

Vol. 16, No. 1  
pp. 219-247  
March &  
April 2025

## Enhancing Well-being: Exploring the Influence of Teacher Growth Mindset and Grit among EFL Instructors in Iran

Jalil Fathi<sup>1</sup>  & Habib Soleimani<sup>2\*</sup> 

### Abstract

The primary objective of this research was to explore how the mindsets and perseverance of English as a Foreign Language (EFL) teachers in Iran impact their well-being. Using Structural Equation Modeling (SEM), data from 375 EFL teachers, selected through convenience sampling, were analyzed. The results revealed a direct and positive correlation between a teacher's growth mindset and their well-being. Additionally, the study found that the relationship between a teacher's growth mindset and well-being was influenced by their level of grit. These findings suggest that educators can significantly contribute to fostering growth mindsets and perseverance among EFL teachers, thus improving their well-being. Ultimately, this research underscores the importance of these teacher characteristics in enhancing the well-being of EFL instructors and offers practical guidance for educators aiming to support them.

**Keywords:** EFL teachers, SEM, teacher grit, teacher growth mindset, well-being

Received: 8 January 2024  
Received in revised form: 6 April 2024  
Accepted: 25 April 2024

<sup>1</sup> Associate Professor of Applied Linguistics, Department of English and Linguistics, Faculty of Language and Literature, University of Kurdistan, Sanandaj, Iran;

Email: [j.fathi@uok.ac.ir](mailto:j.fathi@uok.ac.ir); ORCID ID: <https://orcid.org/0000-0003-1146-1024>

<sup>2</sup> Corresponding Author: Assistant Professor in TEFL, Department of English and Linguistics, Faculty of Language and Literature, University of Kurdistan, Sanandaj, Iran;

Email: [h.soleimani@uok.ac.ir](mailto:h.soleimani@uok.ac.ir); ORCID ID: <https://orcid.org/0000-0003-4469-8052>

## 1. Introduction

Successful education is a multifaceted process influenced by various factors, among which teacher psychology plays a pivotal role. While numerous studies underscore the importance of teacher psychology in achieving successful education (Acheson et al., 2016; Mercer & Kostoulas, 2018), it is noteworthy that in the realm of language-learning psychology, teacher psychology has not received as much attention as learner psychology, despite its significance (Mohammad Hosseini et al., 2022; Williams et al., 2016). Over the past two decades, Positive Psychology (PP) has gained substantial traction due to its emphasis on the positive facets of life and human well-being (Derakhshan, 2022a). This departure from the previous exclusive focus on general psychological matters has been acknowledged by researchers (e.g., Derakhshan & Shakki, 2024; Dewaele et al., 2019).

Positive Psychology (PP) examines how individuals can thrive and excel in life (MacIntyre & Mercer, 2014). Studies within this framework indicate that positive emotions are linked with attitudes towards learning, motivation to acquire English, and perceptions of both the teacher and the course (Derakhshan, 2022b, Dewaele & Li, 2020). The well-being of teachers has emerged as a topic of increasing concern recently, given its profound impact on their job satisfaction, performance, and retention (Mercer & Gregersen, 2020). Within Positive Psychology (PP), well-being encompasses an individual's thoughts, perceptions, and experiences of their situation at a given moment (Vo & Allen, 2022). Flourishing, characterized by a zest for life, is a critical aspect considered in discussions surrounding well-being within PP (Kern et al., 2016). In English as a Foreign Language (EFL) settings, various factors such as insufficient language proficiency, low self-confidence, and the stress stemming from a heavy workload may jeopardize teacher well-being (Babic et al., 2022; Talbot & Mercer, 2018).

Among the various factors influencing teacher well-being, two constructs drawing attention are teacher growth mindset (e.g., Shoshani, 2021) and teacher grit (Lan & Zhang, 2019; Liu et al., 2023; Zhang et al., 2023). Growth mindset refers to the belief that one's abilities and intelligence can be improved through dedication and hard work (Dweck, 2006, 2016). In educational settings, it suggests that instructors with a growth mindset are more inclined to tackle challenges, persist during tough situations, and ultimately experience enhanced well-being (Mesler et al., 2021; Yeager et al., 2022). Despite the theoretical significance of growth mindset in teaching, empirical studies exploring its role in promoting teacher well-being are limited.

On the other hand, grit is defined as the capacity to persevere and maintain enthusiasm and persistence toward long-term goals, even in the face of setbacks and failures (Duckworth & Quinn, 2009). This concept has gained considerable attention in educational research due to its predictive nature for various positive outcomes, including academic achievements, career success, and well-being (Duckworth et al., 2009; Fabelico & Afalla, 2020; Sudina et al., 2021). However, scant attention has been paid to researching the role of grit in enhancing teacher well-being, especially in the EFL context.

While extensive research has delved into teacher well-being (Brady & Wilson, 2021; Hascher & Waber, 2021; Xiao et al., 2022), few studies have investigated the potential mediating role of teacher grit in the relationship between teacher growth mindset and well-being. Additionally, although some studies have explored the connection between teacher grit and well-being (Lan & Zhang, 2019), the contribution of teacher growth mindset in this association remains insufficiently explored within EFL contexts. Consequently, there exists a need to explore these relationships and their impact on the well-being of EFL teachers (Zhang & Fathi, 2024).

With this context in mind, this research aims to enrich the existing literature by examining the correlations among teacher growth mindset, teacher grit, and teacher well-being in the EFL domain. Specifically, the study addresses two research inquiries: (1) whether teacher growth mindset positively influences teacher well-being and (2) whether teacher grit mediates the relationship between teacher growth mindset and teacher well-being. The study's outcomes are anticipated to enhance comprehension of the roles teacher growth mindset and teacher grit play in augmenting teacher well-being. Moreover, the study will offer practical insights for teacher educators to bolster the well-being of EFL instructors by fostering the development of growth mindset and grit. By addressing these research questions, this study aims to yield valuable insights into the factors contributing to the well-being of EFL teachers in Iran.

## **2. Literature Review**

### **2.1. Well-being**

Butler and Kern (2016) delve into the diverse theories utilized by Positive Psychology (PP) scholars to define well-being, which encompasses two primary systems:

subjective well-being and psychological well-being (PWB). Subjective well-being measures the emotional facet of well-being, evaluated through hedonic methods, while psychological well-being assesses the psychological aspect, using eudaimonic methods (Keyes, 2002). While both approaches are pertinent to researching teacher well-being, the hedonic approach primarily considers external factors—such as pleasure and pain—shaping well-being, neglecting internal sources like motivation, desires, and aspirations (Diener & Lucas, 2000). Conversely, the eudaimonic approach conceptualizes well-being as human flourishing, encompassing satisfaction, positive relationships, feelings of competence, confidence, a sense of purpose, and meaning in life, thereby emphasizing both pleasure and meaning (Diener et al., 2010).

The objective of PP is to foster flourishing, denoting well-being based on the PERMA model proposed by Seligman (2018), comprising positive emotions (P), engagement (E), positive relationships (R), meaning (M), and accomplishment (A). The integration of these components contributes to well-being, aligning with the eudaimonic perspective (Mercer & Gregersen, 2020). In the of educational context, teacher well-being pertains to job satisfaction and the emotional experiences resulting from their professional engagements (Collie et al., 2016; Greenier et al., 2021; Wang et al., 2022; Zhi & Derakhshan, 2024; Zhi et al., 2024).

The significance of teacher well-being lies in its impact on both students and educational institutions (Diener, 2009). Teachers with lower well-being may exhibit reduced effectiveness and a heightened likelihood of leaving their profession (Boyd et al., 2006). Thus, prioritizing teacher well-being is pivotal in fostering positive outcomes within the education system. Well-being, a multidimensional construct, is influenced by various internal and external factors (Benevene et al., 2018). Teacher well-being encompasses both positive and negative dimensions (Bing et al., 2022; Mercer & Gregersen, 2020; Zhi & Derakhshan, 2024), wherein stress and burnout significantly contribute to the negative aspects (Bardach et al., 2022). Furthermore, the occupational well-being of teachers aligns with their positive work experiences and ideal mental capacity, characterized by positive dimensions such as job fulfillment and enthusiasm for work (Klusmann et al., 2008).

As a sub-category of well-being, PWB is a multifaceted construct that refers to an individual's contentment with their mental and physical health, life, and work, as well as their assessment of their overall happiness (Garg & Rastogi, 2009). Over the years, PWB has been the subject of extensive research, and Ryff (1989) discussed the most

widely recognized model of PWB, which is comprised of six components: autonomy, purpose in life, positive relationships with others, self-acceptance, personal growth, and environmental mastery. Autonomy pertains to the self-regulation of conduct, self-reliance, and self-rule, whereas purpose in life involves setting goals, intentions, and objectives for one's existence. Positive relations with others encompass building loving, trusting, and warm relationships with other individuals, and self-acceptance is the main feature of self-realization, maturity, optimal functioning, and mental well-being. Personal growth is focused on improving patterns and behaviors, constantly expanding self-awareness and sense of identity, and enhancing abilities throughout the lifespan. Lastly, environmental mastery refers to the creation of settings that align with one's psychological conditions.

Earlier research has delved into the concept of PWB concerning emotional and occupational constructs. Çankir and Sahin (2018) undertook a study on Turkish textile workers, aiming to explore the mediating role of work engagement in the relationship between PWB and job performance. Their findings indicated that participants demonstrated low levels of both WE, job performance, and PWB. Additionally, the study revealed that WE served as a mediator in the correlation between PWB and job performance. Similarly, White (2010) utilized the work demands-resources model to examine the promotion of work-related PWB by assessing factors such as work stress, WE, and psychological detachment. Results showcased a lack of significant correlation between PWB and WE, while highlighting a significant relationship between PWB and work stress. Moreover, psychological detachment exhibited a negative and substantial correlation with PWB. The predictive models of PWB indicated that work stress emerged as the most influential predictor, followed by psychological detachment within the workplace (White, 2010).

In the realm of language teaching, assessing the emotional and psychological well-being of language instructors is crucial, considering the emotional engagement and interpersonal dynamics involved in the subject. Additionally, teachers may face added stressors such as language anxiety and intercultural encounters (Greenier et al., 2021; Fathi et al., 2021; Mercer & Gregersen, 2020). Talbot and Mercer (2018) highlighted the significance of exploring well-being to comprehend the emotional stress experienced by instructors, noting that those with higher well-being tend to exhibit greater effectiveness. Research evidence emphasizes the pivotal role of well-being in the effective functioning of language instructors across all educational levels,

contributing to enhanced teaching creativity, fostering positive relationships with students, mitigating disciplinary issues, and augmenting student achievement (Mercer, 2020).

It is argued that educators who lack effective coping strategies—such as resilience, mindfulness practices, and emotional regulation—to navigate high levels of stress and burnout may face challenges in fulfilling their duties effectively and meeting the academic and emotional needs of their students (Herman et al., 2018). Therefore, prioritizing teachers' well-being becomes imperative in enhancing their job performance and subsequently improving student outcomes.

## 2.2. Growth mindset

Dweck and Leggett (1988) introduced the concept of mindset, distinguishing between fixed and growth mindsets regarding an individual's intelligence. As elucidated by Dweck (2000), individuals embracing a growth mindset perceive their intelligence as malleable and capable of development over time, while those adhering to a fixed mindset consider their intelligence as unchangeable. This concept extends beyond intelligence to encompass personal attributes such as character strengths and abilities. Those with a growth mindset view their abilities as modifiable through effort, whereas those with a fixed mindset regard their abilities as static and immutable (Yeager & Dweck, 2012).

Research has demonstrated the profound impact of mindset on academic performance (Claro et al., 2016; Derakhshan & Fathi, 2024). For instance, Mueller and Dweck (1998) observed that praising students for their intelligence, fostering a fixed mindset, resulted in poorer performance compared to praising their effort, aimed at nurturing a growth mindset. Consequently, various intervention programs have been introduced to enhance academic performance by cultivating a growth mindset (Porter et al., 2022; Spitzer & Aronson, 2015).

In the context of teachers, their implicit beliefs about intelligence significantly influence classroom behavior, instructional approaches, self-efficacy, and perceptions of student performance over time (Derakhshan et al., 2022; Mesler et al., 2021; Seaton, 2018; Yeager et al., 2022). These beliefs also impact interactions with students, shaping their perceptions of their abilities (Patrick & Joshi, 2019; Rissanen et al., 2019).

Teachers embracing a growth mindset can positively impact students by encouraging effort and conveying the belief in students' potential for improvement (Dweck, 2014). Linguistic subtleties in teachers' language use can also shape students' self-perceptions and further motivate them toward achievement (Schmidt et al., 2015). Conversely, teachers adhering to a fixed mindset often praise students' inherent qualities, potentially diminishing motivation and effort (Mueller & Dweck, 1998). Schmidt et al. (2015) posit that linguistic nuances can influence students' perceptions of their abilities, ultimately driving them toward their goals. When teachers maintain a fixed mindset, they tend to praise students' inherent attributes, potentially undermining their motivation and work ethic (Mueller & Dweck, 1998).

While the direct effect of teachers' mindset on students' academic performance appears limited, evidence suggests that teachers' mindset interacts with the classroom performance structure (Mesler et al., 2021).

### **2.3. Grit**

Grit, as defined by Duckworth et al. (2009), refers to the quality of persistently pursuing long-term goals with enthusiasm. This construct has garnered attention in positive psychology and has been associated with various favorable outcomes such as academic achievement, job performance, and overall well-being (Credé et al., 2017; Kannangara et al., 2018). The measurement of grit has been a subject of discourse in scholarly literature. The Grit Scale, developed by Duckworth and colleagues (2007), is one of the widely used measures, consisting of two subscales: perseverance of effort and consistency of interests. However, some researchers argue that grit is a multi-dimensional concept that cannot be entirely captured by a single scale (Credé, 2018; Singh & Chukkali, 2021).

Numerous studies have established a positive correlation between grit and academic success (Jiang et al., 2019; Lam & Zhou, 2019). Eskreis-Winkler et al. (2014) found that high school students exhibiting higher levels of grit had a heightened likelihood of graduating, even after accounting for academic conscientiousness, motivation towards schooling, and standardized test scores. Additionally, Strayhorn (2014) conducted research in a predominantly White academic institution, revealing that grit accounted for 24% of the variance in the grades of Black male college students.

Regarding teacher grit, educators with higher levels of grit tend to exhibit greater

enthusiasm, determination, and engagement within their classrooms. Their persistence in overcoming setbacks is positively associated with their mindset (Robertson-Kraft & Duckworth, 2014; Zeng et al., 2019). Sudina et al. (2021) discovered that the grit of language teachers contributes to their job satisfaction and resilience in facing challenges. However, further studies are warranted to explore the factors influencing language teachers' grit (Sudina et al., 2021). In the educational landscape, the significance of grit has been increasingly acknowledged. Grit stands as a fundamental element of teachers' determination and commitment to their objectives. Research indicates that teachers possessing grit demonstrate heightened passion and perseverance in their classrooms (Derakhshan et al., 2022; Duckworth et al., 2009; McCain, 2017).

Additionally, teachers' mindset is positively associated with their persistence in overcoming failures (Derakhshan & Fathi, 2023; Zeng et al., 2019). According to Sudina et al. (2021), grit is an important characteristic for language teachers as it helps them sustain their passion for their work and display more resilience in the face of failure. Grit in language teaching comprises two main components: perseverance of effort and consistency of interest. Perseverance of effort refers to the ability to exert consistent effort over a prolonged period, while consistency of interest pertains to maintaining a passion for long-term goals despite obstacles and setbacks. In particular, language teacher grit refers to EFL teachers' enthusiasm for their job and their perseverance of effort (Sudina et al., 2021; Teimouri et al., 2022).

Given that teacher grit has is argued to be interconnected with enhanced passion, determination, and engagement in the classroom (Fabelico & Afalla, 2020; Zeng et al., 2019), pinpointing the antecedents of teachers' grit can be beneficial for the field and provide insights into the importance of grit in language teaching. With regard to the empirical background, previous research has investigated the relationship between grit and various factors among teachers. For example, Nazari and Alizadeh Oghyanous (2021) found a strong correlation between job stress, turnover intention, well-being, and grit among EFL teachers. However, McCain (2017) found no significant relationship between teachers' grit and learners' grit or reading achievement. Another study by Azari Noughabi et al. (2022) found that L2 grit and engagement had a significant impact on immunity among EFL teachers. Moreover, a study by Fabelico and Afalla (2020) investigated the connection among teachers' efficacy perceptions, grit, and burnout and discovered that grit had a substantial impact on other factors and influenced teachers' educational achievements. In a more



recent investigation conducted by Liu et al. (2023), it was revealed that teaching enjoyment, teacher grit, and growth mindset were significant predictors of EFL teachers' work engagement. Additionally, the study demonstrated that teacher grit served as a mediator in the model.

#### **2.4. The Structural Model**

The structural model of this study proposes that EFL teachers' growth mindset and grit have significant direct and indirect effects on their well-being. The hypothesized model is based on the theoretical frameworks of growth mindset theory (Dweck, 2006) and grit theory (Duckworth et al., 2007), which suggest that individuals' beliefs and attitudes play a significant role in their well-being.

*Hypothesis 1:* Teacher growth mindset has a direct and positive effect on teacher well-being.

This hypothesis is based on the idea that individuals with a growth mindset tend to embrace challenges and persist in the face of obstacles (Dweck, 2014, 2016). As such, it is expected that EFL teachers with a growth mindset will experience higher levels of well-being, as they are more likely to view challenges as opportunities for growth and development.

*Hypothesis 2:* Teacher grit mediates the relationship between teacher growth mindset and teacher well-being.

This hypothesis is grounded in the construct of grit, which is concerned with the tendency to maintain effort and interest in long-term goals (Duckworth et al., 2009). It is expected that EFL teachers with a growth mindset will be more likely to develop grit, which, in turn, will positively affect their well-being. Consequently, it is hypothesized that grit will mediate the relationship between growth mindset and well-being.

### **3. Method**

#### **3.1. Participants**

This study involved 382 EFL teachers from Iran who voluntarily participated in the research. The cohort consisted of 186 male and 196 female English instructors,

selected through convenience sampling methods (Dörnyei, 2007), based on their availability, accessibility, and willingness to engage in the study. Prior to their involvement, participants were provided with detailed information regarding the research aims, procedures, and their rights as participants. They provided informed consent, signifying their voluntary participation in the study.

The participants, aged between 22 and 41 years, had an average age of 24.78 years (Standard Deviation = 6.91). Their teaching experience ranged from 2 to 19 years (Mean = 8.39, Standard Deviation = 3.16). Engaged in teaching roles across various educational settings such as schools, universities, and language academies, these educators represented diverse regions in Iran, encompassing both urban and rural areas. Their diverse backgrounds and teaching experiences contributed to the study's comprehensive understanding of EFL instructors in the Iranian context.

## 3.2 Instruments

### 3.2.1. Teacher Well-Being Scale

To assess the degree of mental wellness among the respondents, the scale created by Dagenais-Desmarais and Savoie (2012) was employed. The scale contains 25 statements that assess five sub-scales including Interpersonal Fit at Work (IFW), Desire for Involvement at Work (DIW), Feeling of Competency at Work (FCW), Thriving at Work (TW), and Perceived Recognition at Work (PRW). The scale items were rated on a six-point Likert scale ranging from 0 (Disagree) to 5 (Strongly Agree).

### 3.2.2. Teacher Grit

In the current investigation, EFL educators' level of grit was assessed via a self-administered survey that was validated by Sudina and associates (2021). The survey consisted of 14 items that assessed two aspects of L2 teaching grit, namely, perseverance of effort (PE) and consistency of interest (CI). The respondents were asked to rate the statements on a 5-point scale, ranging from 1 (not at all like me) to 5 (very much like me).

### 3.2.3. Growth Mindset

In this research, the participants' growth mindset level was evaluated using an

adaptation of the 4-item Growth Mindset Inventory, created by Dweck (2006). Past research has demonstrated the scale's reliability and validity (Zeng et al., 2016). The participants were requested to rate the statements on a 5-point Likert scale, ranging from 1 = (strongly disagree) to 5 = (strongly agree). An example statement was " You can always substantially change how intelligent you are."

### **3.3. Data Collection**

In this non-experimental study, data collection took place via an electronic survey comprising two sections: a demographic information segment and a section encompassing four scales pertinent to the research objectives. The survey, conducted in English, was administered electronically through an online platform. Participants were approached through a multi-faceted approach involving the distribution of the survey link to teachers across diverse regions in Iran. The primary researcher, with assistance from colleagues and acquaintances, facilitated data collection by disseminating the survey link within their respective networks.

The survey initiative commenced in September 2023 and spanned a duration of approximately 6 weeks, concluding data collection within this period. Throughout the data collection process, participants were ensured of the confidentiality of their responses, with informed consent obtained from each participant prior to their engagement in the survey. It was explicitly conveyed to participants that their participation was voluntary, and they retained the liberty to withdraw from the survey at any juncture without any obligation. Given the participants' proficiency in English, the scales were presented in the English language without necessitating translation into other languages. Ethical considerations and the assurance of confidentiality were upheld throughout the data collection process to maintain participants' trust and compliance with ethical guidelines.

### **3.4. Data Analysis**

The data underwent statistical analysis using Maximum Likelihood Estimation (MLE) within SPSS (Version 24) and Amos (Version 24). Pre-analysis checks were conducted for missing data, outliers, and multivariate normality. The missing data rate was minimal, ranging from .4 to 1.3%, and the MCAR test using Little's test confirmed that the data were missing completely at random ( $\chi^2 = 982.12, p = 0.529$ ).

Subsequently, Expectation Maximization (EM) was employed to handle the missing data, recognized as a suitable and robust estimation method for Structural Equation Modeling (SEM) (Little & Rhemtulla, 2013).

Identification of univariate outliers was executed through scatter plots and Z-standardized values, leading to the exclusion of five cases. Assessment of normality upheld the assumption, with skewness and kurtosis values falling within the accepted range of  $-2$  and  $+2$  (Kline, 2011) (refer to Table 2). Additionally, multivariate outliers were evaluated using Mahalanobis distances (Tabachnick et al., 2013), resulting in the removal of two cases due to their values exceeding the critical chi-square at an alpha level of .001. The finalized dataset encompassed 375 participants. To ascertain the measurement tools' reliability across diverse contexts and specialized fields, three separate Confirmatory Factor Analyses (CFAs) were conducted to assess the questionnaires' construct validity. The outcomes demonstrated an acceptable model fit (see Table 1). Finally, the study employed SEM to delve into the mediating function of teacher grit in the association between teacher growth mindset and teacher well-being.

#### 4. Results

In the current study, the means and standard deviations of the three variables were examined. For males and females, the mean scores for wellbeing were  $3.79 \pm .77$  and  $3.89 \pm .69$ , respectively; for teacher growth mindset, the means were  $3.16 \pm .81$  for males and  $3.23 \pm .75$  for females; for teacher grit, the means were  $4.06 \pm .91$  for males and  $4.13 \pm .89$  for females. The independent samples t-tests revealed no significant gender differences in wellbeing ( $t = -0.678$ ,  $p = .502$ ), teacher growth mindset ( $t = -0.297$ ,  $p = .635$ ), and teacher grit ( $t = -0.428$ ,  $p = .524$ ).

Table 1 shows the results of the first-order Confirmatory Factor Analyses (CFAs) and the reliability indices of the three measurement scales: Wellbeing, Teacher Growth Mindset, and Teacher Grit. The CFAs were conducted using the Maximum Likelihood Estimation method in Amos software.

The results indicate that all three measurement models have good fit based on Hu and Bentler's (1999) guidelines. The CMIN values for Wellbeing, Growth Mindset, and Teacher Grit are 95.236, 123.582, and 178.648, respectively, with corresponding degrees of freedom of 49, 73, and 95. The CMIN/DF ratios are below 2, which indicates good model fit. The P-values are all less than .001, indicating that the models fit the data well. The CFI values are .968, .981, and .973 for Wellbeing,

Growth Mindset, and Teacher Grit, respectively, which suggests good model fit. The RMSEA values are .069, .039, and .044 for Wellbeing, Growth Mindset, and Teacher Grit, respectively, which also indicate good model fit. The SRMR values are .041, .032, and .037 for Wellbeing, Growth Mindset, and Teacher Grit, respectively, which are within acceptable ranges. Finally, the reliability indices (Cronbach's alpha) for Wellbeing, Growth Mindset, and Teacher Grit are .83, .91, and .86, respectively, indicating good internal consistency.

**Table 1**  
*Results of CFA*

	CMIN	DF	CMIN/DF	<i>P</i>	CFI	RMSEA	SRMR	$\alpha$
Wellbeing	95.236	49	1.943	<.001	.968	.069	.041	.83
Growth mindset	123.582	73	1.69	<.001	.981	.039	.032	.91
Teacher grit	178.648	95	1.88	<.001	.973	.044	.037	.86

The three measurement models have adequate fit based on Hu and Bentler's (1999) criteria.

Table 2 presents the descriptive statistics and correlations between the constructs in the study. The table shows that growth mindset and teacher grit are positively correlated ( $r = .49, p < .01$ ), and both are positively correlated with wellbeing ( $r = .23, p < .05$  and  $r = .41, p < .01$ , respectively). The alpha coefficients for all three constructs indicate good reliability ( $\alpha > .80$ ). The results show that growth mindset was positively and significantly correlated with teacher grit ( $r = .49, p < .01$ ) and wellbeing ( $r = .23, p < .05$ ). Teacher grit was positively and significantly correlated with wellbeing ( $r = .41, p < .01$ ). All correlations were in the expected direction.

**Table 2**  
*Descriptive Statistics*

Constructs	1	2	3
1. Growth mindset	1		
2. Teacher grit	.49**	1	
3. Wellbeing	.23*	.41**	1
4. Mean	3.28	4.12	3.89
5. SD	.66	.84	.73
6. Skewedness	-.32	-.16	.13
7. Kurtosis	-.48	-.79	-.52

Note. \*  $p < .05$  \*\*  $p < .01$ .

After conducting SEM to assess the mediating role of teacher grit in the relationship between growth mindset and teacher wellbeing, the model fit was evaluated using different fit indices. The analysis revealed that the suggested model had a good fit to the data, with the following fit indices:  $\chi^2/df = 1.580$ , CFI = .954, TLI = .950, IFI = .953, RMSEA = .041, and SRMR = .047. Figure 1 shows the standardized parameter estimates for the proposed model in this study. Additionally, bootstrap resampling with 500 iterations was used to evaluate the sampling distribution and assess the indirect effects, which is a widely used method in SEM (Hayes, 2009). The results showed that teacher growth mindset had a direct and positive relationship with both wellbeing ( $\beta = .334$ ) and teacher grit ( $\beta = .542$ ), and teacher grit was also positively associated with wellbeing ( $\beta = .478$ ). Also, it was found that teacher growth mindset had an indirect relationship with wellbeing through teacher grit ( $\beta = .259$ ). Together, teacher growth mindset and teacher grit explained 48.26% of the variance in wellbeing, with the remaining variance accounted for by external variables. Table 3 presents the direct and indirect effects of the structural model, along with the 95% confidence intervals as well as effect sizes ( $f^2$ ).

**Table 3**  
*Path Estimates of the Structural Model*

Model pathways	B	SE	$\beta$	P	95% CI		$f^2$
					Lower bound	Upper bound	
<i>Direct effects</i>							
Growth mindset → wellbeing	.543	.159	.334	<.001	.132	.542	.192
Growth mindset → grit	.995	.179	.542	<.001	.412	.682	.413
Grit → wellbeing	.396	.065	.478	<.001	.331	.606	.391
<i>Indirect effect</i>							
Growth mindset → grit → wellbeing	.408	.086	.259	<.001	.172	.376	.153

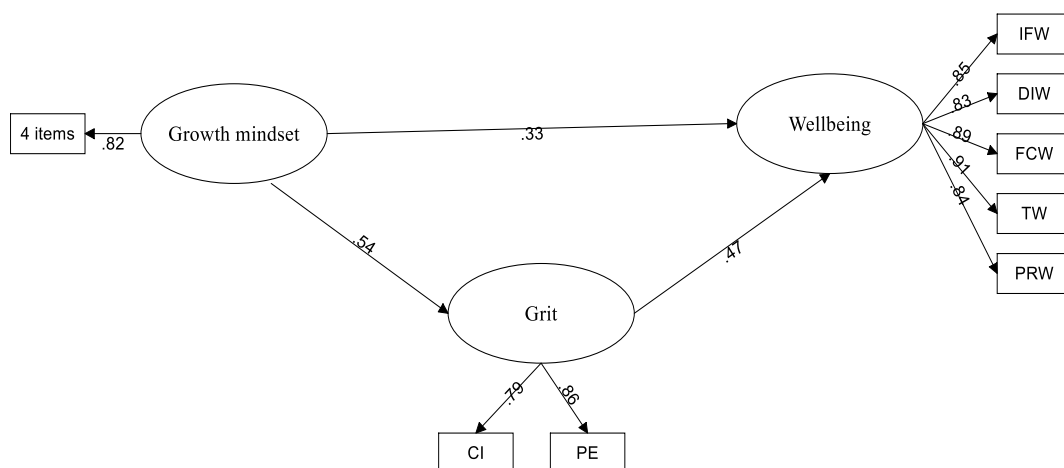
As presented in Table 3, the direct effects of growth mindset on wellbeing ( $B = .543$ ,  $SE = .159$ ,  $\beta = .334$ ,  $p < .001$ , 95% CI [.132, .542],  $f^2 = .192$ ), growth mindset on grit ( $B = .995$ ,  $SE = .179$ ,  $\beta = .542$ ,  $p < .001$ , 95% CI [.412, .682],  $f^2 = .413$ ), and grit on wellbeing ( $B = .396$ ,  $SE = .065$ ,  $\beta = .478$ ,  $p < .001$ , 95% CI [.331, .606],  $f^2 = .391$ ) are displayed. In addition, the indirect effect of growth mindset on wellbeing through grit is presented ( $B = .408$ ,  $SE = .086$ ,  $\beta = .259$ ,  $p < .001$ , 95% CI [.172, .376],  $f^2 = .153$ ). The  $f^2$  values for interpreting the practical significance of the

standardized parameter estimates are also provided, where values between .02 and .15 are considered weak, values between .15 and .35 are considered moderate, and values higher than .35 are considered strong.

Moreover, an assessment was carried out to test the structural consistency of the mediation model, evaluating potential differences in the structural path coefficients between male and female participants. The findings revealed that the proposed mediation model adequately suited the data for both genders. A comparative analysis across genders regarding multi-group invariance displayed satisfactory fits for both the restricted ( $\chi^2/df = 1.430$ , CFI = .932, TLI = .931, RMSEA = .036, SRMR = .070) and the unrestricted models ( $\chi^2/df = 1.429$ , CFI = .933, TLI = .927, RMSEA = .036, SRMR = .069). The comparison using the  $\chi^2$  difference test between these models ( $\Delta\chi^2 = 4.442$ ,  $\Delta df = 3$ ,  $p = .216$ ) indicated that the coefficients in the suggested mediation model remained consistent across genders.

Furthermore, distinct structural equation modeling analyses were conducted for male and female educators, demonstrating acceptable fits for both male ( $\chi^2/df = 1.389$ ,  $p < .001$ , CFI = .935, RMSEA = .049, SRMR = .067) and female instructors ( $\chi^2/df = 1.470$ ,  $p < .001$ , CFI = .931, RMSEA = .052, SRMR = .062). Consequently, no notable gender distinctions emerged in the direct and indirect impacts of teacher growth mindset on well-being. Additionally, it was noted that the mediating influence of teacher grit held substantial strength for both genders.

**Figure 1**  
The Final Model



Note. All Beta coefficients are significant at .001 level.

## 5. Discussion

This study aimed to investigate how teacher growth mindset and teacher grit influence the well-being of EFL educators in Iran. Given the mounting demands and complexities within the teaching profession, identifying factors that bolster teacher well-being holds significant importance. The findings highlighted that teacher growth mindset directly and positively impacted teacher well-being. Additionally, teacher grit played a mediating role in the relationship between teacher growth mindset and well-being.

The discovery that teacher growth mindset positively influences teacher well-being aligns with prior empirical research in the domains of positive psychology and education (e.g., Nalipay et al., 2022; Ortiz Alvarado et al., 2019; Shoshani, 2021; Zeng et al., 2019). A growth mindset entails the belief that one's abilities can develop through effort, dedication, and learning from mistakes (Dweck, 2006). Previous studies have indicated that individuals with a growth mindset tend to exhibit higher motivation, resilience, and overall well-being (Hong et al., 2016; Yeager et al., 2019). In educational settings, embracing a growth mindset emerges as a crucial factor in enhancing teacher well-being (Nalipay et al., 2022). Teachers who perceive their skills as improvable through effort are more likely to confront challenges with a positive outlook and persistence (Liu et al., 2023). Consequently, this approach fosters a greater sense of achievement and job satisfaction, elements known to correlate positively with teacher well-being (Mercer & Gregersen, 2020; Owen, 2016).

Furthermore, a growth mindset aids educators in managing stress and the pressures associated with teaching. Teachers who view challenges as opportunities for growth are less susceptible to burnout and other adverse effects linked to stress (Mesler et al., 2021; Nalipay et al., 2022). They tend to engage in self-care practices and actively seek professional development opportunities, thereby contributing to their overall well-being (Shoshani, 2021). Empirical studies also substantiate the positive relationship between growth mindset and well-being. For instance, Yeager and Dweck's (2012) study revealed that fostering a growth mindset among high school students led to increased resilience and academic performance, alongside reduced symptoms of depression.



The second significant finding revealed that teacher grit acted as a mediator between teacher growth mindset and teacher well-being, substantiated by both theoretical frameworks and empirical evidence. Grit refers to an individual's endurance and commitment toward long-term goals, consistently predicting positive outcomes such as academic success, career achievements, and overall well-being (Duckworth et al., 2007; Duckworth & Quinn, 2009). Conversely, growth mindset refers to the belief that one's abilities and qualities can evolve through effort and learning, rather than being fixed (Dweck, 2006). This construct has shown associations with positive outcomes such as academic achievements, motivation, and well-being (Spitzer & Aronson, 2015; Yeager & Dweck, 2012).

The mediation of teacher grit between growth mindset and teacher well-being finds theoretical support in frameworks like the broaden-and-build theory of positive emotions (Fredrickson, 2001). This theory suggests that positive emotions broaden an individual's cognitive and behavioral responses and enhance personal resources. Positive emotions, like joy, gratitude, and pride, possibly experienced more by teachers with a growth mindset when facing challenges, could broaden their perspectives and build personal resources such as resilience and self-efficacy, contributing to their well-being. Empirical evidence from prior research supports this mediation. Studies by Santana-Monagas & Núñez (2022), Shafiee Rad & Jafarpour (2022), and Yang (2021) demonstrated grit's mediating role between growth mindset and various positive outcomes. For instance, Tang et al. (2019) found grit mediated the relationship between growth mindset, commitment, and academic achievement, while Zeng et al. (2019) discovered that grit and well-being mediated the link between growth mindset and work engagement among Chinese teachers.

In summary, this study underscores the importance of teacher growth mindset and grit in enhancing the well-being of EFL educators. By cultivating these traits among EFL teachers, educators can potentially improve teacher well-being, subsequently benefiting student outcomes. Future research avenues could delve into exploring additional teacher constructs impacting well-being and determining the most effective strategies for nurturing these qualities among EFL educators, especially in the context of Iranian EFL teaching.

## 6. Conclusions

This study delved into examining the influence of teacher growth mindset and teacher grit on the well-being of EFL instructors in Iran. The results highlighted that a

teacher's growth mindset directly and positively impacted their well-being. Additionally, it was identified that teacher grit served as a mediator between teacher growth mindset and well-being. These findings underscore the importance of nurturing the development of growth mindset and grit among EFL teachers to enhance their overall well-being. Teacher educators can play a pivotal role in facilitating the enhancement of these qualities by offering targeted training and support to teachers.

From a theoretical standpoint, these findings offer valuable contributions to the expanding body of literature concerning teacher well-being and the significance of teacher-related traits in its promotion. The study presents empirical evidence supporting the positive influence of teacher growth mindset and grit on teacher well-being, while also highlighting the mediating role of teacher grit in this relationship. These results advocate for the integration of teacher-related traits into teacher education programs, recognizing their crucial role in fostering teacher well-being. Moreover, the practical implications of this research extend to teacher educators and policymakers. Teacher training programs can incorporate specific strategies aimed at cultivating growth mindset and grit among teachers, including avenues for professional development, coaching, and mentoring. Policymakers are encouraged to support the advancement of these traits by allocating resources for teacher training and development initiatives.

Nevertheless, it is imperative to acknowledge potential limitations in this research. Firstly, the study's reliance on convenience sampling may limit the generalizability of the findings to other educational contexts. Secondly, the use of self-reported scales might introduce social desirability bias. Thirdly, the study did not account for other factors that could influence teacher well-being, such as workload and job satisfaction. Addressing these limitations in future studies could involve employing larger and more diverse samples, utilizing objective measures for teacher traits, and controlling for relevant variables to offer a more comprehensive understanding of their impact on teacher well-being.

**References**

- Azari Noughabi, M., Ghonsooly, B., & Jahedizadeh, S. (2022). Modeling the associations between EFL teachers' immunity, L2 grit, and work engagement. *Journal of Multilingual and Multicultural Development*, 1–16. <https://doi.org/10.1080/01434632.2022.2088766>
- Acheson, K., Taylor, J., & Luna, K. (2016). The burnout spiral: The emotion labor of five rural US foreign language teachers. *The Modern Language Journal*, 100(2), 522–537. <https://doi.org/10.1111/modl.12333>
- Babic, S., Mercer, S., Mairitsch, A., Gruber, J., & Hempkin, K. (2022). Language teacher wellbeing in the workplace. *Theory and Practice of Second Language Acquisition*, 8(1), 11–34. <https://doi.org/10.31261/TAPSLA.11514>
- Bardach, L., Klassen, R. M., & Perry, N. E. (2022). Teachers' psychological characteristics: Do they matter for teacher effectiveness, teachers' well-being, retention, and interpersonal relations? An integrative review. *Educational Psychology Review*, 34(1), 259–300. <https://doi.org/10.1007/s10648-021-09614-9>
- Benevene, P., Wong, Y. H. P., Fiorilli, C., & De Stasio, S. (2018). A cross-national comparison on subjective well-being of kindergarten teachers: Hong Kong and Italy. *Frontiers in Psychology*, 9, 2626. <https://doi.org/10.3389/fpsyg.2018.02626>
- Bing, H., Sadjadi, B., Afzali, M., & Fathi, J. (2022). Self-efficacy and emotion regulation as predictors of teacher burnout among English as a foreign language teachers: A structural equation modeling approach. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.900417>
- Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2006). How changes in entry requirements alter the teacher workforce and affect student achievement. *Education Finance and Policy*, 1(2), 176–216. <https://doi.org/10.1162/edfp.2006.1.2.176>
- Brady, J., & Wilson, E. (2021). Teacher wellbeing in England: Teacher responses to school-level initiatives. *Cambridge Journal of Education*, 51(1), 45–63. <https://doi.org/10.1080/0305764X.2020.1775789>
- Butler, J., & Kern, M. L. (2016). The PERMA-Profil: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, 6(3). <https://doi.org/10.5502/ijw.v6i3.526>
- Çankır, B. İ. L. A. L., & Şahin, S. A. F. İ. Y. E. (2018). Psychological well-being and

- job performance: The mediating role of work engagement. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 11(3).
- Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, 113(31), 8664–8668. <https://doi.org/10.1073/pnas.1608207113>
- Clark, K. N., & Malecki, C. K. (2019). Academic grit scale: Psychometric properties and associations with achievement and life satisfaction. *Journal of School Psychology*, 72, 49–66. <https://doi.org/10.1016/j.jsp.2018.12.001>
- Coleman, J. (2009). Well-being in schools: empirical measure, or politician's dream?. *Oxford Review of Education*, 35(3), 281–292. <https://doi.org/10.1080/03054980902934548>
- Collie, R. J., Shapka, J. D., Perry, N. E., & Martin, A. J. (2016). Teachers' psychological functioning in the workplace: exploring the roles of contextual beliefs, need satisfaction, and personal characteristics. *Journal of Educational Psychology*, 108(6), 788. <https://doi.org/10.1037/edu0000088>
- Cormier, D. L., Dunn, J. G., & Dunn, J. C. (2019). Examining the domain specificity of grit. *Personality and Individual Differences*, 139, 349–354. <https://doi.org/10.1016/j.paid.2018.11.026>
- Credé, M. (2018). What shall we do about grit? A critical review of what we know and what we don't know. *Educational Researcher*, 47(9), 606–611. <https://doi.org/10.3102/0013189X18801322>
- Credé, M., Tynan, M. C., & Harms, P. D. (2017). Much ado about grit: A meta-analytic synthesis of the grit literature. *Journal of Personality and Social Psychology*, 113(3), 492. <https://doi.org/10.1037/pspp0000102>
- Dagenais-Desmarais, V., & Savoie, A. (2012). What is psychological well-being, really? A grassroots approach from the organizational sciences. *Journal of Happiness Studies*, 13, 659–684. <https://doi.org/10.1007/s10902-011-9285-3>
- Derakhshan, A. (2022a). *The 5Cs positive teacher interpersonal behaviors: Implications for learner empowerment and learning in an L2 context*. Springer Nature. <https://doi.org/10.1007/978-3-031-16528-3>
- Derakhshan, A. (2022b). Revisiting research on positive psychology in second and foreign language education: Trends and directions. *Language Related Research*, 13(5), 1–43. <https://doi.org/10.52547/LRR.13.5.2>

- Derakhshan, A., Dewaele, J. M., & Noughabi, M. A. (2022). Modeling the contribution of resilience, well-being, and L2 grit to foreign language teaching enjoyment among Iranian English language teachers. *System, 109*, 102890. <https://doi.org/10.1016/j.system.2022.102890>
- Derakhshan, A., & Fathi, J. (2023). Grit and foreign language enjoyment as predictors of EFL learners' online engagement: The mediating role of online learning self-efficacy. *The Asia-Pacific Education Researcher*, 1–11. <https://doi.org/10.1007/s40299-023-00745-x>
- Derakhshan, A., & Fathi, J. (2024). Growth mindset, self-efficacy, and self-regulation: A symphony of success in L2 speaking. *System, 123*, 103320. <https://doi.org/10.1016/j.system.2024.103320>
- Derakhshan, A., Fathi, J., Pawlak, M., & Kruk, M. (2022). Classroom social climate, growth language mindset, and student engagement: The mediating role of boredom in learning English as a foreign language. *Journal of Multilingual and Multicultural Development*. <https://doi.org/10.1080/01434632.2022.2099407>
- Derakhshan, A., & Shakki, F. (2024). How innovative are innovative research approaches in the psychology of the language teachers and learners: A state-of-the-art review. *Language Related Research, 15*(5), 1–34. <https://doi.org/10.52547/LRR.13.5.2>
- Dewaele, J. M., Chen, X., Padilla, A. M., & Lake, J. (2019). The flowering of positive psychology in foreign language teaching and acquisition research. *Frontiers in Psychology, 10*, 2128. <https://doi.org/10.3389/fpsyg.2019.02128>
- Dewaele, J. M., & Li, C. (2020). Emotions in second language acquisition: A critical review and research agenda. *Foreign Language World, 196*(1), 34–49.
- Diener, E. (2009). *The science of well-being: The collected works of Ed Diener* (Vol. 37). Springer. <https://doi.org/10.1007/978-90-481-2350-6>
- Diener, E., & Lucas, R. E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of Happiness Studies, 1*, 41–78. <https://doi.org/10.1023/A:1010076127199>
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research, 97*, 143–156. <https://doi.org/10.1007/s11205-009-9493-y>

- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087. <https://doi.org/10.1037/0022-3514.92.6.1087>
- Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the Short Grit Scale (GRIT-S). *Journal of Personality Assessment*, 91(2), 166–174. <https://doi.org/10.1080/00223890802634290>
- Duckworth, A. L., Quinn, P. D., & Seligman, M. E. (2009). Positive predictors of teacher effectiveness. *The Journal of Positive Psychology*, 4(6), 540–547. <https://doi.org/10.1080/17439760903157232>
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- Dweck, C. (2014). Teachers' Mindsets: "Every Student has Something to Teach Me" Feeling overwhelmed? Where did your natural teaching talent go? Try pairing a growth mindset with reasonable goals, patience, and reflection instead. It's time to get gritty and be a better teacher. *Educational Horizons*, 93(2), 10–15. <https://doi.org/10.1177/0013175X14561420>
- Dweck, C. (2016). What having a "growth mindset" actually means. *Harvard Business Review*, 13(2), 2–5.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256. <https://doi.org/10.1037/0033-295X.95.2.256>
- Eskreis-Winkler, L., Shulman, E. P., Beal, S. A., & Duckworth, A. L. (2014). The grit effect: Predicting retention in the military, the workplace, school and marriage. *Frontiers in Psychology*, 5, 36. <https://doi.org/10.3389/fpsyg.2014.00036>
- Fabelico, F., & Afalla, B. (2020). Perseverance and passion in the teaching profession: Teachers' grit, self-efficacy, burnout, and performance. *Journal of Critical Reviews*.
- Fathi, J., Greenier, V., & Derakhshan, A. (2021). Self-efficacy, reflection, and burnout among Iranian EFL teachers: the mediating role of emotion regulation. *Iranian Journal of Language Teaching Research*, 9(2), 13–37. <https://doi.org/10.30466/ijltr.2021.121043>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218.

<https://doi.org/10.1037/0003-066X.56.3.218>

- Garg, P., & Rastogi, R. (2009). Effect of psychological wellbeing on organizational commitment of employees. *Journal of Organizational Behavior*, 8(2), 42–51.
- 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. <https://doi.org/10.1016/j.system.2020.102446>
- Hascher, T., & Waber, J. (2021). Teacher well-being: A systematic review of the research literature from the year 2000–2019. *Educational Research Review*, 34, 100411. <https://doi.org/10.1016/j.edurev.2021.100411>
- Herman, K. C., Hickmon-Rosa, J. E., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behavior Interventions*, 20(2), 90–100. <https://doi.org/10.1177/1098300717732066>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Jin, B., & Kim, J. (2017). Grit, basic needs satisfaction, and subjective well-being. *Journal of Individual Differences*, 38(1), 29. <https://doi.org/10.1027/1614-0001/a000219>
- Jiang, W., Xiao, Z., Liu, Y., Guo, K., Jiang, J., & Du, X. (2019). Reciprocal relations between grit and academic achievement: A longitudinal study. *Learning and Individual Differences*, 71, 13–22. <https://doi.org/10.1016/j.lindif.2019.02.004>
- Kannangara, C. S., Allen, R. E., Waugh, G., Nahar, N., Khan, S. Z. N., Rogerson, S., & Carson, J. (2018). All that glitters is not grit: Three studies of grit in university students. *Frontiers in Psychology*, 9, 1539. <https://doi.org/10.3389/fpsyg.2018.01539>
- Kern, M. L., Benson, L., Steinberg, E. A., & Steinberg, L. (2016). The EPOCH measure of adolescent well-being. *Psychological Assessment*, 28(5), 586. <https://doi.org/10.1037/pas0000201>
- Keyes, C. L. (2002). The exchange of emotional support with age and its relationship with emotional well-being by age. *The Journals of Gerontology Series B:*

*Psychological Sciences and Social Sciences*, 57(6), 518–525.  
<https://doi.org/10.1093/geronb/57.6.P518>

King, J., & Ng, K. Y. S. (2018). Teacher emotions and the emotional labour of second language teaching. *Language Teacher Psychology*, 1. <https://doi.org/10.21832/9781783099467-013>

Kline, R. B. (2011). *Principles and practice of structural equation modeling*. 3rd ed. Guilford Press.

Klusmann, U., Kunter, M., Trautwein, U., Lüdtke, O., & Baumert, J. (2008). Teachers' occupational well-being and quality of instruction: The important role of self-regulatory patterns. *Journal of Educational Psychology*, 100(3), 702. <https://doi.org/10.1037/0022-0663.100.3.702>

Kunnan, A. J. (1998). An introduction to structural equation modelling for language assessment research. *Language Testing*, 15(3), 295–332. <https://doi.org/10.1177/026553229801500302>

Lam, K. K. L., & Zhou, M. (2019). Examining the relationship between grit and academic achievement within K-12 and higher education: A systematic review. *Psychology in the Schools*, 56(10), 1654–1686. <https://doi.org/10.1002/pits.22302>

Lan, X., & Zhang, L. (2019). Shields for emotional well-being in Chinese adolescents who switch schools: the role of teacher autonomy support and grit. *Frontiers in Psychology*, 10, 2384. <https://doi.org/10.3389/fpsyg.2019.02384>

Little, T. D., & Rhemtulla, M. (2013). Planned missing data designs for developmental researchers. *Child Development Perspectives*, 7(4), 199–204. <https://doi.org/10.1111/cdep.12043>

Liu, L., Fathi, J., Allahveysi, S. P., & Kamran, K. (2023). A model of teachers' growth mindset, teaching enjoyment, work engagement, and teacher grit among EFL teachers. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1137357>

MacIntyre, P. D., & Mercer, S. (2014). Introducing positive psychology to SLA. *Studies in Second Language Learning and Teaching*, 4(2), 153–172. <https://doi.org/10.14746/ssl.2014.4.2.2>

McCain, B. (2017). *Effects of teacher grit on student grit and reading achievement: A mixed-methods study*. Indiana University of Pennsylvania.

Mercer, S. (2020). The wellbeing of language teachers in the private sector: An ecological perspective. *Language Teaching Research*, 1362168820973510.



<https://doi.org/10.1177/1362168820973510>

- Mercer, S., & Gregersen, T. (2020). *Teacher wellbeing*. Oxford University Press.
- Mercer, S., & Kostoulas, A. (Eds.). (2018). *Language teacher psychology* (Vol. 1). Multilingual Matters. <https://doi.org/10.21832/9781783099467>
- Mesler, R. M., Corbin, C. M., & Martin, B. H. (2021). Teacher mindset is associated with development of students' growth mindset. *Journal of applied developmental psychology, 76*, 101299. <https://doi.org/10.1016/j.appdev.2021.101299>
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2016). *Applied multivariate research: Design and interpretation*. Sage publications.
- Mohammad Hosseini, H., Fathi, J., Derakhshesh, A., & Mehraein, S. (2022). A model of classroom social climate, foreign language enjoyment, and student engagement among English as a foreign language learners. *Frontiers in Psychology, 13*, 933842. <https://doi.org/10.3389/fpsyg.2022.933842>
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology, 75*(1), 33. <https://doi.org/10.1037/0022-3514.75.1.33>
- Nalipay, M. J. N., King, R. B., Mordeno, I. G., & Wang, H. (2022). Are good teachers born or made? Teachers who hold a growth mindset about their teaching ability have better well-being. *Educational Psychology, 42*(1), 23–41. <https://doi.org/10.1080/01443410.2021.2001791>
- Nazari, M., & Alizadeh Oghyanous, P. (2021). Exploring the role of experience in L2 teachers' turnover intentions/occupational stress and psychological well-being/grit: A mixed methods study. *Cogent Education, 8*(1), 1892943. <https://doi.org/10.1080/2331186X.2021.1892943>
- Ortiz Alvarado, N. B., Rodriguez Ontiveros, M., & Ayala Gaytán, E. A. (2019). Do mindsets shape students' well-being and performance?. *The Journal of Psychology, 153*(8), 843–859. <https://doi.org/10.1080/00223980.2019.1631141>
- Owen, S. (2016). Professional learning communities: Building skills, reinvigorating the passion, and nurturing teacher wellbeing and “flourishing” within significantly innovative schooling contexts. *Educational Review, 68*(4), 403–419. <https://doi.org/10.1080/00131911.2015.1119101>
- Patrick, S. K., & Joshi, E. (2019). “Set in stone” or “willing to grow”? teacher sensemaking during a growth mindset initiative. *Teaching and Teacher Education, 88*, 103077. <https://doi.org/10.1016/j.tate.2019.103077>

83, 156–167. <https://doi.org/10.1016/j.tate.2019.04.009>

- Porter, T., Catalán Molina, D., Cimpian, A., Roberts, S., Fredericks, A., Blackwell, L. S., & Trzesniewski, K. (2022). Growth-mindset intervention delivered by teachers boosts achievement in early adolescence. *Psychological Science*, *33*(7), 1086–1096. <https://doi.org/10.1177/09567976211061109>
- Rissanen, I., Kuusisto, E., Tuominen, M., & Tirri, K. (2019). In search of a growth mindset pedagogy: A case study of one teacher's classroom practices in a Finnish elementary school. *Teaching and Teacher Education*, *77*, 204–213. <https://doi.org/10.1016/j.tate.2018.10.002>
- Robertson-Kraft, C., & Duckworth, A. L. (2014). True grit: Trait-level perseverance and passion for long-term goals predicts effectiveness and retention among novice teachers. *Teachers College Record*, *116*(3), 1–27. <https://doi.org/10.1177/016146811411600306>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Santana-Monagas, E., & Núñez, J. L. (2022). Predicting students' basic psychological need profiles through motivational appeals: Relations with grit and well-being. *Learning and Individual Differences*, *97*, 102162. <https://doi.org/10.1016/j.lindif.2022.102162>
- Schafer, J. L., & Graham, J. W. (2002). Missing data: our view of the state of the art. *Psychological Methods*, *7*(2), 147. <https://doi.org/10.1037/1082-989X.7.2.147>
- Schmidt, J. A., Shumow, L., & Kackar-Cam, H. (2015). Exploring teacher effects for mindset intervention outcomes in seventh-grade science classes. *Middle Grades Research Journal*, *10*(2), 17–32.
- Seaton, F. S. (2018). Empowering teachers to implement a growth mindset. *Educational Psychology in Practice*, *34*(1), 41–57. <https://doi.org/10.1080/02667363.2017.1382333>
- Shafiee Rad, H., & Jafarpour, A. (2022). Effects of well-being, grit, emotion regulation, and resilience interventions on 12 learners' writing skills. *Reading & Writing Quarterly*, 1–20. <https://doi.org/10.1080/10573569.2022.2096517>
- Shoshani, A. (2021). Growth mindset in the maths classroom: A key to teachers' well-being and effectiveness. *Teachers and Teaching*, *27*(8), 730–752.

<https://doi.org/10.1080/13540602.2021.2007370>

- Singh, S., & Chukkali, S. (2021). Development and validation of multi-dimensional scale of grit. *Cogent Psychology*, 8(1), 1923166.
- Spitzer, B., & Aronson, J. (2015). Minding and mending the gap: Social psychological interventions to reduce educational disparities. *British Journal of Educational Psychology*, 85(1), 1–18. <https://doi.org/10.1111/bjep.12067>
- Strayhorn, T. L. (2014). What role does grit play in the academic success of black male collegians at predominantly white institutions?. *Journal of African American Studies*, 18, 1–10. <https://doi.org/10.1007/s12111-012-9243-0>
- Sudina, E., Vernon, T., Foster, H., Del Villano, H., Hernandez, S., Beck, D., & Plonsky, L. (2021). Development and initial validation of the L2-Teacher Grit Scale. *TESOL Quarterly*, 55(1), 156–184. <https://doi.org/10.1002/tesq.581>
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics*. Pearson.
- Talbot, K., & Mercer, S. (2018). Exploring university ESL/EFL teachers' emotional well-being and emotional regulation in the United States, Japan and Austria. *Chinese Journal of Applied Linguistics*, 41(4), 410–432. <https://doi.org/10.1515/cjal-2018-0031>
- Tang, X., Wang, M. T., Guo, J., & Salmela-Aro, K. (2019). Building grit: The longitudinal pathways between mindset, commitment, grit, and academic outcomes. *Journal of Youth and Adolescence*, 48, 850–863. <https://doi.org/10.1007/s10964-019-00998-0>
- Teimouri, Y., Plonsky, L., & Tabandeh, F. (2022). L2 grit: Passion and perseverance for second-language learning. *Language Teaching Research*, 26(5), 893–918. <https://doi.org/10.1177/1362168820921895>
- Vainio, M. M., & Daukantaitė, D. (2016). Grit and different aspects of well-being: Direct and indirect relationships via sense of coherence and authenticity. *Journal of Happiness Studies*, 17, 2119–2147. <https://doi.org/10.1007/s10902-015-9688-7>
- Vo, D. T., & Allen, K. A. (2022). A systematic review of school-based positive psychology interventions to foster teacher wellbeing. *Teachers and Teaching*, 28(8), 964–999. <https://doi.org/10.1080/13540602.2022.2137138>
- Wang, Y., Derakhshan, A., & Azari Noughabi, M. (2022). The interplay of EFL teachers' immunity, work engagement, and psychological well-being: Evidence

from four Asian countries. *Journal of Multilingual and Multicultural Development*.  
<https://doi.org/10.1080/01434632.2022.2092625>

Wang, Y., Derakhshan, A., & Zhang, L. J. (2021). Researching and practicing positive psychology in second/foreign language learning and teaching: the past, current status and future directions. *Frontiers in Psychology*, *12*, 731721. <https://doi.org/10.3389/fpsyg.2021.731721>

Williams, M., Mercer, S., & Ryan, S. (2016). *Exploring psychology in language learning and teaching*. Oxford University Press.

Xiao, Y., Fathi, J., & Mohammaddockht, F. (2022). Exploring a structural model of teaching enjoyment, teacher self-efficacy, and work engagement. *Frontiers in Psychology*, *13*, 918488. <https://doi.org/10.3389/fpsyg.2022.918488>

Yang, P. (2021). Exploring the relationship between Chinese EFL students' grit, well-being, and classroom enjoyment. *Frontiers in Psychology*, *12*, 762945. <https://doi.org/10.3389/fpsyg.2021.762945>

Yeager, D. S., Carroll, J. M., Buontempo, J., Cimpian, A., Woody, S., Crosnoe, R., ... & Dweck, C. S. (2022). Teacher mindsets help explain where a growth-mindset intervention does and doesn't work. *Psychological Science*, *33*(1), 18–32. <https://doi.org/10.1177/09567976211028984>

Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, *47*(4), 302–314. <https://doi.org/10.1080/00461520.2012.722805>

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*, 839. <https://doi.org/10.3389/fpsyg.2019.00839>

Zhang, L. J., & Fathi, J. (2024). The mediating role of mindfulness and emotion regulation in the relationship between teacher self-compassion and work engagement among EFL teachers: A serial mediation model. *System*, *125*, 103433. <https://doi.org/10.1016/j.system.2024.103433>

Zhang, L. J., Fathi, J., & Naderi, M. (2023). A cross-lagged panel analysis of self-efficacy, teacher grit, teaching enjoyment, and work engagement among foreign language teachers. *Journal of Multilingual and Multicultural Development*, 1–19. <https://doi.org/10.1080/01434632.2023.2248064>

Zhi, R., & Derakhshan, A. (2024). Modelling the interplay between resilience, emotion regulation and psychological well-being among Chinese English language teachers: The mediating role of self-efficacy beliefs. *European Journal of Education*. <https://doi.org/10.1111/ejed.12643>

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/10.1177/00315125231222>

### About the Authors

**Jalil Fathi** received his PhD degree in Applied Linguistics from Allameh Tabataba'i University, Tehran, Iran. He is currently an Associate Professor at University of Kurdistan, Sanandaj, Iran. His areas of interest are Computer Assisted Language Learning (CALL), teacher education, and psychology of language learning. He has published extensively in internationally acclaimed journals like *Computer Assisted Language Learning*, *Computers and Education*, *System*, *Language Teaching Research*, *International Review of Applied Linguistics in Language Teaching*, *Journal of Computer Assisted Learning (JCAL)*, *Journal of Multilingual and Multicultural Development*, *International Journal of Multilingualism*, *Thinking Skills and Creativity*, *Education and Information Technologies*, *Asia Pacific Education Researcher*, *Social Psychology of Education*, *Current Psychology*, and *Perceptual Motor and Skills*. He has also presented extensively in both international and national conferences.

**Habib Soleimani** received his PhD in TEFL from University of Isfahan, Iran. He is currently an assistant professor in the department of English language and literature and linguistics at the University of Kurdistan, Sanandaj, Iran. His areas of interests include: English Teaching Methodology, Testing and Evaluation, and Research Methodology. He has participated in different national and international conferences and published several papers in different academic journals.