized estimates to determine the most significant predictor of their TM by considering the mediating role of their writing ability. Table 3 shows these results.

Table 3. Standardized estimates of the male ESP lecturers' TM

Correlations			Estimate
WR	<---	SE	0.226
WR	<---	TP	0.131
TM	<---	WR	0.247
TM	<---	SE	0.721
TM	<---	TP	0.849

Based on Table 3, the male ESP lecturers' TP (0.849) and SE (0.721) were respectively the first and the second most significant predictors of their TM with the mediating role of their writing ability taken into account. Therefore, the researchers examined the model fit. Table 4 shows the results.

Table 4. Model fit summary of the male ESP lecturers' TM

Model	NPAR	CMIN	DF	P	CMIN/DF	RMSEA
Default model	35	81.265	30	0.467	2.042	0.061

According to Table 4, the model fit was satisfactory ($p > 0.05$; $CMIN/DF < 3$; $RMSEA = 0.061$). Therefore, the researchers examined the baseline comparisons of this model to ensure its fit. Table 5 provides the results.

Table 5. Baseline comparisons of the male ESP lecturers' TM

Model	IFI Delta2	TLI rho2	CFI
Default model	0.967	0.922	0.948

As shown in Table 5, the male ESP lecturers' TM model fit was acceptable ($IFI > 0.90$; $TLI > 0.90$; & $CFI > 0.90$).

Research questions two examined the degree to which the female ESP lecturers' SE and TP predicted their TM by considering the mediating role of their writing ability. Therefore, the researchers used SEM to analyze the data. Figure 2 shows the model for the predictors of the female ESP lecturers' TM.

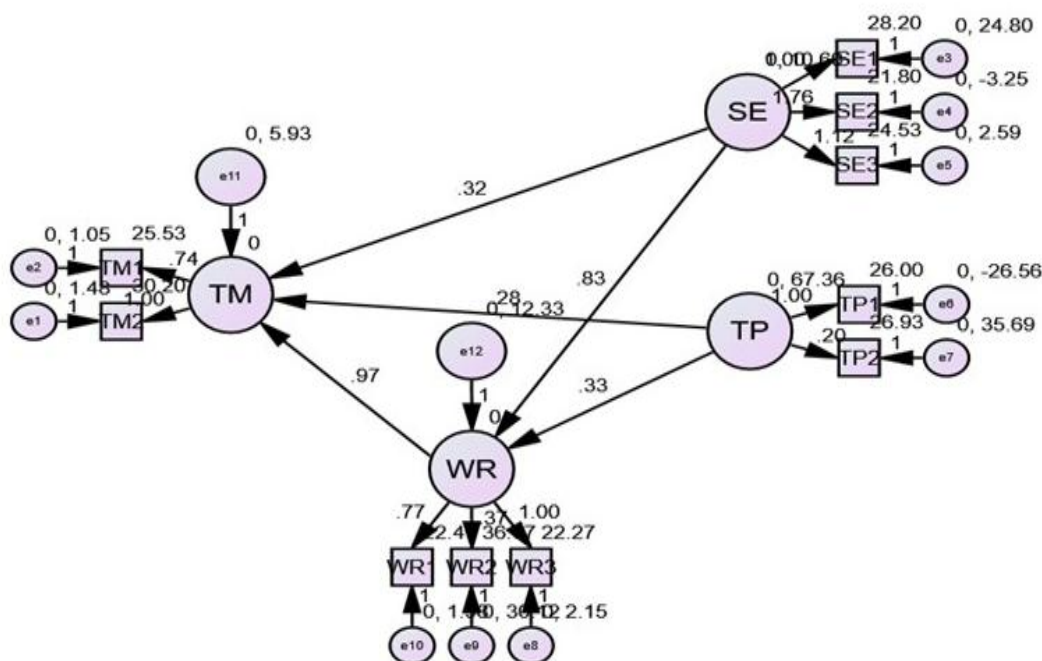


Figure 2. Model of the predictors of the female ESP lecturers' TM

The researchers examined the regression weights of the female ESP lecturers' SE and TP and determined the mediating effect of their writing ability to determine the degree to which these variables predicted the TM of this group. Table 6 provides the results.

Table 6. Regression weights of the female ESP lecturers' TM model

Correlations			Estimate	S.E.	C.R.	P
WR	<---	SE	0.033	0.370	2.250	0.009
WR	<---	TP	0.030	0.206	3.604	0.000
TM	<---	WR	0.071	0.356	2.723	0.008
TM	<---	SE	0.017	0.332	2.954	0.006
TM	<---	TP	0.075	0.268	3.026	0.001

Based on Table 6, the female ESP lecturers' SE and TP were significant predictors of their TM and writing ability ($C.R. > 1.96$; $p < 0.05$). Therefore, the researchers examined the standardized estimates to determine the most significant predictor of their TM by considering the mediating role of their writing ability. Table 7 shows the results.



Table 7. Standardized estimates of the female ESP lecturers' TM

Correlations			Estimate
WR	<---	SE	0.523
WR	<---	TP	0.520
TM	<---	WR	0.761
TM	<---	SE	0.256
TM	<---	TP	0.341

According to Table 7, the female ESP lecturers' TP (0.341) and SE (0.256) were respectively the first and the second most significant predictors of their TM with the mediating role of their writing ability taken into account. Based on these results, the researchers examined the model fit. Table 8 shows the results.

Table 8. Model fit summary of the female ESP lecturers' TM

Model	NPAR	CMIN	DF	P	CMIN/DF	RMSEA
Default model	35	144.309	30	0.242	2.610	0.068

As shown in Table 8, the model fit was satisfactory ($p > 0.05$; CMIN/DF < 3 ; RMSEA = 0.068). As a result, the researchers examined the baseline comparisons of this model to ensure its fit. Table 9 shows the results.

Table 9. Baseline comparisons of the female ESP lecturers' TM

Model	IFI Delta2	TLI rho2	CFI
Default model	0.988	0.955	0.970

According to Table 9, the female ESP lecturers' TM model fit was acceptable (IFI > 0.90 ; TLI > 0.90 ; & CFI > 0.90).

V. DISCUSSION

The findings demonstrated that personality (extroversion) was the strongest predictor of teaching motivation among the male lecturers, whereas writing ability showed the strongest direct association with teaching motivation among the female lecturers. Interestingly, the direct path from self-efficacy to teaching motivation among the males was negative in the unstandardized model, although the standardized estimate was positive. This may indicate a suppression effect, where writing ability absorbs part of the shared variance between self-efficacy and motivation. Such a pattern suggests that male lecturers' perceived competence may influence motivation primarily through demonstrated professional skills rather than direct psychological confidence.

Wu (2003) pointed out that language teachers' satisfactory SE enables them to engage their learners in their learning tasks and makes them aware of the value of language learning in their context. According to him, learners' engagement in their tasks arouses their interest in language learning and motivates teachers to use more efficacious strategies to facilitate their learners' acquisition of the target language. Moreover, Tse et al. (2020) pointed out that language teachers' higher extroversion enables them to express their feelings in an effective way and prompts them to develop rapport with their peers and colleagues; thereby, teachers' ability to establish harmonious relationships in their workplace increases their intrinsic motivation for teaching the target language. Finally, Wang (2022) noted that teachers' psychological health in their academic contexts partly stems from their constructive relationships with their colleagues and motivates them to ameliorate their language skills including their writing skill, among the others.

In light of these discussions, it can be argued that, in the present study, the male ESP lecturers' SE was a main factor in their TM since it helped them to engage their learners in classroom tasks and made them cognizant of their capabilities. Moreover, these lecturers' extraversion was a significant predictor of their TM owing to the fact that it expedited their establishment of harmonious and working relationships with

their peers and learners. Finally, these lecturers' writing ability significantly mediated the relationships between their SE, TP, and TM since their SE and TP encouraged them to hone their language skills including their writing skill in relevant academic settings.

Research question two examined the extent to which the female ESP lecturers' SE and TP predicted their TM with the mediating role of their writing ability taken into account. The results underlined the fact that these lecturers' SE and TP were significant factors in their TM. Moreover, these lecturers' writing ability was a significant mediator of the relationships between their SE, TP and their TM. Generally, these results are in line with the findings of the studies carried out by Yılmaz and Çokluk-Bökeoğlu (2008), Elliott et al. (2010), Woodrow (2012), Zach et al. (2012), Gasco-Txabarri et al. (2014), McEown et al. (2014), Guay et al. (2015), Zee and Koomen (2016), Zhen et al. (2017), Howard et al. (2018), Tóth-Király et al. (2018), Van Roy and Zaman (2019), Fathi et al. (2020), Jafari Pazoki and Alemi. (2020), Menon (2020), Shirkhani and Mir Mohammad Meigouni (2020), Gale et al. (2021), Holzer et al. (2021), Ding et al. (2022), Orakci, and Durnali (2022), and Xiyun, et al. (2022). These studies indicated that language teachers' positive perspectives on their management skills and their interest in group-based activities made them cognizant of the value of their endeavors in their workplace and encouraged them to develop more effective language skills along with teaching strategies in the context of the classroom. The present findings are also consistent with Ahangaran and Pouyan's (2025) SEM-based study, which revealed that motivational and psychological constructs significantly contributed to ESP learners' academic writing ability. This consistency further supports the assumption that writing competence is closely associated with affective and motivational dimensions in ESP settings.

Gale et al. (2021) noted that language teachers' SE empowers them to control their learners' behavior and prevents contextual distractors from interfering with their language learning. Moreover, teachers' satisfactory SE enables them to develop and implement diverse teaching strategies, to use various prompts such as rhetorical questions, and to adjust their teaching to their learners' needs and proficiency level. Likewise, Ahangaran (2025) demonstrated that teachers' psychological well-being, emotion regulation, and work engagement significantly predicted teaching motivation among English teachers in different educational contexts. This finding further confirms the multidimensional nature of teaching motivation and its close relationship with affective and psychological teacher variables. In addition, these abilities assure teachers of their teaching efficacy and ameliorate their TM. In addition, Ding et al. (2022) noted that teachers' higher extroversion prompts them to develop group-based activities that promote learners' second language communication and facilitate their language acquisition. As they explained, teachers' awareness of their significant role in learners' development of communicative competence is likely to have a beneficial impact on their TM. Finally, Tóth-Király et al. (2018) noted that teachers' positive perspectives on their pedagogical effectiveness prompts them to improve their language skills including their writing skill to ameliorate the process of their continuous academic development.

Considering the above-mentioned issues, it can be argued that, in the present study, the female ESP lecturers' SE significantly predicted their TM since it helped them to remove the contextual barriers to learners' language acquisition. Moreover, these lecturers' TP was a main factor in their TM owing to the fact that it helped them to facilitate their learners' communicative competence development by means of communicative tasks. Finally, the female lecturers' writing ability significantly mediated the relationships between their SE, TP and TM since their SE made them aware of the significant role of their professional development and convinced them to hone their writings skill.

A comparison of the structural paths revealed that writing ability played a stronger mediating role among the female lecturers (0.761) compared to the males (0.247). This suggests that professional language competence may be more central to female lecturers' motivational structure. Conversely, personality exerted a stronger direct effect among the males (0.849). These findings highlight gender-based differences in how psychological and professional variables interact in ESP contexts.

VI. CONCLUSION

The present study was conducted to determine the role of male and female ESP lecturers' SE and TP in the prediction of their TM by considering the mediating role of their writing ability. The results indicated that these lecturers' SE and TP were significant predictors of their TM. Moreover, their writing ability significantly mediated the relationships between their SE, TP, and TM.

The results may have certain implications. First, it is necessary to redress the ESP lecturer education courses in Iranian context in light of the results of recent empirical studies on teacher factors. These courses need to be overhauled in terms of their content and educators. More specifically, the educators of these courses are experienced professors who are predominantly concerned with effective ESP instruction, tending to disregard lecturer factors. Therefore, it is necessary to re-educate the educators to prompt them to include the discussions of these factors in their courses and to empower the prospective lecturers to manage their affective factors including their SE, TP, and TM among the others.

Moreover, it is necessary to include a module in these courses that makes the lecturers cognizant of their own factors including their SE, TP, and TM, thus empowering them to develop and implement efficacious strategies. This would help them to deal with contextual stressors that have a detrimental effect on their TM and interfere with their efficacious ESP teaching.

Second, it is necessary to revise the current lecturer manuals in terms of their content. The examination of the relevant manuals shows that they are mainly concerned with ESP course content and focus on the instruction of the required ESP language skills and aspects without dealing with theoretical considerations including lecturer factors. Therefore, ESP syllabus designers should add a certain section to these manuals that makes lecturers aware of the consequential role of their factors such as their TM. This can help them to improve the relevant factors by capitalizing on their internal resources and positive emotions including their SE, self-esteem, and self-compassion, among the others.

There is also a need to provide ESP lecturers with the opportunities to develop a better understanding of the role of their factors including their TM in ESP courses. To this end, ESP course developers should prompt the lecturers to attend national and international events such as webinars, conferences, and education courses that focus on lecturer factors. Furthermore, experienced colleagues can advise lecturers to use affective strategies that ameliorate their classroom management, psychological well-being, and coping in diverse teaching conditions. Finally, ESP course developers can provide lecturers with the psychologists' professional consulting services in healthcare centers. These services can make lecturers aware of their internal capabilities and may improve their TM.

The present study suffered from a number of limitations since it was not able to examine the impacts of the participants' age, experience, academic degree, and language background on the obtained results. Furthermore, the researchers delimited the study by focusing on ESP lecturers who taught English for Mechanical Engineering courses and did not include the lecturers who taught other ESP courses in the study. Future studies should deal with these issues. Moreover, these studies have to take advantage of mixed-methods designs to delve more deeply into the main factors that affect ESP lecturers' TM in their settings. They also need to be carried out in both second and foreign language contexts to provide a better understanding of the role of ESP lecturers' factors in their mental health and pedagogical efficacy.

Declaration of use of AI in the writing process

The authors take full responsibility for the contents of this manuscript.

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APPENDIX A

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Writing Task Prompt

Please write an approximately 800-word essay responding to the following question:
“What are the main challenges of teaching ESP courses in your context, and how can they be addressed?”