Research article

EFL teachers' engagement: The impact of well-being and emotion regulation

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A B S T R A C T

As foreign language education is a challenging and complex activity, investigating the factors that influence English as foreign language (EFL) teachers' engagement may be an interesting area of research. In this field, teachers' engagement is considered an important factor related to people's perception of work. With the emergence of Positive Psychology (PP), and with regard to the role of constructive emotion variables in teachers' engagement, more attention was paid to the practical aspects of life, and it views well-being as a crucial concern for individuals' success. Emotion regulation (ER), as another emotional trait, is noteworthy as it aids in managing the favorable and unfavorable emotions educators commonly encounter in educational settings. Therefore, the constructs of well-being and emotion regulation and their role in the EFL setting have been highlighted. Therefore, the current study sought to assess the effects of well-being and emotion regulation in EFL teachers' engagement. To this end, 410 Chinese EFL teachers were chosen to complete three scales, namely engagement, well-being and ER. Structural Equation Modeling (SEM) was run to inspect the responses of the teachers. The results specified that both ER and well-being had significant impacts on the engagement of Chinese EFL teachers. Indeed, 65 percent of changes in the EFL educators' engagement can be predicted by their well-being, and about 73 percent can be predicted by their emotional regulation. The consequences for EFL instructors, teacher trainers, and other academic stakeholders are also presented in detail.

1. Introduction

Many teachers are deeply devoted to their careers, despite their recognized demands and challenges [1,2]. This commitment, known as engagement, alludes to the levels to which individuals are willing and involved in their job [3,4]. Because of the emergence of PP and the significance of engagement [5], there has been an interest in this variable over the past twenty years, and a move from teacher burnout studies to engagement [6,7]. Recent studies have engrossed in detecting issues that impact teachers' engagement, as those who are more engaged tend to have a more positive outlook toward their profession and exhibit a greater interest in their work duties [8,9]. This may change the eminence of instruction and its effectiveness, [7,10,11]. Among the factors influencing individuals to engage in instruction or education is to achieve well-being [12], Recently, the topic of well-being among teachers has garnered significant attention, particularly with the emergence of PP as a field of study [13]. Teacher well-being is regarded as a teacher's evaluation of their satisfaction and happiness in the classroom setting [14]. Similarly, based on previous studies [7,15,16], the emotional, social, and professional well-being of language instructors has gained greater attention in educational training programs.

This is due to the significant impact it has on their classroom performance, learning environment, and the well-being of their students.

Moreover, in line with Greenier et al. [17] emotional variability is abundant within the field of education, and it is essential to consider how it is demonstrated in the educational setting as emotions are an inherent aspect of teaching [18], and effective management of emotions using effective strategies is crucial for L2 teachers to create a kindly learning environment [19]. Having complete understanding of the contribution made by emotions to L2, it is essential to know why and how teachers use particular feelings in their classes and what is the intensity of such emotions [20,21]. Moreover, ER is the progression by which people regulate their emotions, affect, mood, and stress [22,23]. EFL teachers must regulate their emotions, particularly negative ones, to foster a positive learning environment; otherwise, they cannot establish a pleasant situation in their classes [24]. ER is essential for teachers to possess, as it enables them to overcome negative emotions that may impede educational objectives [25]. Therefore, teachers need to control their emotions so that they can achieve educational aims. To do so, teachers may employ various ER strategies [6]. Emotions involve multiple steps and the process of ER can impact the speed, intensity, and duration of emotional reactions, as well as intellectual, social, and physical responses [26,27]. In today's educational context, where working conditions are increasingly challenging and complex, it seems that teachers who are highly successful in regulating their emotions tend to be more involved in their career responsibilities. And accordingly, they are passionate about educational objectives and are attentive to learners' needs [28].

In a nutshell, the well-being of EFL teachers and the strategies they use to control their emotions are crucial in comprehending the evolving characteristics of foreign language education [29]. For instance, few investigations have concentrated on the importance of teachers' well-being [17,30]. Alternatively, investigations on ER are gradually progressing in various domains like universal education, commerce, and well-being; however, there has been little attention given to language teaching, particularly in the EFL Chinese setting [31]. Accordingly, the lack of studies in this field necessitates further studies that present a distinct picture of the impact of ER on EFL educators. Furthermore, in the extant literature, no empirical studies of general education or language teaching have tested the two constructs to predict teachers' engagement. This study looks at how educators' well-being and ER in EFL domain affect their engagement so the following question is formulated:

Q: How much variance in the EFL teachers' engagement can be predicted by their well-being and emotion regulation?

2. Review of the literature

2.1. Engagement

Fredricks [32] defined engagement in the context of education as the level of commitment and investment demonstrated by both learners and educators in their work. Engagement is seen as a broad concept that encompasses various aspects, including learners' and bib3 educators' degrees of dedication, focus, and willingness to utilize their skills, strategies, or activities to enhance their performance [33]. From the perspective of Self-Determination Theory (SDT), work engagement is seen as a marker of intrinsic motivation and is linked to positive outcomes for both educators and learners [30]. Educators who are highly engaged in their work exhibit a sense of vigor and efficiency that allows them to complete tasks effectively, even in the case of demanding situations [3,34]. SDT posits that people who are involved in their job are likely to demonstrate enhanced performance, resilience, and creativity in their work [35]. To determine engagement among teachers, Klassen et al. [36] constructed a framework encompassing three aspects: cognitive-physical, affective, and social engagement with learners and with coworkers. The first refers to educators' mental and physical dedication to their instructional responsibilities, and the second pertains to teachers' pleasure and amusement in line with instruction [7]. The latter is the final aspect of this framework, which emphasizes the social aspect of teachers' occupations [37].

2.2. Well-being

Teaching and learning languages are closely related to well-being, as people seek to experience positive emotions, engage in meaningful relationships, and achieve their goals [12]. Teacher well-being is defined as the degree of pleasure and contentment experienced by teachers in the workplace [38]. The well-being theory proposed by Seligman [8] emphasizes the importance of constructive emotions, a high level of engagement, constructive relations, meaning, and accomplishment (PERMA) in enhancing well-being [8,39]. According to Barry et al. [40], well-being can be conceptualized as a series of skill acquisitions that enable individuals to identify and regulate their emotions effectively, establish and accomplish positive objectives, appreciate diverse perspectives, cultivate responsible decisions, and cope with interpersonal situations constructively. Positive emotions have to do with enjoyment, feeling good, and comfort, while engagement is concerned with being dynamic. Positive relationships render life meaningful and purposeful, while meaning has to do with acting based on a purpose beyond oneself [8]. Accomplishment refers to feeling competent to reach one's aims. By promoting PERMA elements, people can enhance their own personal and societal transformations, which results in the realization of positive outcomes in their personal and professional lives [8].

2.3. Emotion regulation

The growing interest in PP has led to an increased focus on identifying factors that influence both teachers and learners. As a result, ER has emerged as a topic of interest in the field of language instruction [5]. ER refers to the set of physiological, behavioral, and cognitive routes that people use to react to their emotions in an effective manner [22,41]. Essentially, ER plays a role in determining which emotions people experience, when they experience them, and how they express or feel them [21]. Like other forms of self-regulation and self-management skills, emotions can be controlled to achieve certain educational goals, and to accomplish this, a

range of strategies known as ER strategies may be employed [42,43]. ER is a complex framework comprising several processes aimed at assessing, modifying, and maintaining one's emotions. It involves numerous factors such as motivation, burnout, well-being, engagement, and achievement, making it a multidimensional construct [17,44,45]. As stated by Gross [41], ER, is a multifaceted procedure that impacts how teachers manage their feelings. Educational instruction has two main components: proficiency in imparting knowledge to pupils and handling the affective aspects of teaching [46]. One way to describe a teacher's ER is the ability to control the difficulties of teaching, as well as the accompanying emotions, in an appropriate manner that allows for a thoughtful response. This can be seen as a responsibility to maintain composure while navigating social interactions with students and colleagues [47]. Indeed, ER is attained by utilizing specific behavioral and cognitive approaches referred to as ER strategies. These strategies are applied for various purposes, both intrapersonal and interpersonal, which are collectively known as ER motives [45]. ER strategies aim to alter emotion by changing how we think about the situation to mitigate its detrimental impact, and consciously avoid or adapt emotional manifestations [48]. Indeed, when teachers exercise control over their emotions, they enhance their cognitive abilities and as a result, teaching becomes more efficient [49,50].

2.4. Related studies

Zeng et al. [30] inspected the exchange among attitude, work engagement, persistence, and well-being for instructors in China. To this end, 472 high school teachers attended and the findings indicated that all three factors can predict how engaged they are at work. Sudibjo and Sutarji [51] discovered how well-being, satisfaction, and emotionally intelligent teachers can show how much they enjoy their job. The data were collected by distributing questionnaires to 65 teachers; SEM results showed that all three variables certainly influenced teacher commitment. In addition, Kong [52] evaluated the influence of well-being on educators' engagement in China. To accomplish this, two measurements were given to 304 EFL educators. In line with the upshots of the study, it is resolved that the participation of EFL teachers is dependent on their well-being. Besides, Greenier et al. [17] investigated engagement, ER, and mental well-being among English teachers in Britain and Iran, as well as the interrelation between them. So, 108 English teachers from the UK and 225 English teachers from Iran participated in the study, and the three scales were given to them in both countries. The findings revealed that both well-bring and ER had a significant impact on the work engagement of both English teachers in Britain and Iran. However, mental well-being was found to have a stronger influence on work engagement.

Moreover, Xie [16] examined the function of EFL educators' resilience and ER on their engagement in the workplace. For this purpose, 314 Chinese EFL educators with different educational qualifications and teaching backgrounds were selected and the questionnaires were electronically disseminated among participants. The results through SEM revealed that ER and resilience could predict work engagement. Fathi et al. [11] examined how ER affects the correlation between Iranian EFL instructors' confidence in their abilities and the impact of reflection on the issue of teacher burnout. Two hundred thirty-eight language instructors from different language institutes across the country were handed four questionnaires to complete by the researchers. The findings suggest that the variables could help reduce the likelihood of EFL instructors encountering negative emotions related to their work. Exhaustion and disillusionment due to excessive work stress within their field of work. Fan and Wang [53] examined how well-being and ER are important for Chinese English teachers to succeed. To this end, 357 teachers in China were chosen to respond to three questionnaires. The outcome of the SEM analysis indicated that well-being, ER, and professional attainment have significant relations. The study also revealed that well-being and ER were highly effective for EFL teachers' occupational success in the Chinese context.

3. Method

3.1. Participants

The selection of 410 Chinese EFL teachers in 20 cities across 11 provinces from various universities and colleges has been carried out using a convenience sampling strategy. There are 138 men and 272 women in this example, with ages ranging from 28 to 40. The teaching experiences of our subjects in the English language were about 10 years. Furthermore, they were asked to present information about their fields of study and qualifications in education. Prior to taking part in the inquiry, first, respondents were guaranteed that their personal information would be kept private and merely employed for instructive purposes and then they signed a contract affirming their consent. The ethical procedures of this research were reviewed and verified by the Transportation Management School, Zhejiang Institute of Communications.

3.2. Instruments

The subsequent scales are utilized in this investigation.

3.2.1. Emotion regulation scale
The ER of English language instructors was evaluated using the ER scale developed by Gross and John [54]. A set of 10 questions has been designed to evaluate how individuals manage their emotions in two different ways, namely, (1) Cognitive Reappraisal and (2) Expressive Suppression. On a scale that ranges from 1 to 7, the participants can express their degree of agreement or disagreement towards the given items using the Likert method. The responses may differ from one individual to another. The internal consistency of the scale was 0.926.

3.2.2. Engagement teacher scale (ETS)

To regard the degree how much any individual is engaged in teaching activities, the ETS is employed. Klassen et al. [36] created and validated the ETS including 16 items. Participants answered a 7-point frequency-rating Likert scale, varying from 1 "never" and 7 "always". The constituents of scale are energy, commitment, and focus. The reliability was 0.969, indicating an appropriate internal consistency.

3.2.3. Teacher's well-being scale

Collie et al. [55] developed a questionnaire including 16 items, each is scored using a seven-point Likert-like scale that sorts from negative to positive. The scale measures three different aspects of well-being consisting of tensions and problems associated with workload. The next thing, called "hierarchical prosperity", is about how teachers see school as a job, including how the school is run, its culture, and how students are taught. The last group is about how teachers and students get along and how teachers comprehend why students behave the way they do and what motivates them. This study found that the scale's reliability was 0.898.

3.3. Data collection procedures

Through the distribution of questionnaires online, data was gathered from 410 questionnaires from Chinese language colleges, to achieve the goals of the study. All individuals were fully educated on the proper way to fill out the related scales and guaranteed that their answers and personal information would be kept private to ensure the dependability of this investigation. Furthermore, they were notified that they had the option to voluntarily remove themselves from the study if they encountered any distress.

3.4. Statistical analysis

The data were inspected by running SEM due to the purposes of this research. Besides, the reliability of each scale was also affirmed. Moreover, the relationship between the variables was testified in line with the existing covariance in the model. In addition, to check the predictor roles of variables, Linear Regression was run. The final measurement model with standardized estimates was shown in Fig. 1.

4. Results

Consistent with the aims of the study, the data were inspected through SEM.

Table 1 signposted that the model fit indices are all within specifications. Indeed, CMIN-DF is 3.579 (spec. ≤ 3.0), goodness-of-fit index (GFI) is 0.958 (spec. > 0.9), comparative fit index (CFI) is 0.957 (spec. > 0.9), Parsimonious Normed Fit Index (PNFI) is PNFI = 0.774 (spec. > 0.5), Tucker–Lewis Index (TLI) is TLI = 0.948 (spec. > 0.9), and Root Mean Square Error of Approximation (RMSEA) is = 0.075 (spec. < 0.080).
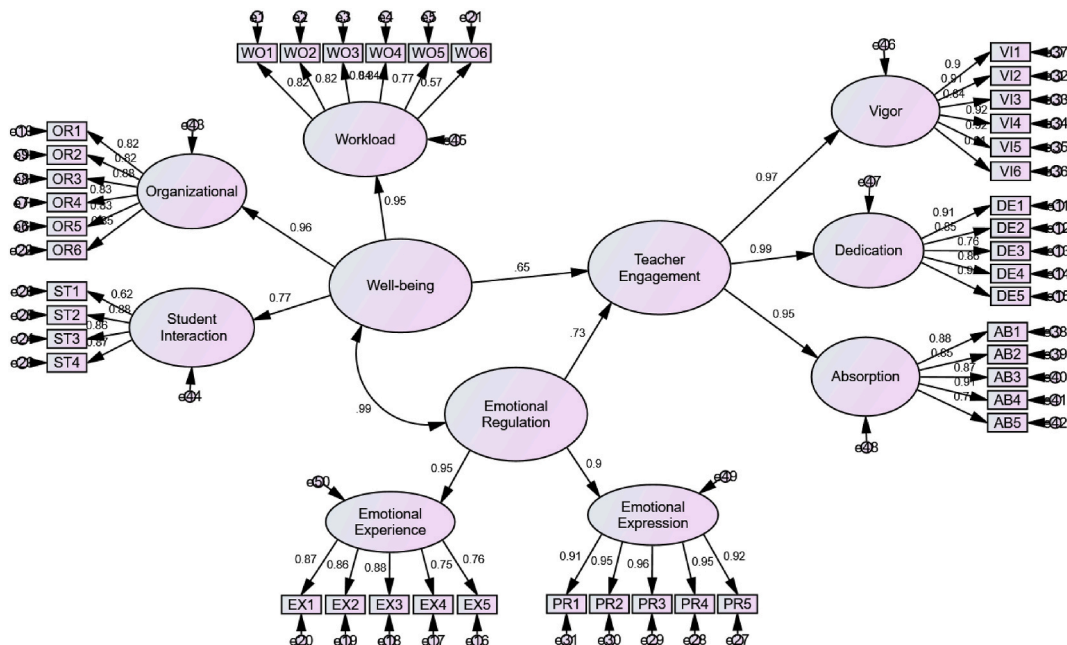

Fig. 1. The final measurement model with standardized estimates.

Table 1
Assessment of the CFA goodness of fit.

Criteria		Terrible	Threshold Acceptable	Excellent	Evaluation
CMIN	2891.832				
DF	808				
CMIN/DF	3.579	>5	>3	>1	Satisfactory
RMSEA	0.075	>0.08	<0.08	<0.06	Satisfactory
GFI	0.958	<0.9	>0.9	>0.95	Satisfactory
CFI	0.957	<0.9	>0.9	>0.95	Satisfactory
PNFI	0.774	<0.5	>0.5		Satisfactory
TLI	0.948	>0.9	>0.9	>0.95	Satisfactory

The results of Table 2 show that the composite reliabilities of the factors are satisfactory (CR > 0.70). In other words, the model has achieved composite reliability. The values also demonstrate that the convergent validity of the factors reaches to a satisfactory value (AVE >0.50) or that the model has achieved convergent validity. The final measurement model was shown in Fig. 2.

The results of Table 3 signify that about 65 percent of variations in the EFL teachers' engagement can be predicted by their well-being, and about 73 percent of variations in the their engagement can be predicted by their teachers' ER.

5. Discussion

The results of this investigation designated that the variables under examination, specifically the constructs of well-being and ER, significantly influenced teachers' engagement. The result is consistent with PP's assumption that constructive emotional attributes, including ER and well-being, can significantly contribute to teachers' well-being, and accomplishment [56]. Teachers who have favorable emotional qualities such as well-being and emotional resilience can succeed in their occupation [57]. As stated by Greenier et al. [17], educators who can enhance positive emotions are more inclined to prosper in their professional endeavors. Educators who manage their emotions proficiently can perform efficiently during affective experiences in the professional environment [58].

The results are in proportion to Greenier et al. [17] that they explained the relationship with the support of broad-and-build theory and by stating that the well-being of teachers has the potential to broaden the scope of an individual's feelings and actions, leading to the development of their skills, and ultimately, enhancing their mental well-being and performance. In short, when one's psychological needs are satisfied, he/she will focus more on their objectives, be more interested, and therefore more active in classes [40]. The outcomes are in the same line with the idea that positive emotions help people expand their thoughts and actions. The broad-and-build theory says that positive emotions can help people think of new ideas and make choices about what to do [40]. People who feel happy tend to be better at spotting opportunities, enjoy being playful and creative, and are more interested in exploring and learning new things. This makes them more energetic and focused at work [59]. The role of EFL teachers' well-being through job engagement in China can also be warranted by what Mercer et al. [60] and Wang et al. [5] presented in the view of PP principle. They demonstrated that affirmative emotions that educators undergo in their communications with learners, coworkers, and supervisors result in their well-being, which sequentially stimulates their commitment. Hence, it is logical to infer that those who are content are found to be more receptive to chances at their job, have an inclination to engage in leisure activities, and possess a greater inclination to innovate and have a stronger inclination to investigate and incorporate new experiences, resulting in increased degrees of work engagement [17].

Similarly, the outcomes are justified via the PERMA framework of well-being. For the initial factor which is favorable feelings, the Broaden and Built concept asserted that the encounter of favorable feelings helped to expand the range of individuals' care, practices, and action; and ultimately develop assets, which in turn could help their career engagement [8,17]. A sense of significance can provide guidance and objective to individuals' behaviors, and amplify their intention, drive, and commitment to their tasks [12]. Furthermore, it is indicated that a feeling of accomplishment can effectively enhance motivation and thus encourage individuals to be more involved in their tasks [61]. Furthermore, social connections can anticipate work engagement. For instance, it can be claimed that social connections with others are the indicator of an individual's work engagement [62]. Similar findings were achieved in the research conducted by Shuck and Reio [63], which emphasized the importance of individuals having a favorable perception of a supportive work environment. Their study revealed that a positive emotional atmosphere in the workplace and active participation leads to an increased level of psychological well-being.

The obtained outcomes revealed the favorable impacts of ER on the engagement of teachers. Following the obtained findings, it

Table 2
Composite reliability and discriminant validity of the factors.

	CR	AVE	MSV	MaxR(H)	Well-being	Teacher Engagement	ER
Well-being	0.925	0.807	0.848	0.958	0.898		
Teachers' Engagement	0.978	0.938	0.530	0.988	0.653	0.969	
ER	0.924	0.858	0.829	0.932	1.002	0.728	0.926
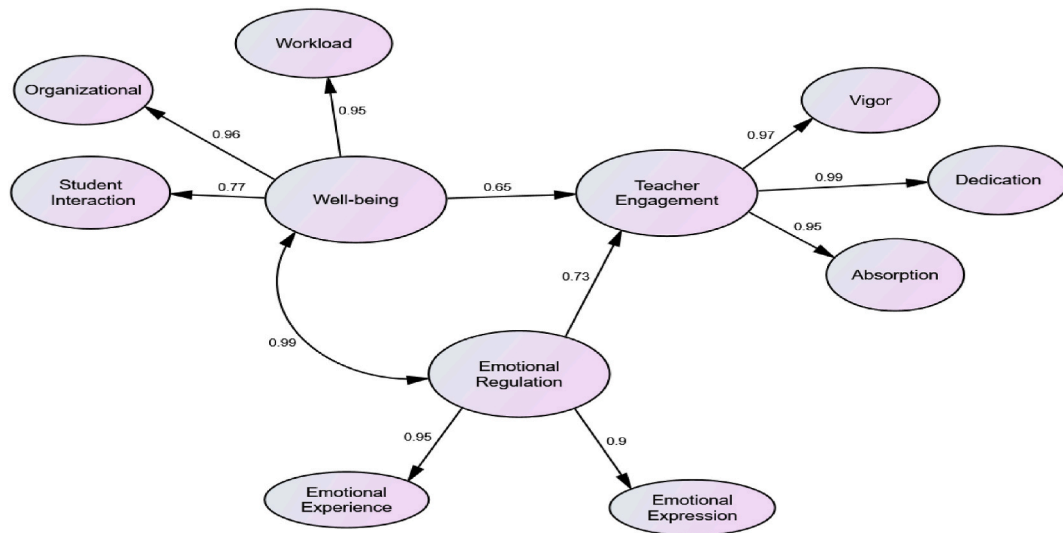
Fig. 2. The final measurement model.

Table 3
Results of linear regression analysis with SEM.

			Estimate	S.E.	C.R.	P
Teachers' Engagement	<→	Well- being	0.653	0.048	9.336	0.000
Teachers' Engagement	<→	ER	0.728	0.045	10.124	0.000
Wellbeing	<→	ER	0.994	0.031	11.423	0.000
Workload	<—	Well-being	0.951			0.000
Organizational	<—	Well-being	0.961	0.053	18.071	0.000
Student Interaction	<—	Well-being	0.770	0.063	14.961	0.000
Emotion Experience	<—	ER	0.950	0.059	17.200	0.000
Emotion Expression	<—	ER	0.902			0.000
Vigor	<—	Teachers' Engagement	0.966	0.043	23.159	0.000
Dedication	<—	Teachers' Engagement	0.992	0.042	24.099	0.000
Absorption	<—	Teachers' Engagement	0.947			0.000

could be argued that the greater utilization of ER methods by the participants, the greater level of engagement they potentially experienced in their professional responsibilities. Moreover, the results demonstrated that ER had a constructive effect on the dimensions of engagement, specifically emotional, intellectual, and social engagement. The results corroborate findings of some recent studies [11,16,18], indicating that ER can contribute to teachers' engagement, and a possible justification for the gained results is that due to the ER strategies used by EFL university professors, they were able to effectively manage their emotions and control unpleasant situations in the classroom. Concerning the important connection between language instructors' work engagement and ER [11,17,64], it can be contended that language instructors who are capable of effectively controlling their emotions are more inclined to become cognitively, affectionally, and socially engaged in the profession of EFL instruction.

6. Conclusion

Consistent with the results, it is determined that favorable issues such as ER and well-being contribute to the engagement of EFL instructors. As a result, the well-being and ER of EFL teachers can be seen as two interconnected elements of promoting engagement, which offers language educators a strong emotional state to endure challenging circumstances. Consequently, it is strongly advised for teacher trainers to guarantee the ideal well-being of EFL instructors to assist them in consistently enhancing their dedication to their job, sustaining their positive feeling emotionally, and persisting in their profession with resilience. This study can help EFL teachers indicating that teachers' ER and well-being as examples of constructive emotional experience, and enhanced their job engagement which results in better success as a teacher [57].

To enhance the well-being of educators, teacher trainers can organize seminars and recommend novice teachers adopt a mindset development in their teaching approach. This will enable them to acknowledge their errors and incorporate novel educational techniques. They can recommend teachers to emphasize compassion in their teaching to cultivate favorable passionate conditions, and constructive rapport, and boost mental health. The teacher trainers should be knowledgeable about PP, and they should teach well-being approaches, containing adaptability, and attentiveness with ER approaches to their trainers to aid decrease the unavoidable pressure and unease that are encountered in their profession that leads to their engagement.

Regulating the emotions of teachers is a crucial aspect, as it can minimize negative emotions and promote positive ones. This, in turn, allows educators to utilize various teaching techniques and adapt better to different classroom situations. By feeling more engaged and invested in the teaching process, positive emotions can ultimately have a positive impact on students' outcomes. Teacher educators need to possess knowledge on effective emotional control and management tactics, t equip teachers with techniques and methods to comprehend and acknowledge the emotional aspects of teaching. This will assist them in avoiding the neglect of their own emotions. According to Davis et al. [65], coping involves identifying and categorizing one's emotions, and coming up with strategies to either enhance or reduce these emotions. Considering that ER is crucial for EFL instructors' achievement, they are obligated to regulate their feelings to thrive in their professions. Educator trainers should try to reinforce educators' understanding of the importance of ER strategies in educational-learning environments. They also must instruct their teacher candidates on effectively managing their affectional experiences. In addition, regarding the prominence of well-being in educators' job engagement, stakeholders ought to provide an optimal working environment for teachers to improve their well-being.

Teacher trainers need to help teachers understand how useful ER strategies are for teaching and learning. Teachers should learn how to handle their feelings well and also teach their learners how to do the same. Besides, given the importance of teachers' well-being at work, educational institutions should provide ideal working conditions for teachers to improve their psychosocial and subjective well-being. Teachers with high degrees of well-being are more successful if they engage more in EFL teaching preparation and if they can cope better with the problems that arise in the teaching process. Educators may benefit from this research to increase their engagement and understand that increased levels of well-being can improve effectiveness, engagement, and stress management throughout the learning process. In addition, it is recommended that EFL teacher educators take steps to promote teacher well-being, as this has an important influence on growing engagement.

This study had some limitations that need to be regarded while describing the obtained results. First, this research had a quantitative design; therefore, to reveal a comprehensive view of the connection between well-being, ER, and engagement, more investigations with mixed-method design seem necessary. Second, this study did not examine the demographic aspects of college instructors such as age, gender, teaching experiences and their potential associations with ER, well-being, and engagement; therefore, they could be a promising route for future research. It would be remarkable to evaluate the moderating influences of aspects such as age, instructional background, educational qualification, and field of study on the connections between the variables. The study was done in China; more studies can be conducted to consider the issue in other EFL context.

Data availability statement

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

CRediT authorship contribution statement

Sian Chen: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Linqiang Tang:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Investigation, Funding acquisition, Formal analysis, Data curation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.heliyon.2024.e27338.

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