

The Relationship Between Iranian EFL Teachers' Self-Efficacy and Work Engagement

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Abstract

This study examined the association between teacher self-efficacy (TSE) and work engagement (WE) among Iranian English as a foreign language (EFL) teachers. Its novelty lies in jointly analyzing overall and dimension-level relationships and comparing the strength of the TSE–WE correlation across two teaching-experience groups. Using a cross-sectional correlational design, the data were collected from 106 teachers using the 24-item Teachers' Sense of Efficacy Scale and the 17-item Utrecht Work Engagement Scale. Overall TSE was positively associated with overall WE ($r = .598, p < .001$). At the dimension level, classroom management efficacy showed the strongest association with WE ($\rho = .541, p < .001$); in the regression model, classroom management ($\beta = .275, p = .013$) and student engagement ($\beta = .271, p = .010$) accounted for the unique variance in WE. Vigor was the only WE dimension with a significant unique coefficient for TSE ($\beta = .608, p < .001$). The correlations for novice ($r = .582$) and experienced teachers ($r = .601$) did not differ significantly (Fisher's $z = -.146, p = .884$). The findings support professional development that strengthens classroom management and learner engagement efficacy while also attending to teachers' energy and well-being. The causal conclusions are not warranted.

1. INTRODUCTION

Recent research in education has increasingly examined the personal and professional resources that help teachers sustain effective practice under the routine pressures of classroom life. Teaching is widely recognized as a demanding profession because it requires constant decision-making, management of uncertainty, and the simultaneous handling of instructional, emotional, and social responsibilities (Clandinin & Connelly, 1986).

In such settings, teachers' actions are strongly shaped by their beliefs and by the ways they interpret and respond to classroom events (Kim et al., 2018, 2019), while the overall effectiveness of schools depends greatly on teachers' competence, expertise, and subject knowledge (Hancock & Scherff, 2010). Within this line of inquiry, two constructs have attracted particular attention:

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teachers' self-efficacy (TSE), referring to teachers' beliefs about their ability to plan and carry out effective teaching (Tschannen-Moran & Hoy, 2001), and *work engagement (WE)*, a positive work-related state marked by vigor, dedication, and absorption (Burić & Macuka, 2018; Klassen et al., 2013).

Prior studies have linked both TSE and WE to teacher effectiveness and to important student and school outcomes (Cross & Hong, 2012; Klassen & Tze, 2014; Zembylas & Schutz, 2009), yet much of the earlier literature examined them mainly in relation to burnout, stress, and attrition, leaving their direct association less fully explored (Friedman, 1991; Friedman & Kass, 2002; Parker et al., 2012; Skaalvik & Skaalvik, 2010). Resource-based perspectives suggest that personal resources such as self-efficacy can strengthen work engagement by increasing confidence in handling job demands (Bakker & Demerouti, 2008). More recent research also links self-efficacy with adaptive teaching behavior, performance, job satisfaction, classroom problem-solving, and work engagement (Burić & Kim, 2020; Chen, 2019; Lazarides & Warner, 2020; Liu et al., 2021; Vadivel et al., 2021; Wang et al., 2025b), whereas weaker efficacy beliefs may heighten vulnerability to stress (Barni et al., 2019). The role of teaching experience in the strength of this association remains underexamined, especially in Iranian English as a foreign language (EFL) samples (McLennan et al., 2017; Perera et al., 2018; Zee & Koomen, 2016). Accordingly, the present study examines TSE and WE at overall and dimensional levels and compares the magnitude of their association across experience groups.

2. LITERATURE REVIEW

Overview of the Related Literature

In educational research, TSE and WE have become two important constructs for understanding teachers' professional functioning. TSE refers to teachers' beliefs about their ability to plan, organize, and carry out instructional actions that lead to desired learning outcomes (Bandura, 1997; Tschannen-Moran & Hoy, 2001). WE, on the other hand, is generally understood as a positive motivational state in which individuals show energy, commitment, and deep involvement in their work (Kahn, 1990; Schaufeli et al., 2002). Both constructs have been associated with major educational outcomes, including teacher effectiveness, job satisfaction, organizational commitment, and students' academic achievement (Cross & Hong, 2012; Klassen & Tze, 2014; Zembylas & Schutz, 2009). Nevertheless, the relationship between TSE and WE has not been examined sufficiently, particularly in Iranian EFL contexts. In addition, although teaching experience may affect the way teachers' efficacy beliefs and engagement develop, its role in shaping the relationship between TSE and WE remains relatively unclear.

Theories

The present study is informed by the social cognitive career theory (SCCT) model of work satisfaction proposed by Lent and Brown (2006). This model explains work-related behavior through the interaction of personal beliefs, contextual conditions, and goal-directed action. Based on social cognitive theory, SCCT views individuals as active agents who interpret their environment, regulate their behavior, and construct meaning through continuous interaction between internal beliefs and external feedback. Within Lent and Brown's (2006) framework, self-efficacy (SE) is central because it influences people's goals, effort, and persistence when they face difficulty. Thus, SE can affect performance and subsequent work satisfaction. This framework is relevant to teachers' WE because it explains how teachers' perceived capabilities may encourage

sustained professional involvement. Teachers who believe they are capable of managing instructional demands are more likely to invest emotional, cognitive, and behavioral energy in their work.

In education, the focus of SCCT on SE is closely related to established models of teacher efficacy. Tschannen-Moran and Hoy (2001) define TSE as a multidimensional construct that includes efficacy for classroom management, instructional strategies, and student engagement. These dimensions are often strongly related, indicating a broader sense of teaching competence across key professional tasks (Klassen et al., 2009; Perera et al., 2019; Tschannen-Moran & Hoy, 2001). SCCT also clarifies why efficacy beliefs matter for engagement: teachers' judgments about their capabilities affect how they understand job demands, respond to obstacles, and sustain effort, all of which are central to engagement (Bandura, 1997; Perera et al., 2018).

WE is also compatible with SCCT because it reflects motivated and goal-oriented professional action. Engagement has been described as the expression of the whole self in work through physical energy, emotional attachment, and cognitive focus (Kahn, 1990). It has also been defined as a positive work-related state consisting of vigor, dedication, and absorption (Schaufeli et al., 2002). From an SCCT perspective, teachers who believe they can meet classroom demands are more likely to act energetically, remain committed, and continue pursuing educational goals (Perera et al., 2018). Thus, SCCT provides a useful basis for expecting a meaningful connection between TSE and WE and for examining whether this connection differs according to teaching experience or construct dimensions. Figure 1 summarizes this conceptual relationship by showing how TSE may support WE through perceived competence, effort, persistence, and goal-directed action. It also represents the multidimensional nature of both constructs by presenting TSE through classroom management, instructional strategies, and student engagement, and WE through vigor, dedication, and absorption.

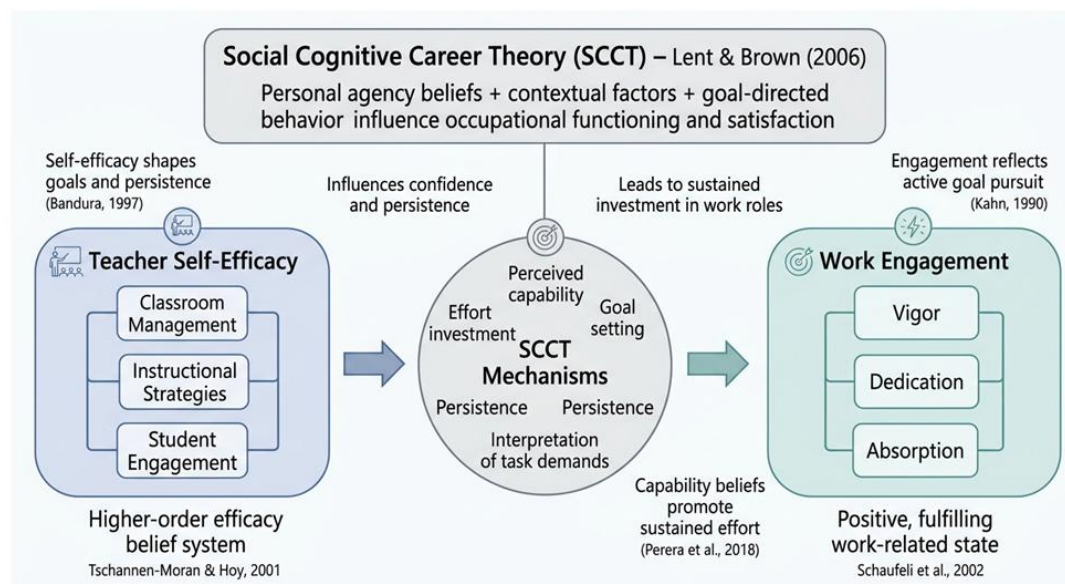


Figure 1. Conceptual Model Linking Teacher Self-Efficacy and Work Engagement Within SCCT

TSE: Conceptualization, Importance, and Influencing Factors

TSE is widely viewed as a central construct in teacher motivation, instructional effectiveness, and professional resilience. Grounded in social cognitive theory, efficacy beliefs shape individuals' willingness to act, the effort they invest, and their persistence when challenges arise (Bandura, 1997, 2006). In teaching, these beliefs influence whether teachers set demanding instructional goals, persist through classroom difficulties, and interpret problems as manageable rather than discouraging. This is especially important in EFL contexts, where limited exposure to the target language, mixed learner proficiency, and student demotivation require flexibility and emotional resilience (Tschannen-Moran & Hoy, 2001; Zee & Koomen, 2016). TSE also affects classroom quality and student learning because teachers' beliefs, judgments, and emotional-cognitive responses are related to achievement, instructional decisions, and classroom relationships (Cross & Hong, 2012; Klassen & Tze, 2014; Zembylas & Schutz, 2009). Teachers with stronger TSE tend to manage behavior more effectively, use adaptive methods, and report higher job satisfaction, whereas weaker TSE is linked to frustration, discouragement, and withdrawal (Barni et al., 2019; Burić & Kim, 2020; Vadivel et al., 2021). TSE further supports professional growth by encouraging reflection, feedback-seeking, and experimentation with new methods (Lazarides & Warner, 2020; Zee & Koomen, 2016). Recent studies reinforce this view, showing that TSE is associated with well-being, burnout reduction, innovative teaching, instructional practice, and professional development needs (Alshuhumi et al., 2025; Chen et al., 2024; Marcedula et al., 2026; Wang et al., 2024; Zhang et al., 2025). TSE develops through mastery experiences, vicarious experiences, social persuasion, and emotional or physiological states (Bandura, 1993, 1997). Successful teaching strengthens efficacy, while repeated setbacks, stress, and negative feedback may weaken it (Guo et al., 2012; Holzberger et al., 2013; Ware & Kitsantas, 2007). Observing competent colleagues and receiving constructive support can also enhance confidence, especially in collaborative schools (Gist et al., 1989; Ross & Gray, 2006; Swanson, 2012).

Empirical Studies on TSE

Recent empirical work positions TSE as a professional resource associated with school climate, instructional practice, innovation, and well-being. Studies published in 2025 reported links among school climate, TSE, innovative teaching, instructional practice, and professional development needs (Alshuhumi et al., 2025; Zhang et al., 2025), while 2024 evidence connected TSE with emotional intelligence, burnout, resilience, teaching satisfaction, and classroom processes (Chen et al., 2024; Malinen et al., 2024; Wang et al., 2024). Earlier EFL and teacher education studies showed that reflection, proficiency, preparation, peer coaching, and practicum experiences can support efficacy beliefs (Moradkhani et al., 2017; Wyatt, 2013), and Iranian research identified context-dependent links with emotional intelligence and reflection (Rastegar & Memarpour, 2009). Foundational studies associated classroom management efficacy with lower burnout (Brouwers & Tomic, 2000), TSE with professional commitment (Coladarci, 1992), and efficacy beliefs with the continuation of educational change (Berman et al., 1977). Research on experience has remained mixed: established routines may accompany greater confidence, but can also constrain responsiveness to innovation (Ghaith & Yaghi, 1997).

WE: Conceptualization, Importance, and Determinants

WE is a key construct in occupational well-being because it emphasizes positive motivation rather than burnout alone. It is usually conceptualized through vigor, dedication, and absorption (Schaufeli et al., 2002), and in teaching, it is associated with stronger instructional performance,

student involvement, participation in school activities, and lower withdrawal (Bakker & Bal, 2010; Hakanen et al., 2006; Parker & Martin, 2009; Roth et al., 2007). From a self-determination theory perspective, engagement increases when autonomy, competence, and relatedness are fulfilled (Ryan & Deci, 2000), especially through meaningful teacher–student relationships (Klassen et al., 2012), whereas controlling work environments may reduce engagement and increase exhaustion (Meyer & Gagné, 2008). WE is also shaped by work–life balance, coping, organizational support, school culture, and emotional regulation: balance promotes recovery, adaptive coping reduces withdrawal, supportive schools encourage innovation, and positive emotions strengthen engagement (Deng et al., 2022; Fan, 2022; Hosseini & Haghighi Shirazi, 2021; van Loon et al., 2018). Recent studies extend these findings by showing that well-being, emotion regulation, perceived organizational support, psychological empowerment, social support, and mindfulness are important predictors of WE, especially among EFL and school teachers (Chen & Tang, 2024; Shi & Wang, 2026; Wang, 2024; Wu et al., 2025; Yu et al., 2024).

Empirical Studies on WE

Recent empirical research on WE emphasizes psychological and organizational resources. A 2026 systematic review and a 2026 mixed-methods study highlight emotion regulation, well-being, and interpersonal regulation in EFL teacher engagement (Shi & Wang, 2026; Xu et al., 2026). Studies from 2024–2025 identify well-being, emotion regulation, organizational support, psychological empowerment, social support, and workload as important correlates or statistical predictors of WE (Chen & Tang, 2024; Huo & Wang, 2024; Wang, 2024; Wu et al., 2025; Yu et al., 2024). Earlier studies connected growth mindset, resilience, proactive behavior, and job crafting with engagement (Greenier et al., 2021; Zahoor, 2018; Zeng et al., 2019), while work on leadership and career stages showed that organizational support may need to vary across professional groups (Guglielmi et al., 2016; Koch et al., 2015). Foundational organizational studies linked engagement with balanced demands and resources, recovery, justice, and perceived organizational support (Eisenberger et al., 1986; Maslach & Leiter, 2008).

Studies on the Relationship between TSE and WE

Recent EFL studies generally report positive associations between TSE and WE. Research published in 2025 found that TSE contributed to engagement alongside emotion regulation, loving pedagogy, professional development, grit, and metacognition (Chen, 2025; Hejazi & Sadoughi, 2025; Wang et al., 2025a, 2025b; Zhou & Hou, 2025). Studies from 2024 similarly linked engagement with teaching efficacy, emotional intelligence, burnout, and academic buoyancy (Chen et al., 2024; Lien & Lai, 2024; Zhi et al., 2024). In 2023, structural models identified positive relationships among efficacy, resilience, reflection, and WE (Heng & Chu, 2023; Wang & Pan, 2023). Iranian evidence showed that TSE was associated with engagement directly or through teaching enjoyment and that individual efficacy may be more strongly related to engagement than collective efficacy (Fathi et al., 2021; Xiao et al., 2022). Earlier longitudinal and organizational research described reciprocal or reinforcing relations among personal resources, job resources, efficacy, and engagement (Federici & Skaalvik, 2011; Simbula et al., 2011; Xanthopoulou et al., 2009), consistent with the job demands–resources perspective (Demerouti et al., 2001; Prieto, 2009). Despite this growing literature, dimension-level relationships and possible differences in correlation magnitude across career-stage groups remain underexamined in Iranian EFL samples. Because the present design is cross-sectional and correlational, the questions below are framed in terms of association, differences in association strength, and unique statistical variance rather than causal influence.

Research Questions

RQ1. To what extent are Iranian EFL teachers' overall TSE scores associated with their overall WE scores?

RQ2. How are the dimensions of TSE and WE associated with the overall score of the other construct?

RQ3. Does the strength of the overall TSE–WE association differ between teachers with 5 years of experience or less and teachers with more than 5 years of experience?

RQ4. Which TSE dimensions account for unique variance in overall WE when entered simultaneously in a regression model?

RQ5. Which WE dimensions account for unique variance in overall TSE when entered simultaneously in a regression model?

3. METHODOLOGY AND DESIGN

Participants and Setting

The target population comprised practicing Iranian EFL teachers. Because no complete national roster or probability sampling frame was available and recruitment was conducted online, the study used a non-probability combination of convenience, snowball, and criterion-based purposive sampling. Convenience recruitment provided initial access through professional contacts and EFL communities, snowball distribution extended the survey through participants and professional gatekeepers, and purposive screening retained respondents who were actively teaching EFL during data collection. This combination was practical for reaching a geographically dispersed professional population, but it entails self-selection, network, and coverage bias. Therefore, the sample should not be interpreted as nationally representative.

The participants were invited through professional contacts, EFL-focused social media communities, and institutional contacts. Eligibility required current engagement in EFL teaching in Iran during the data-collection period, electronic informed consent, and a sufficiently complete response for analysis. No minimum weekly teaching load, academic qualification, grade-level assignment, or full-time employment threshold was imposed. Recruitment was not stratified by province or instructional setting, and the study did not establish category-specific counts for public schools, private schools, language institutes, grade levels, qualifications, employment status, or weekly teaching hours. The age range was not used as an eligibility criterion and the available descriptive summary indicated a mean age of approximately 29 years. These constraints limit detailed sample characterization and external validity. Altogether, 106 teachers participated: 62 women (59%) and 44 men (41%).

For the experience-group analysis, teachers with five years of experience or less were classified as novice ($n = 56$, 53%), and those with more than five years were classified as experienced ($n = 50$, 47%). The five-year boundary was specified a priori as an operational convention rather than a universal standard. It has precedent in general teacher research and EFL research, where the first 5 years are often treated as the novice or early-career period ([Aghabarari & Rahimi, 2020](#); [Kim & Roth, 2011](#)). Definitions vary across studies, and alternative cutoffs were not tested because further division of this sample would reduce subgroup precision; this decision is, therefore, acknowledged as a delimitation.

Table 1. Demographic Information of the Study Sample

Group	N	Male	Female	Novice	Experienced
Participants	106	44 (41%)	62 (59%)	56 (53%)	50 (47%)

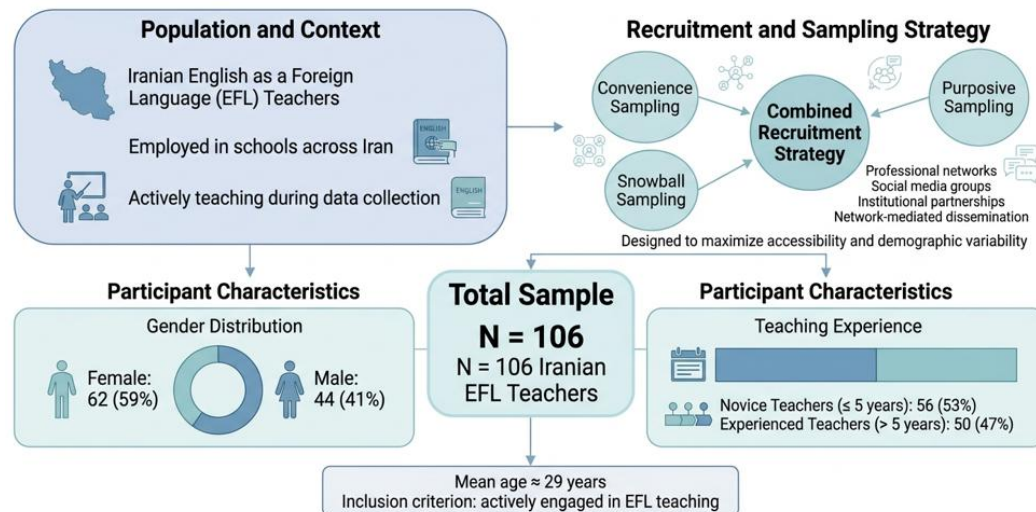


Figure 2. Recruitment Strategy and Sample Composition

Research Design

This investigation used a quantitative, cross-sectional, non-experimental correlational design. No intervention was introduced, no participants were assigned to conditions, and no variables were manipulated. The design was selected to estimate naturally occurring associations, compare correlation magnitudes across predefined experience groups, and examine the unique variance associated with construct dimensions in regression models. Consequently, terms such as association, difference in correlation strength, and unique statistical contribution are used throughout; the analyses do not establish temporal order or causality.

Instruments

The study measured its two principal constructs using two established questionnaires: the Teachers' Sense of Efficacy Scale (TSES) and the Utrecht Work Engagement Scale (UWES). These instruments have been widely applied in educational research and occupational psychology and are consistent with multidimensional conceptualizations of teacher efficacy and work engagement.

Teachers' Sense of Efficacy Scale

Teacher self-efficacy was assessed with the Teachers' Sense of Efficacy Scale (TSES), a 24-item measure originally developed and validated by Tschannen-Moran and Hoy (2001). The scale is designed to capture teachers' perceived capacity to perform essential instructional responsibilities successfully. It consists of three dimensions: (a) efficacy for student engagement, which concerns teachers' confidence in their ability to motivate learners and promote their active involvement; (b) efficacy for instructional strategies, which reflects teachers' perceived skill in applying instructional and assessment techniques; and (c) efficacy for classroom management, which refers

to teachers' confidence in regulating student behavior and sustaining an organized learning environment. Responses were recorded on a five-point Likert-type scale ranging from 1 ("not at all") to 5 ("a great deal"). For the present sample, reliability analysis using Cronbach's alpha indicated excellent internal consistency for the overall TSES, with a coefficient of .923.

Utrecht Work Engagement Scale

Teachers' WE was evaluated using the Utrecht Work Engagement Scale (UWES), a prominent measure based on the conceptualization of engagement as a positive, fulfilling work-related psychological state involving vigor, dedication, and absorption (Bakker et al., 2008; Schaufeli & Bakker, 2010; Schaufeli et al., 2002, 2006). The UWES exists in several formats, including 17-item and 9-item versions, as well as adaptations for student populations. The current study employed the full 17-item version to provide a more complete representation of the three engagement dimensions and improve measurement precision. In this dataset, the UWES demonstrated high internal reliability, with a Cronbach's alpha coefficient of .908.

Data Collection Procedure

Data were gathered through an online survey created in Google Forms. The online format facilitated access to practicing Iranian EFL teachers through professional networks and EFL communities. The survey link was circulated through professional contacts, social media groups, and institutional contacts; because distribution was network-based rather than frame-based, the resulting sample cannot be treated as a proportional representation of Iranian regions or educational settings.

At the beginning of the questionnaire, the participants were presented with a brief explanation of the purpose of the study, the nature of their participation, and what completing the survey involved. They were also informed that their responses would be used only for research purposes and would be treated anonymously and confidentially. Clear instructions were provided for answering the Likert-scale items so that participants could respond consistently and minimize misunderstanding of the response options.

Participation in the study was voluntary. Before accessing the main part of the questionnaire, the respondents were required to provide electronic informed consent. To encourage sincere responses and minimize social desirability bias, the questionnaire did not request names, contact details, or any other identifying information. Thus, all submitted responses remained anonymous.

The questionnaire was available for four weeks. This time frame was intended to give the potential participants enough opportunity to complete the survey and to allow the link to be circulated through relevant professional channels. During the data collection period, occasional reminder messages were sent to initial contacts and members of teacher groups to increase the response rate.

Once the data collection period was completed, all responses were downloaded from Google Forms and prepared for analysis. The dataset was reviewed carefully to identify incomplete, invalid, or potentially duplicated entries. Responses that did not meet the requirements for analysis were removed. The final dataset was, then, stored in password-protected files, accessible only to the researcher, in line with ethical standards for managing data collected from human participants.

Data Analysis Procedure

The quantitative data were analyzed using IBM SPSS Statistics (Version 27). Descriptive statistics and Cronbach's alpha coefficients were first calculated to summarize the variables and assess internal consistency. The inferential analyses were then organized explicitly by research question: the overall correlation addressed RQ1; dimension-level correlations addressed RQ2; the experience-group comparison addressed RQ3; and the two regression models addressed RQ4 and RQ5.

Before the correlation analyses, variable distributions were examined with the Shapiro–Wilk goodness-of-fit test. Pearson's product–moment correlation was used when both variables in a pair had normal distribution, and Spearman's rank-order correlation was used when at least one variable violated of the assumption of normal distribution. This decision rule was applied separately to each analysis.

For RQ1, the association between overall TSE and overall WE was estimated. For RQ2, the three TSE dimensions were correlated with overall WE, and the three WE dimensions were correlated with overall TSE. Effect direction, magnitude, and statistical significance were reported with the appropriate correlation coefficient.

For RQ4 and RQ5, two multiple linear regression models were fitted. In the first model, the three TSE dimensions were entered simultaneously to estimate their unique statistical contributions to overall WE. In the second model, the three WE dimensions were entered simultaneously to estimate their unique contributions to overall TSE. Linearity, independence of errors, homoscedasticity, residual normality, and multicollinearity diagnostics were examined. These models are explanatory association models, not causal tests.

For RQ3, Pearson correlations between overall TSE and WE were calculated separately for the novice and experienced groups after group-specific normality checks. The two independent correlations were then compared using Fisher's *r*-to-*z* transformation. This procedure tests whether the observed association strengths differ statistically; it does not treat teaching experience as an experimentally manipulated variable or establish moderation in a causal sense.

Inferential Results by Research Question

Preliminary Analyses and Descriptive Statistics

Descriptive statistics were calculated to summarize participants' responses to the two main variables, WE and TSE. Cronbach's alpha coefficients were also computed to examine the internal consistency of the instruments. As shown in Table 2, teachers reported relatively high levels of both WE and TSE. The mean score for WE was 75.41, while the mean score for TSE was 91.80. The reliability coefficients were excellent for both scales, with α values exceeding the conventional criterion of .70.

Table 2. Descriptive Statistics and Cronbach's Alpha for the Study Variables

Variable	Number of items (<i>k</i>)	Mean (<i>M</i>)	<i>SD</i>	Cronbach's alpha (α)
WE	17	75.41	13.31	.908
TSE	24	91.80	12.28	.923

4. RESULTS

Research Question 1: Overall TSE–WE Association

Before answering RQ1 and RQ2, the normality of the distribution of data was checked using the Shapiro–Wilk goodness-of-fit test. The test was selected because of its strong power for detecting non-normality in moderate-sized samples (Mohd Razali & Bee Wah, 2011). The results are presented in Table 3.

Table 3. Results of the Normality Test for Research Variables (Shapiro–Wilk Test)

Variable	<i>W</i>	<i>df</i>	<i>p</i>	Result
Total WE	.984	106	.227	Normal
Vigor	.961	106	.004	Non-normal
Dedication	.954	106	.001	Non-normal
Absorption	.981	106	.130	Normal
Total TSE	.980	106	.104	Normal
Instructional Strategies	.980	106	.113	Normal
Classroom Management	.974	106	.037	Non-normal
Student Engagement	.981	106	.137	Normal

Because some variables were normally distributed and others were not, Pearson correlations were used for normally distributed pairs, whereas Spearman correlations were used when at least one variable did not have normal distribution.

To answer RQ1, the association between overall TSE and overall WE was estimated. As shown in Table 4, the relationship was positive and statistically significant, $r = .598$, $p < .001$.

Table 4. Correlation Between Overall TSE and Overall WE

Variables	<i>N</i>	<i>M(TSE)</i>	<i>SD(TSE)</i>	<i>M(WE)</i>	<i>SD(WE)</i>	Correlation coefficient	<i>p</i>
TSE and WE	106	91.80	12.28	75.41	13.31	.598	< .001

To answer the first part of RQ2, the overall WE was correlated with the three TSE dimensions. As shown in Table 5, instructional strategies ($r = .462$), classroom management ($p = .541$), and student engagement ($r = .522$) were each positively associated with WE $p < .001$.

Table 5. Correlations Between WE and Dimensions of TSE

Dimension	<i>M</i>	<i>SD</i>	Correlation coefficient	<i>p</i>	Test
Instructional Strategies	31.04	4.28	.462	< .001	Pearson
Classroom Management	30.50	5.32	.541	< .001	Spearman
Student Engagement	30.25	4.83	.522	< .001	Pearson

Classroom management showed the largest bivariate association with WE, followed by student engagement and instructional strategies.

To answer the second part of RQ2, the overall TSE was correlated with the three WE dimensions. As shown in Table 6, vigor ($\rho = .653$), dedication ($\rho = .499$), and absorption ($r = .497$) were all positively associated with TSE $p < .001$.

Table 6. Correlations Between TSE and Dimensions of WE

Dimension	<i>M</i>	<i>SD</i>	Correlation coefficient	<i>p</i>	Test
Vigor	26.12	5.34	.653	< .001	Spearman
Dedication	23.35	4.23	.499	< .001	Spearman
Absorption	25.93	5.14	.497	< .001	Pearson

Vigor had the largest bivariate correlation with the overall TSE, although this comparison alone does not establish that vigor causes or temporally precedes efficacy beliefs.

Research Question 3 asked whether the strength of the overall TSE–WE association differed between the two experience groups. Normality was first checked within each group.

Table 7. Normality Test Results for Overall Variables by Teaching Experience (Shapiro–Wilk)

Group	Variable	<i>W</i>	<i>df</i>	<i>p</i>	Result
Novice	WE	.977	56	.361	Normal
	TSE	.971	56	.191	Normal
Experienced	WE	.979	50	.528	Normal
	TSE	.977	50	.430	Normal

Both TSE and WE were approximately normally distributed within each group; therefore, Pearson correlations were used. The association was significant for novice ($r = .582$, $p < .001$), and experienced teachers ($r = .601$, $p < .001$). Fisher's r -to- z comparison indicated that the two correlations did not differ significantly, $z = -.146$, $p = .884$.

Table 8. Correlations Between TSE and WE by Teaching Experience

Group	<i>N</i>	<i>M(TSE)</i>	<i>SD(TSE)</i>	<i>M(WE)</i>	<i>SD(WE)</i>	Correlation coefficient	<i>p</i>
Novice	56	89.28	12.00	73.82	14.11	.582	< .001
Experienced	50	94.62	12.10	77.20	12.26	.601	< .001

Research Questions 4 and 5: Multiple Regression Models

Two multiple regression analyses addressed RQ4 and RQ5. Diagnostic checks indicated that the assumptions related to linearity, independence of errors, homoscedasticity, residual normality, and multicollinearity were adequately satisfied. Tolerance and VIF values were acceptable, and the Durbin–Watson statistics were close to 2.

For RQ4, the three TSE dimensions were entered simultaneously as statistical predictors of the overall WE. The model was significant, $R^2 = .360$, $F(3, 102) = 19.084$, $p < .001$.

Table 9. Multiple Regression Analysis of TSE Dimensions Predicting Overall WE

Predictor	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	Tolerance	VIF
Constant	16.978	8.294	—	2.047	.043	—	—
Instructional Strategies	0.478	0.318	.154	1.505	.135	.600	1.666
Classroom Management	0.689	0.273	.275	2.519	.013	.525	1.904
Student Engagement	0.747	0.286	.271	2.607	.010	.581	1.722

Note. Model summary: $R^2 = .360$, $F(3, 102) = 19.084$, $p < .001$; Durbin–Watson = 1.863; $N = 106$. Dependent variable: WE.

Classroom management ($\beta = .275$, $p = .013$) and student engagement ($\beta = .271$, $p = .010$) had significant unique coefficients, whereas instructional strategies did not ($\beta = .154$, $p = .135$).

For RQ5, the three WE dimensions were entered simultaneously as statistical predictors of the overall TSE. The model was significant, $R^2 = .417$, $F(3, 102) = 24.357$, $p < .001$.

Table 10. Multiple Regression Analysis of WE Dimensions Predicting Overall TSE

Predictor	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	Tolerance	VIF
Constant	52.027	5.434	—	9.574	< .001	—	—
Vigor	1.399	0.272	.608	5.148	< .001	.409	2.442
Dedication	0.033	0.347	.012	0.096	.924	.400	2.501
Absorption	0.095	0.306	.040	0.310	.757	.349	2.867

Note. Model summary: $R^2 = .417$, $F(3, 102) = 24.357$, $p < .001$; Durbin–Watson = 2.024; $N = 106$. Dependent variable: TSE.

Vigor had a significant unique coefficient ($\beta = .608$, $p < .001$), whereas dedication ($\beta = .012$, $p = .924$) and absorption ($\beta = .040$, $p = .757$) did not.

In summary, RQ1 showed a moderate-to-strong positive TSE–WE association, RQ2 showed significant positive dimension-level associations in both directions, RQ3 found no statistically significant difference between the two experience-group correlations, RQ4 identified classroom management and student engagement as unique contributors to WE, and RQ5 identified vigor as the only unique WE contributor to TSE in the simultaneous model.

5. DISCUSSION

The primary finding for RQ1 was a positive association between overall TSE and overall WE, $r = .598$, $p < .001$. This result is consistent with the recent EFL studies in which efficacy beliefs were positively related to engagement (Wang et al., 2025b; Xiao et al., 2022; Zhi et al., 2024; Zhou & Hou, 2025) and with resource-based accounts that conceptualize efficacy as a personal resource supporting effort and involvement (Demerouti et al., 2001; Xanthopoulou et al., 2009). The cross-sectional result supports covariation, not reciprocal causality. Reciprocal reinforcement between efficacy and engagement remains a theoretically plausible interpretation supported by longitudinal research (Simbula et al., 2011), but it was not tested directly here.

The study’s contribution is contextual rather than comparative. It documents the association in a network-recruited Iranian EFL sample and provides dimension-level estimates that can be compared with findings from other settings. Because there was no non-Iranian comparison group and no detailed stratification by province or instructional setting, the data cannot

demonstrate that the TSE–WE relationship is stronger, more salient, or distinctive in Iran. The interpretation is, therefore, limited to showing that the pattern observed elsewhere is also present in this sample, consistent with Iranian and EFL research linking efficacy with enjoyment, reflection, resilience, and engagement (Fathi et al., 2021; Heng & Chu, 2023; Xiao et al., 2022).

For RQ2 and RQ4, all TSE dimensions were positively associated with WE: instructional strategies, $r = .462$, classroom management, $\rho = .541$, and student engagement, $r = .522$ (all $p < .001$). In the simultaneous regression model, which explained 36.0% of the variance in WE, classroom management ($\beta = .275$, $p = .013$) and student engagement ($\beta = .271$, $p = .010$) had significant unique coefficients, whereas instructional strategies did not ($\beta = .154$, $p = .135$). This pattern is compatible with research emphasizing classroom management efficacy and supportive classroom climates (Alshuhumi et al., 2025; Malinen et al., 2024; Zhang et al., 2025). However, it should not be interpreted as showing that engagement is *less a product of* instructional confidence or that one efficacy dimension causes engagement. It indicates only that, within this sample and model, classroom-management and student engagement efficacy accounted for unique variance beyond instructional strategy efficacy.

For the second part of RQ2 and for RQ5, vigor ($\rho = .653$), dedication ($\rho = .499$), and absorption ($r = .497$) were each positively associated with TSE (all $p < .001$). When the three dimensions were entered simultaneously, the model explained 41.7% of the variance in TSE; vigor had a significant unique coefficient ($\beta = .608$, $p < .001$), while dedication ($\beta = .012$, $p = .924$) and absorption ($\beta = .040$, $p = .757$) did not. Recent studies also connect teachers' energy, emotion regulation, resilience, efficacy, and engagement (Wang et al., 2025b; Wang & Pan, 2023; Xu et al., 2026). Nevertheless, the present result means only that vigor was the sole unique statistical contributor in this model. The cross-sectional design does not show that vigor is foundational to, more directly connected with, or causally prior to efficacy beliefs.

For RQ3, the TSE–WE correlations were similar for novice teachers ($r = .582$, $p < .001$) and experienced teachers ($r = .601$, $p < .001$). Fisher's r -to- z comparison was non-significant, $z = -.146$, $p = .884$. Thus, the study found no evidence that the correlation magnitude differed between the two operational experience groups. This null difference should not be treated as proof of equivalence or as evidence that experience is irrelevant; the subgroup sizes were modest, the five-year cutoff was a pragmatic convention, and other career-stage classifications might yield different patterns.

6. CONCLUSION

Within the limits of a cross-sectional, non-probability survey, the findings indicate that TSE and WE were positively associated among the participating Iranian EFL teachers. The dimension-level findings refine this general association: classroom management and student engagement efficacy accounted for unique variance in WE, and vigor accounted for unique variance in TSE in the simultaneous models. The experience-group correlations were statistically similar under the five-year operational classification of the study.

Practically, the findings support professional development initiatives that address classroom management, strategies for eliciting student participation, and teacher energy and well-being. These recommendations should be treated as evidence-informed priorities rather than demonstrated interventions because the present study did not manipulate professional development or test changes over time.

The study has several limitations and delimitations. Limitations include the cross-sectional self-report design, potential common method and social desirability bias, non-probability and network-mediated recruitment, modest subgroup sizes, and the absence of detailed data on

province, school or institute type, grade level, qualification, employment status, weekly teaching hours, and age range; these features restrict generalizability and detailed contextual interpretation. Delimitations include the deliberate focus on actively teaching Iranian EFL teachers, the use of the TSES and UWES, the examination of selected construct dimensions, and the a priori five-year career-stage boundary. These design choices made the study feasible and focused, but they also define the scope within which the findings should be interpreted.

Future studies should use larger and, where possible, stratified or probability-based samples, report fuller demographic and institutional profiles, compare alternative career-stage classifications, and use longitudinal, multilevel, mixed-methods, or intervention designs to examine directionality and change. Cross-cultural comparison groups and formal moderation models could also test whether the strength or mechanisms of the TSE–WE relationship vary across educational contexts.

References

- Aghabbari, M., & Rahimi, M. (2020). EFL teachers' conceptions of professional development during the practicum: Retrospective perceptions and prospective insights. *Asian-Pacific Journal of Second and Foreign Language Education*, 5(1), 6.
<https://doi.org/10.1186/s40862-020-00084-0>
- Alshuhumi, S., Al-Hidabi, D., Aldaba, A., Ateeq, A., Almuraqab, N., Ibrahim, S., & Al-Refaei, A. A. (2025). Examining the impact of Omani primary school climate and teacher self-efficacy on innovative teaching practices: A structural equation modeling approach. *Frontiers in Education*, 10, 1487857. <https://doi.org/10.3389/feduc.2025.1487857>
- Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83, 189–206.
<https://doi.org/10.1348/096317909X402596>
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187–200.
<https://doi.org/10.1080/02678370802393649>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117–148. https://doi.org/10.1207/S15326985EP2802_3
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164–180. <https://doi.org/10.1111/j.1745-6916.2006.00011.x>
- Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' self-efficacy: The role of personal values and motivations for teaching. *Frontiers in Psychology*, 10, 465388.
<https://doi.org/10.3389/fpsyg.2019.01645>
- Berman, P., McLaughlin, M. W., Bass, G., Pauly, E., & Zellman, G. (1977). *Federal programs supporting educational change, Vol. VII: Factors affecting implementation and continuation*. The Rand Corporation.
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, 16(2), 239–253.
[https://doi.org/10.1016/S0742-051X\(99\)00057-8](https://doi.org/10.1016/S0742-051X(99)00057-8)

- Burić, I., & Kim, L. E. (2020). Teacher self-efficacy, instructional quality, and student motivational beliefs: An analysis using multilevel structural equation modeling. *Learning and Instruction*, 66, 101302. <https://doi.org/10.1016/j.learninstruc.2019.101302>
- Burić, I., & Macuka, I. (2018). Self-efficacy, emotions and work engagement among teachers: A two-wave cross-lagged analysis. *Journal of Happiness Studies*, 19(7), 1917-1933. <https://doi.org/10.1007/s10902-017-9903-9>
- Chen, J. (2019). Efficacious and positive teachers achieve more: Examining the relationship between teacher efficacy, emotions, and their practicum performance. *The Asia-Pacific Education Researcher*, 28(4), 327-337. <https://doi.org/10.1007/s40299-018-0427-9>
- Chen, J., Lin, C., & Lin, F. (2024). The interplay among EFL teachers' emotional intelligence and self-efficacy and burnout. *Acta Psychologica*, 248, 104364. <https://doi.org/10.1016/j.actpsy.2024.104364>
- Chen, M. C. (2025). Exploring the influencing effect of tertiary teachers' perceived organizational support and teacher self-efficacy on their job satisfaction: The mediating role of teacher work engagement. *Frontiers in Psychology*, 16, 1609824. <https://doi.org/10.3389/fpsyg.2025.1609824>
- Chen, S., & Tang, L. (2024). EFL teachers' engagement: The impact of well-being and emotion regulation. *Heliyon*, 10(5), 27338. <https://doi.org/10.1016/j.heliyon.2024.e27338>
- Clandinin, D. J., & Connelly, F. M. (1986). Rhythms in teaching: The narrative study of teachers' personal practical knowledge of classrooms. *Teaching and Teacher Education*, 2(4). [https://doi.org/10.1016/0742-051X\(86\)90030-2](https://doi.org/10.1016/0742-051X(86)90030-2)
- Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *The Journal of Experimental Education*, 60(4), 323-337. <https://doi.org/10.1080/00220973.1992.9943869>
- Cross, D. I., & Hong, J. Y. (2012). An ecological examination of teachers' emotions in the school context. *Teaching and Teacher Education*, 28(7), 957-967. <https://doi.org/10.1016/j.tate.2012.05.001>
- Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Deng, J., Heydarnejad, T., Farhangi, F., & Farid Khafaga, A. (2022). Delving into the relationship between teacher emotion regulation, self-efficacy, engagement, and anger: A focus on English as a foreign language teachers. *Frontiers in Psychology*, 13, 1019984. <https://doi.org/10.3389/fpsyg.2022.1019984>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507. <https://doi.org/10.1037/0021-9010.71.3.500>
- Fan, Y. (2022). Reviewing the effect of English as a foreign language teachers' positive and negative affectivity on their work engagement. *Frontiers in Psychology*, 13, 852687. <https://doi.org/10.3389/fpsyg.2022.852687>
- Fathi, J., Nourzadeh, S., & Arabani, A. S. (2021). Teacher individual self-efficacy and collective efficacy as predictors of teacher work engagement: The case of Iranian English teachers. *Journal of Language Horizons*, 5(2). <https://doi.org/10.22051/lghor.2021.33184.1366>
- Federici, R. A., & Skaalvik, E. M. (2011). Principal self-efficacy and work engagement: Assessing a Norwegian principal self-Efficacy scale. *Social Psychology of Education*, 14(4), 575-600. <https://doi.org/10.1007/s11218-011-9160-4>
- Friedman, I. A. (1991). High and low-burnout schools: School culture aspects of teacher burnout. *The Journal of Educational Research*, 84(6), 325-333.

- <https://doi.org/10.1080/00220671.1991.9941813>
- Friedman, I. A., & Kass, E. (2002). Teacher self-efficacy: A classroom-organization conceptualization. *Teaching and Teacher Education*, 18(6), 675-686.
[https://doi.org/10.1016/S0742-051X\(02\)00027-6](https://doi.org/10.1016/S0742-051X(02)00027-6)
- Ghaith, G., & Yaghi, H. (1997). Relationships among experience, teacher efficacy, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 13(4), 451-458. [https://doi.org/10.1016/S0742-051X\(96\)00045-5](https://doi.org/10.1016/S0742-051X(96)00045-5)
- Gist, M. E., Schwoerer, C., & Rosen, B. (1989). Effects of alternative training methods on self-efficacy and performance in computer software training. *Journal of Applied Psychology*, 74(6), 884-891. <https://doi.org/10.1037/0021-9010.74.6.884>
- Greenier, V., Derakhshan, A., & Fathi, J. (2021). Emotion regulation and psychological well-being in teacher work engagement: A case of British and Iranian English language teachers. *System*, 97, 102446. <https://doi.org/10.1016/j.system.2020.102446>
- Guglielmi, D., Bruni, I., Simbula, S., Fraccaroli, F., & Depolo, M. (2016). What drives teacher engagement: A study of different age cohorts. *European Journal of Psychology of Education*, 31(3), 323-340. <https://doi.org/10.1007/s10212-015-0263-8>
- Guo, Y., Connor, C. M. D., Yang, Y., Roehrig, A. D., & Morrison, F. J. (2012). The effects of teacher qualification, teacher self-efficacy, and classroom practices on fifth graders' literacy outcomes. *The Elementary School Journal*, 113(1), 3-24.
<https://doi.org/10.1086/665816>
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513.
<https://doi.org/10.1016/j.jsp.2005.11.001>
- Hancock, C. B., & Scherff, L. (2010). Who will stay and who will leave? Predicting secondary English teacher attrition risk. *Journal of Teacher Education*, 61(4), 328-338.
<https://doi.org/10.1177/0022487110372214>
- Hejazi, S. Y., & Sadoughi, M. (2025). Growth teaching mindset and work engagement: The chain mediating roles of professional development and teaching self-efficacy. *Studies in Educational Evaluation*, 87, 101506. <https://doi.org/10.1016/j.stueduc.2025.101506>
- Heng, Q., & Chu, L. (2023). Self-efficacy, reflection, and resilience as predictors of work engagement among English teachers. *Frontiers in Psychology*, 14, 1160681.
<https://doi.org/10.3389/fpsyg.2023.1160681>
- Holzberger, D., Philipp, A., & Kunter, M. (2013). How teachers' self-efficacy is related to instructional quality: A longitudinal analysis. *Journal of Educational Psychology*, 105(3), 774-786. <https://doi.org/10.1037/a0032198>
- Hosseini, S., & Haghighi Shirazi, Z. R. (2021). Towards teacher innovative work behavior: A conceptual model. *Cogent Education*, 8(1), 1869364.
<https://doi.org/10.1080/2331186X.2020.1869364>
- Huo, W., & Wang, X. (2024). Understanding the influencing factors of foreign language teachers' work engagement: A meta-analytic structural equation model. *Heliyon*, 10(14), 34272.
<https://doi.org/10.1016/j.heliyon.2024.e34272>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692-724. <https://doi.org/10.5465/256287>
- Kim, K.-A., & Roth, G. L. (2011). Novice teachers and their acquisition of work-related information. *Current Issues in Education*, 14(1). Retrieved from
<https://cie.asu.edu/ojs/index.php/cieatasu/article/view/268>

- Kim, L. E., Dar-Nimrod, I., & MacCann, C. (2018). Teacher personality and teacher effectiveness in secondary school: Personality predicts teacher support and student self-efficacy but not academic achievement. *Journal of Educational Psychology*, 110(3).
<https://doi.org/10.1037/edu0000217>
- Kim, L. E., Jörg, V., & Klassen, R. M. (2019). A meta-analysis of the effects of teacher personality on teacher effectiveness and burnout. *Educational Psychology Review*, 31(1).
<https://doi.org/10.1007/s10648-018-9458-2>
- Klassen, R. M., & Tze, V. M. C. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational Research Review*, 12.
<https://doi.org/10.1016/j.edurev.2014.06.001>
- Klassen, R. M., Bong, M., Usher, E. L., Chong, W. H., Huan, V. S., Wong, I. Y. F., & Georgiou, T. (2009). Exploring the validity of a teachers' self-efficacy scale in five countries. *Contemporary Educational Psychology*, 34, 67–76.
<https://doi.org/10.1016/j.cedpsych.2008.08.001>
- Klassen, R. M., Perry, N. E., & Frenzel, A. C. (2012). Teachers' relatedness with students: An underemphasized component of teachers' basic psychological needs. *Journal of Educational Psychology*, 104, 150–165. <https://doi.org/10.1037/a0026253>
- Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring teacher engagement: Development of the Engaged Teachers Scale (ETS). *Frontline Learning Research*, 1(2), 33–52. <https://doi.org/10.14786/FLR.V1I2.44>
- Koch, A. R., Binnewies, C., & Dormann, C. (2015). Motivating innovation in schools: School principals' work engagement as a motivator for schools' innovation. *European Journal of Work and Organizational Psychology*, 24(4).
<https://doi.org/10.1080/1359432X.2014.958471>
- Lazarides, R., & Warner, L. M. (2020). Teacher self-efficacy. *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.890>
- Lent, R. W., & Brown, S. D. (2006). Integrating person and situation perspectives on work satisfaction: A social-cognitive view. *Journal of Vocational Behavior*, 69, 236–247.
<https://doi.org/10.1016/j.jvb.2006.02.006>
- Lien, H. Y., & Lai, H. C. (2024). The impact of the organisational commitment of teachers on work engagement: The mediating role of teaching efficacy. *e-mentor*, 5(107), 29–35.
<https://doi.org/10.15219/em107.1685>
- Liu, F., Vadivel, B., Rezvani, E., & Namaziandost, E. (2021). Using games to promote English as a foreign language learners' willingness to communicate: Potential effects and teachers' attitude in focus. *Frontiers in Psychology*, 12, 762447.
<https://doi.org/10.3389/fpsyg.2021.762447>
- Malinen, O. P., Närhi, V., & Savolainen, H. (2024). The effect of teacher self-efficacy in behaviour management on classroom behavioural climate: A longitudinal multilevel cross-lagged analysis. *Educational Psychology*, 44, 415–435.
<https://doi.org/10.1080/01443410.2024.2359672>
- Marcedula, F., Angelini, G., & Fiorilli, C. (2026). Teacher self-efficacy and well-being: The mediating role of satisfaction with students, colleagues, and parents. *International Journal of Environmental Research and Public Health*, 23(2), 150.
<https://doi.org/10.3390/ijerph23020150>
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3). <https://doi.org/10.1037/0021-9010.93.3.498>

- McLennan, B., McIlveen, P., & Perera, H. N. (2017). Pre-service teachers' self-efficacy mediates the relationship between career adaptability and career optimism. *Teaching and Teacher Education*, 63, 176–185. <https://doi.org/10.1016/j.tate.2016.12.022>
- Meyer, J. P., & Gagné, M. (2008). Employee engagement from a self-determination theory perspective. *Industrial and Organizational Psychology*, 1, 60–62. <https://doi.org/10.1111/j.1754-9434.2007.00010.x>
- Mohd Razali, N., & Bee Wah, Y. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, 2(1).
- Moradkhani, S., Raygan, A., & Moein, M. S. (2017). Iranian EFL teachers' reflective practices and self-efficacy: Exploring possible relationships. *System*, 65, 1–14. <https://doi.org/10.1016/j.system.2016.12.011>
- Parker, P. D., & Martin, A. J. (2009). Coping and buoyancy in the workplace: Understanding their effects on teachers' work-related well-being and engagement. *Teaching and Teacher Education*, 25(10), 68–75. <https://doi.org/10.1016/j.tate.2008.06.009>
- Parker, P. D., Martin, A. J., Colmar, S., & Liem, G. A. (2012). Teachers' workplace well-being: Exploring a process model of goal orientation, coping behavior, engagement, and burnout. *Teaching and Teacher Education*, 28(4), 503–513. <https://doi.org/10.1016/j.tate.2012.01.001>
- Perera, H. N., Calkins, C., & Part, R. (2019). Teacher self-efficacy profiles: Determinants, outcomes, and generalizability across teaching level. *Contemporary Educational Psychology*, 58, 186–203. <https://doi.org/10.1016/j.cedpsych.2019.02.006>
- Perera, H. N., Granziera, H., & McIlveen, P. (2018). Profiles of teacher personality and relations with teacher self-efficacy, work engagement, and job satisfaction. *Personality and Individual Differences*, 120, 171–178. <https://doi.org/10.1016/j.paid.2017.08.034>
- Lorente Prieto, L. (2009). *Exploring the power of self-efficacy at work: Some empirical studies from the social cognitive perspective* [Doctoral dissertation, Universitat Jaume I]. Tesis Doctorals en Xarxa. <http://hdl.handle.net/10803/10528>
- Rastegar, M., & Memarpour, S. (2009). The relationship between emotional intelligence and self-efficacy among Iranian EFL teachers. *System*, 37, 700–707. <https://doi.org/10.1016/j.system.2009.09.013>
- Ross, J. A., & Gray, P. (2006). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement*, 17, 179–199. <https://doi.org/10.1080/09243450600565795>
- Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan, H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of Educational Psychology*, 99, 761–774. <https://doi.org/10.1037/0022-0663.99.4.761>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24).
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66, 701–716. <https://doi.org/10.1177/0013164405282471>

- Schaufeli, W. B., Salanova, M., Bakker, A. B., & Gonzales-Roma, V. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92. <https://doi.org/10.1023/A:1015630930326>
- Shi, X., & Wang, Y. (2026). The role of Chinese EFL teachers' interpersonal emotion regulation in their work engagement and buoyancy: A sequential explanatory mixed-methods research. *European Journal of Education*, 61(2), 70604. <https://doi.org/10.1111/ejed.70604>
- Simbula, S., Guglielmi, D., & Schaufeli, W. B. (2011). A three-wave study of job resources, self-efficacy, and work engagement among Italian schoolteachers. *European Journal of Work and Organizational Psychology*, 20, 285–304. <https://doi.org/10.1080/13594320903513916>
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(4), 1059–1069. <https://doi.org/10.1016/j.tate.2009.11.001>
- Swanson, P. (2012). Second/foreign language teacher efficacy and its relationship to professional attrition. *The Canadian Modern Language Review*, 68, 78–101. <https://doi.org/10.3138/cmlr.68.1.078>
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7). [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Vadivel, B., Namaziandost, E., & Saeedian, A. (2021). Progress in English language teaching through continuous professional development—Teachers' self-awareness, perception, and feedback. *Frontiers in Education*, 6. <https://doi.org/10.3389/feduc.2021.757285>
- van Loon, N. M., Heerema, M., Weggemans, M., & Noordegraaf, M. (2018). Speaking up and activism among frontline employees: How professional coping influences work engagement and intent to leave among teachers. *The American Review of Public Administration*, 48(4). <https://doi.org/10.1177/0275074016682313>
- Wang, X., Gao, Y., Wang, Q., & Zhang, P. (2024). Relationships between self-efficacy and teachers' well-being in middle school English teachers: The mediating role of teaching satisfaction and resilience. *Behavioral Sciences*, 14(8), 629. <https://doi.org/10.3390/bs14080629>
- Wang, Y. (2024). Exploring the impact of workload, organizational support, and work engagement on teachers' psychological wellbeing: A structural equation modeling approach. *Frontiers in Psychology*, 14, 1345740. <https://doi.org/10.3389/fpsyg.2023.1345740>
- Wang, Y., & Pan, Z. (2023). Modeling the effect of Chinese EFL teachers' self-efficacy and resilience on their work engagement: A structural equation modeling analysis. *SAGE Open*, 13. <https://doi.org/10.1177/21582440231214329>
- Wang, Y., Derakhshan, A., & Solhi, M. (2025a). Dispositions toward loving pedagogy, emotion regulation, and self-efficacy as predictors of EFL teachers' work engagement: A multinational study. *Language Teaching Research*. Advance online publication. <https://doi.org/10.1177/13621688251353132>
- Wang, Y., He, L., & Wang, Q.-Y. (2025b). The predictive power of teaching self-efficacy and emotion regulation on work engagement for EFL teachers in higher education. *Frontiers in Psychology*, 16, 1446257. <https://doi.org/10.3389/fpsyg.2025.1446257>
- Ware, H., & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research*, 100, 303–310. <https://doi.org/10.3200/JOER.100.5.303-310>

- Wu, S., Xu, Q., Tian, H., Li, R., & Wu, X. (2025). The relationship between social support and work engagement of rural teachers: A moderated mediation model. *Frontiers in Psychology*, 15, 1479097. <https://doi.org/10.3389/fpsyg.2024.1479097>
- Wyatt, M. (2013). Overcoming low self-efficacy beliefs in teaching English to young learners. *International Journal of Qualitative Studies in Education*, 26, 238–255. <https://doi.org/10.1080/09518398.2011.605082>
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74, 235–244. <https://doi.org/10.1016/j.jvb.2008.11.003>
- Xiao, Y., Fathi, J., & Mohammaddokht, F. (2022). Exploring a structural model of teaching enjoyment, teacher self-efficacy, and work engagement. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.918488>
- Xu, G., Haratyan, F., & Tian, H. (2026). A 2025 systematic review of teacher emotion regulation and well-being: Implications for student engagement, learning outcomes, and professional development in EFL contexts. *Frontiers in Psychology*, 16, 1715266. <https://doi.org/10.3389/fpsyg.2025.1715266>
- Yu, X., Lin, X., Xue, D., & Zhou, H. (2024). Impact of work engagement on teachers' workplace well-being: A serial mediation model of perceived organizational support and psychological empowerment. *SAGE Open*, 14(4). <https://doi.org/10.1177/21582440241291344>
- Zahoor, A. (2018). Teacher proactivity influencing student satisfaction and loyalty: Role of job crafting and work engagement. *Vikalpa*, 43(3). <https://doi.org/10.1177/0256090918785046>
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being. *Review of Educational Research*, 86(4), 981–1015. <https://doi.org/10.3102/0034654315626801>
- Zembylas, M., & Schutz, P. A. (2009). Research on teachers' emotions in education: Findings, practical implications and future agenda. In P. A. Schutz & M. Zembylas (Eds.), *Advances in teacher emotion research: The impact on teachers' lives* (pp. 367–377). https://doi.org/10.1007/978-1-4419-0564-2_18
- Zeng, G., Chen, X., Cheung, H. Y., & Peng, K. (2019). Teachers' growth mindset and work engagement in the Chinese educational context: Well-being and perseverance of effort as mediators. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00839>
- Zhang, J., Ye, Z., Chen, S., Sun, Q., Xu, Y., Liu, Y., Zhu, J., Jia, W., & Ma, L. (2025). Association between school climate, teachers' self-efficacy, instructional practice, and perceived needs in professional development: A structural equation analysis using Shanghai TALIS 2018 data. *Large-Scale Assessments in Education*, 13, 33. <https://doi.org/10.1186/s40536-025-00268-5>
- Zhi, R., Wang, Y., & Derakhshan, A. (2024). On the role of academic buoyancy and self-efficacy in predicting teachers' work engagement: A case of Chinese English as a foreign language teachers. *Perceptual and Motor Skills*, 131(2), 612–629. <https://doi.org/10.1177/00315125231222398>
- Zhou, S., & Hou, H. (2025). The interplay of self-efficacy, grit, and metacognition in shaping work engagement among EFL teachers: A comparative study of Mainland China and Hong Kong. *BMC Psychology*, 13, 468. <https://doi.org/10.1186/s40359-025-02761-6>