

Do emotional regulation behaviors matter in EFL teachers' professional development? A process model approach

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ABSTRACT: The effectiveness of pedagogical approaches to teaching English as a foreign language (EFL) can be enhanced by ensuring that teachers are in a psychologically sound state, allowing them to upgrade their professional skills. Emotional regulation (ER) is acknowledged as a key factor in enhancing one's professional capabilities. However, research in this area is notably underdeveloped. Therefore, this study aims to investigate the utilization level and impact of ER strategies on EFL teachers' professional development in Chinese higher educational institutions. The research used a survey approach, employing questionnaires as the primary means of data collection. The data was then analysed through structural equation modelling and a descriptive statistical approach. The findings provide evidence that EFL teachers effectively employ various ER strategies to navigate the challenges inherent in the classroom, underscoring their adaptability and resilience. Moreover, the study identified a significant relationship between the use of ER and EFL teachers' professional development. These findings highlight the essential role of emotional regulation in the teaching journeys of EFL educators and underscore the importance of integrating emotional regulation training into teacher development programs.

Keywords: Emotional Regulation, EFL teachers, Teachers' professional development, Process Model

¿Importan los comportamientos de regulación emocional en el desarrollo profesional de los profesores de inglés como lengua extranjera? Un enfoque de modelo de proceso

RESUMEN: La eficacia de los enfoques pedagógicos del inglés como lengua extranjera (EFL) puede reforzarse garantizando que los profesores se encuentren en un estado psicológicamente sólido, lo que les permitirá mejorar sus habilidades profesionales. En este sentido, las conductas de regulación emocional (RE) contribuyen significativamente a mejorar sus capacidades profesionales. Teniendo esto en cuenta, el presente estudio investiga el nivel de utilización y el impacto de las estrategias de ER en el desarrollo profesional de los profesores de inglés como lengua extranjera en instituciones de educación superior chinas. La investigación utilizó un enfoque de encuesta, empleando cuestionarios como medio principal de recopilación de datos, que luego se analizó mediante el modelado ecuacional estructural y el enfoque estadístico descriptivo. Los hallazgos proporcionan evidencia de que los profesores de inglés como lengua extranjera emplean eficazmente varias estrategias de ER para afrontar los desafíos inherentes al aula, lo que subraya su adaptabilidad y resiliencia. Además, el es-

tudio identifica una relación significativa y positiva entre la utilización de ER y el desarrollo profesional de los profesores de inglés como lengua extranjera. Estos hallazgos enfatizan la importancia de incorporar capacitación en regulación emocional en la enseñanza de inglés como lengua extranjera y en los programas de desarrollo docente para equipar a los educadores con las habilidades necesarias para gestionar eficazmente sus emociones en el aula.

Palabras clave: regulación emocional, Profesores de inglés como lengua extranjera, Desarrollo profesional docente, Modelo de proceso

1. INTRODUCTION

Contemporary educational research emphasizes the pivotal role of teachers in shaping the learning outcomes of EFL students (Akram & Abdelrady, 2023; Pan *et al.*, 2023). This recognition has led to a global movement prioritizing the excellence of EFL teaching, with a special focus on professional development (Mehdizadeh *et al.*, 2023; Uştuk & De Costa, 2021). Enhancing professional development is considered crucial in empowering teachers to improve their instructional effectiveness and integrate innovative pedagogical strategies (Cirocki & Farrell, 2019). Professionally competent teachers are instrumental in addressing pedagogical issues within schools and transforming them into more effective learning organizations (Akram *et al.*, 2022; Darling-Hammond *et al.*, 2020). Furthermore, teachers are responsible for implementing academic policies and facilitating students towards their educational objectives. Therefore, they are expected to possess the professional competence to execute those policies effectively (Sims & Fletcher-Wood, 2021). This compelling evidence highlights the critical need to prioritize the professional development of EFL teachers to enhance their teaching abilities and improve student academic achievement (Zhang & Luo, 2022).

Simultaneously, the educational and linguistic literature has observed a surge of interest in understanding emotions and their experiential dimensions in both learning and teaching (Abdelrady & Akram, 2022; Derakhshan, 2022). This increased attention acknowledges the role of emotions in shaping the effectiveness of instructional practices (Jones & Kessler, 2020), promoting educational reforms (Datnow, 2020), and determining the dynamics of student-teacher interactions (Goetz *et al.*, 2021). Regarding the emotional landscape, teachers navigate a complex terrain in their careers that involves relationships with colleagues, students, parents, administrators, and other professional stakeholders (Chen, 2020). They experience a range of emotions, including elation when achieving course objectives and witnessing students' success (Frenzel *et al.*, 2021), frustration during online teaching challenges (Akram *et al.*, 2021), and exasperation in response to misconduct, among others (Gkonou & Miller, 2021). However, teachers are not passive recipients of their emotional experiences; they actively regulate, manage, and sometimes conceal their emotions to achieve specific objectives (Atmaca *et al.*, 2020). They strive to maintain courage when encountering challenges (Valente & Lourenço, 2020), exhibit resilience when responding to parental critique, and display patience when dealing with challenging colleagues (Wang *et al.*, 2019).

Despite the growing attention given to the contribution of emotions in teachers' professional development (e.g., Richards, 2022; Bardach *et al.*, 2022; Solhi *et al.*, 2023), this research area is still in its infancy, particularly within the EFL context. Furthermore, the complex interactions between teachers' emotional experiences and their professional devel-

opment are not yet fully recognized by many educational systems. Hargreaves (2005) also raised concerns about the negligence of the emotional aspect of teaching by both educational authorities and the research community, whose primary focus revolves around rationalized, cognitively-focused priorities centred on behaviour and actions. Additionally, in language education, prior research has primarily focussed on the emotional aspects of language learning and teaching (e.g., Yang *et al.*, 2022), often neglecting the domain of professional development. Despite the renewed emphasis on the emotional dimension of language learning, it still competes for attention with the traditionally prominent cognitive domain (Shi, 2021). Moreover, it remains notably underdeveloped, particularly in the context of China.

Hence, this study endeavours to unveil the intricate relationship between emotion regulation (ER) behaviours among EFL teachers and their professional development. By exploring the ER strategies employed in the classroom, this research seeks to illuminate the nuanced interplay between emotional experiences and the professional growth of EFL educators. Furthermore, it strives to provide a more comprehensive understanding of how these ER behaviours impact their effectiveness as teachers and the overall quality of EFL education. In so doing, this study not only enriches the field of educational research but also offers valuable insights for optimizing professional development programs for EFL teachers, ultimately benefiting students and the broader education system. Considering this, the study endeavours to address the following two research questions:

- RQ1. To what extent do EFL teachers employ emotional regulation strategies in response to challenges encountered in their classrooms?
- RQ2. What is the relationship of emotional regulation behaviors with professional development of EFL teachers across higher education institutions in China?

2. LITERATURE REVIEW

2.1. Teachers' professional development

Commencing with the broader perspective of teacher education, it becomes evident that enhancing pedagogical skills is crucial for improving student learning outcomes. However, it's imperative to acknowledge that professional development is an ongoing process that doesn't have strict boundaries (Sancar *et al.*, 2021). Professional development is a concept that can be interpreted in various ways. This study adopts a nuanced definition inspired by Postholm (2012), which views professional development as a powerful mechanism for enhancing teachers' competencies and knowledge, ultimately boosting their instructional effectiveness.

Darling-Hammond *et al.* (2017) discern seven fundamental elements, within the complex professional growth framework, each playing a significant role in shaping the landscape of effective teaching and learning. The first of these components, content-focused, underscores the significance of possessing not only a profound understanding of the subject matter but also the ability to seamlessly integrate this knowledge into teaching practice (Sims & Fletcher-Wood, 2021). The second element, active learning, refers to any pedagogical approach that actively engages students in meaningful and participatory learning experiences, fostering deeper comprehension and retention of knowledge (Bates & Morgan, 2018). The

third dimension, collaboration, entails meaningful associations among educators, both inside and outside educational settings. Such collaborative endeavours are instrumental in elevating the overall quality of both teaching and learning experiences (De Jong *et al.*, 2022). The fourth element, effective teaching practice, posits that educators should judiciously utilize curricular materials to enhance instructional quality and make learning engaging and impactful (Darling-Hammond *et al.*, 2020).

In our continued exploration, the fifth element, coaching support, involves educators engaging in mentoring practices, offering guidance, and creating learning opportunities for both themselves and their colleagues (Zhang & Luo, 2022). The inclusion of feedback and reflection as the sixth component empowers teachers to initiate constructive changes in their teaching practices by incorporating insights and recommendations gleaned from experienced professionals (Darling-Hammond *et al.*, 2017). Finally, the last element emphasizes that professional learning is an ongoing, continuous process, not a one-time event. The sustained commitment to ongoing growth is a pivotal factor in determining its profound impact on teaching effectiveness (Akram *et al.*, 2022). Moreover, professional development enables teachers to stay updated with the latest teaching methodologies, technologies, and educational trends (Uştuk & De Costa, 2021). Additionally, Zhi and Wang (2023) emphasized that professional development is critical in helping language learners not only survive but thrive in classroom settings. Lastly, Sims and Fletcher-Wood (2021) linked professional development with an increased ability for teachers to address the diverse learning needs of their students, resulting in improved academic outcomes and a more positive learning experience for students. Acknowledging the multifaceted nature of professional development, this study seeks to delve into how these interconnected elements are collectively linked with the ER behaviours of EFL teachers.

2.2. Teacher emotional regulation

The term "emotion" finds its roots in the Latin word "emovere," signifying the act of stimulation (Kövecses, 2012). As per its etymological origin, emotional experiences can encourage individuals to take action. Dzedzickis *et al.* (2020) highlight the importance of comprehending that emotions are complex and diverse entities consisting of a wide range of concurrently occurring, interrelated psychological processes. In essence, emotions are complex combinations of many cognitive and affective components.

The teaching profession is inherently intertwined with a spectrum of emotions that significantly impact various aspects of educators' professional lives. These emotions influence teachers' cognitive processes (Shi, 2021), motivation levels (Jones & Kessler, 2020), self-efficacy (Bardach *et al.*, 2022), identity construction (Derakhshan, Karimpour, *et al.*, 2023; Derakhshan & Nazari, 2022 a, b) professional success (Zhi & Wang, 2023), pedagogical choices (Chen, 2020), memory and self-regulation skills (Chen and Cheng, 2021), the formation of their professional identity (Fan & Wang, 2022), well-being (Greenier *et al.*, 2021; Pan *et al.*, 2023; Stark *et al.*, 2022), and consequently, the academic achievements of their students (Frenzel, *et al.*, 2021).

Among the variety of emotions, teachers go through in their respective positions, they are required to actively control and regulate negative emotions like anger and anxiety while

actively managing and expressing positive emotions like happiness and pride (Bardach *et al.*, 2022). Amidst this spectrum, Teachers being focal persons of the classroom, are expected to find a balance among various everyday emotional experiences, refraining from displaying emotions that are extremely intense or excessively suppressed (Yang *et al.*, 2022). In light of this, the techniques teachers use to manage their emotions become crucial, as they can significantly enhance their well-being and foster professional growth. ER encompasses a range of impulsive or deliberate progressions utilized to navigate both pleasant and unpleasant emotional occurrences (Gross, 2015). In essence, it serves as the mechanism by which individuals impart meaning to their emotions, lending a sense of purpose and direction to their emotional responses (Nazari & Karimpour, 2022).

Teachers who effectively regulate their emotions contribute to a positive and supportive classroom environment, fostering a conducive space for student learning (Richards, 2022). Emotionally regulated teachers possess the ability to handle challenging situations in their classrooms, which contributes to a healthier teacher-student relationship (Goetz *et al.* (2021). Additionally, emotional regulation enhances teaching effectiveness, allowing teachers to focus on instructional goals and adapt to various teaching methods, ultimately improving the overall quality of pedagogical practices (Wu *et al.*, 2023). Acknowledging the significance of emotional regulation, this research seeks to explore its collective connection with teachers' professional development.

2.3. Theoretical Framework of the Study

This study utilizes Gross's (2014) process-oriented emotion regulation model, which is widely recognized in psychology for its comprehensive approach and its applicability in education. The model includes six temporal points for structured emotion management, which are crucial in understanding the nuanced complexity of emotional navigation.

2.3.1. Situation Selection

The first component, situation selection, involves the deliberate choices individuals make to either enter or avoid situations that are likely to elicit specific emotions (Gross, 2015). In the context of teaching, this could refer to a teacher's decision to engage in a challenging classroom discussion that may evoke frustration or opting to avoid a confrontational situation. When teachers deliberately choose situations that align with their emotional well-being and teaching satisfaction, they are more likely to exhibit a positive attitude toward their profession (Fan & Wang, 2022). Therefore, it can be inferred that situation selection is an important facet of ER and is hypothesized as:

H1: Situation Selection is positively correlated with the professional development of EFL teachers.

2.3.2. Situation Modification

Situation modification encompasses the strategies employed to alter the characteristics of a situation that may provoke certain emotions (Gross, 2014). Teachers might modify their teaching methods to create a more conducive learning environment, thereby mitigating

potential sources of stress or frustration. Proactively adapting the classroom environment to reduce stress and create a supportive atmosphere, fosters the teachers' commitment to professional development (Wang *et al.*, 2022). Optimizing the classroom environment sets the stage for effective teaching and motivates the teachers to strengthen their skills. Therefore, the hypothesis can be posited as:

H2: Situation Modification is positively correlated with the professional development of EFL teachers.

2.3.3. Attention Deployment

Attention deployment involves redirecting one's focus and cognitive resources to influence their emotional state (Suri & Gross, 2015). In classrooms, teachers may choose to actively focus on the positive aspects of a lesson or student interactions, diverting attention away from potential stressors. By doing so, they can enhance their professional well-being and motivation to build upon their strengths (Atmaca *et al.*, 2020). Teachers who perceive professional development as a means to further improve their teaching skills and capitalize on their successes are likely to be more effective in the classroom. Therefore, attention deployment is an important component of emotional regulation for EFL teachers and is hypothesized as:

H3: Attention Deployment is positively correlated with the professional development of EFL teachers.

2.3.4. Reappraisal

Reappraisal is a cognitive process that involves altering one's emotional response by reinterpreting the meaning of a circumstance (Blechert *et al.*, 2015). In an educational context, this can entail viewing a difficult teacher's behaviour as a chance for development rather than as a source of annoyance. When instructors apply cognitive reappraisal, they are more likely to see challenges in their instruction as chances for their own and their students' development, empowering them to strengthen their professionalism (Chen, 2020). Therefore, it can be hypothesized as:

H4: Reappraisal is positively correlated with the professional development of EFL teacher.

2.3.5. Suppression

The intentional suppression of emotional expression is referred to as suppression (Suri & Gross, 2015). As a part of emotion regulation, suppressing negative emotional expressions entails hiding or controlling one's emotional responses to preserve professionalism and decorum. In other words, expressive suppression entails the inhibition of emotional expressions. In teaching, the suppression of emotions is linked to frustration, which may enhance stress levels and hinders the ability to engage in effective problem-solving behaviour (Chang & Taxer, 2021). It is hypothesized that EFL teachers who suppress their emotions during pedagogical challenges may encounter greater difficulties during their teaching due to increased stress. Therefore, it can be postulated that:

H5: Suppression is negatively correlated with the professional development of EFL teachers.

2.3.6. Seeking Social Support

Seeking social support is the process of proposing a positive relationship with others for assistance in managing one's emotions (Gross, 2015). It is often considered a sign of emotional resilience as teachers who actively seek assistance in coping with emotional demands demonstrate their ability to acknowledge and manage their emotions effectively. Emotional resilience is a valuable trait that can translate into a willingness to engage in professional development activities, since they are better equipped to handle the challenges and stressors that may arise during these activities (Kangas-Dick & O'Shaughnessy, 2020). Therefore, it can be postulated as:

H6: Seeking Social Support is positively correlated with the professional development of EFL teachers.

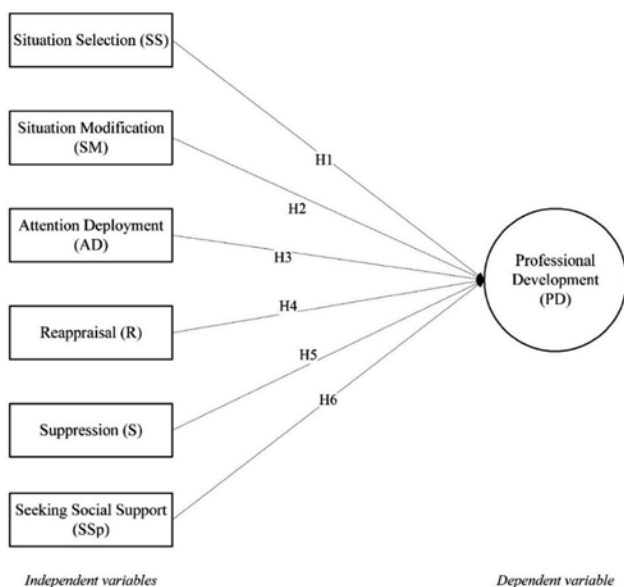


Figure 1. *Conceptual basis*

In the realm of EFL teachers' professional development, the application of the process-oriented model of emotion regulation takes on heightened significance. The ability of EFL teachers to regulate their emotions has a direct impact on their overall well-being. ER strategies empower them to manage the stressors and challenges inherent in the teaching profession, thus contributing to reduced burnout, improved job satisfaction, and heightened overall well-being. Therefore, this framework emphasizes the need to understand the intricate interplay and role of the six components (taken as independent variables) in the professional development of EFL educators.

3. METHODOLOGY

3.1. Research Design

The study employed a quantitative design to understand the dynamics of emotion regulation behaviors and professional development of EFL teachers. The following section provides an explanation of the steps used during the execution of this study:

3.2. Participants

The current study employed a random sampling technique to collect data from the participants in order to mitigate sample selection bias, following the approach suggested by Dornyei and Csizer (2012). According to Martino *et al.* (2018), random or convenience sampling is a type of non-probability sampling that takes into account the convenience of the researcher and can provide “a truly representative sample” (p. 81). A basic requirement for such a sampling method was that the participants possess critical characteristics related to the undergoing study. A total of 276 valid cases were chosen from different ages, genders, academic and professional backgrounds to delve into the psychological traits and professional development of EFL teachers. Table 1 below, shows that over 80% of the participants were females (227) and less than 20 % were males (49), which is in accordance with the reality that females are more encouraged to be teachers in China. The age range of the participants was from ≤ 30 to ≥ 51 and over 90% of them (93.07%) were between 30 to 50. In relation to the academic degree obtained, MA accounted for the largest group (75%) while BA and Ph.D. were the second (12.49%) and the third (7.60%) respectively. The participants’ range of teaching experience was between ≤ 4 years to ≥ 16 years, with an average of 11.74 years including both genders. These participants were selected from different colleges and universities across 29 cities in 9 provinces, 1 autonomous region (Guangxi Zhuang Autonomous Region), and 1 municipality (Shanghai).

To ensure ethical standards, participants in this study provided informed consent via WeChat, using the Wenjuanxing online data collection platform. Further details regarding the participants' demographics can be found in Table 1.

Table 1. Demographic Profile of the Participants

Demographics	Frequency (%)
Gender	
Male	49 (17.8%)
Female	227 (82.2%)
Age	
≤ 30	58 (21.01%)
31-40	118 (42.75%)
41-50	88 (31.88%)
≥ 51	12 (4.34%)

Levels of Education

BA	40 (12.49%)
MA	207 (75%)
Ph.D.	21 (7.60%)
Other	8 (2.89%)

Teaching Experience

≤ 4	71 (25.72%)
5-10	58 (21.01%)
11-15	56 (20.28%)
16 ≥	91 (32.97%)

3.3. Instruments

The study employed a self-reported questionnaire to assess the ER behaviors of the teachers. This questionnaire was developed with the assistance of prior literature and consisted of two scales, encompassing a total of 38 items. Respondents were asked to rate their agreement or disagreement, ranging from 'Strongly Disagree' to 'Strongly Agree', using a five-point Likert scale.

The study utilized the Language Teacher Emotion Regulation Inventory (LTERI) to evaluate the independent variable of this research, which is the emotion regulation behaviors of EFL teachers. Heydarnejad *et al.* (2021) developed and validated LTERI based on Gross's (2014) process model of emotion regulation.

The study evaluated the dependent variable, which is the professional development of EFL teachers, using an eleven-item scale. This scale was specifically developed to comprehensively assess various aspects of teachers' professional development, based on the framework proposed by Darling-Hammond *et al.* (2017).

3.4. Data collection

The data collection process was carried out in two phases. In the first phase, the questionnaire was double-checked by applied linguistics experts to ensure its validity. This was done to ensure that participants fully understood the questions and were able to give accurate answers. In the second phase, the questionnaire was distributed across a wide range of areas and the process lasted for 3 weeks between August 16, 2023, and September 6, 2023. To ensure clarity and ease of use, the scale was examined again to eliminate any possible errors that could confuse participants. Prior to data collection, participants were informed that their responses would be kept confidential and used solely for research purposes. They were free to withdraw from the study if they experienced any discomfort. To increase reliability and trustworthiness, the questionnaire was distributed through WeChat in the form of a QR code, with participants instructed on how to complete it on their phones. A total of 276 valid questionnaires were collected, after which the tunnel was closed and the data was extracted for further analysis. Finally, the researchers checked and cleaned the data prior to conducting statistical analysis.

3.5. Results

The acquired data underwent thorough analysis using Smart PLS version 3.3.2, which involved various tests including confirmatory factor analysis, descriptive statistics, and structural equation modeling. The outcomes of these analyses are displayed below:

3.6. Assessment of the Model

To thoroughly evaluate the consistency of the research measurement model, a comprehensive examination of all the constructs was conducted in the study.

The assessment involved two critical measures: goodness-of-fit (GOF) and reliability and validity, as outlined by Hair and Alamer (2022). The initial model showed a remarkable degree of consistency with the collected data, and all individual items demonstrated strong factor loadings, as depicted in Figure 2. It is worth noting that each of the obtained values exceeded the recommended threshold of 0.6, in line with the guidelines provided by Alavi *et al.* (2020).

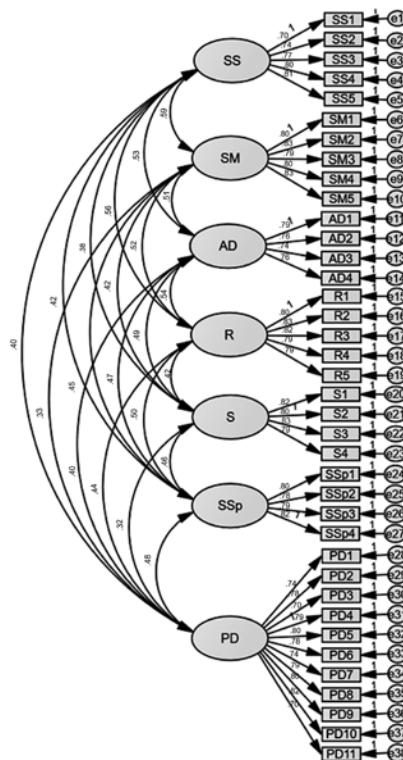


Figure 2. Confirmatory factor analysis model

In terms of model fit indices, Table 2 presents a comprehensive overview of the assessment results. All six critical indicators, namely chi-square (χ^2/df), RMSEA, GFI, CFI, TLI, and RMR reported statistically significant values within the recommended range, as specified by Sarstedt *et al.* (2021). This comprehensive validation reinforces our confidence in the model's overall adequacy and suitability for the study's objectives.

Table 2. *Model fit indices*

Fitting indexes	χ^2	df	χ^2/df	RMSEA	GFI	CFI	TLI	RMR
Threshold values			< 3	$\leq .08$	$\geq .90$	$\geq .90$	$\geq .90$	< .08
Model values	1310	644	2.03	.061	.91	.90	.92	.05

To further assess the alignment of the data with the measurement model, a battery of reliability and validity assessments was undertaken. Reliability was ascertained through Cronbach's alpha scale, and all variables achieved a level exceeding 80%, indicating satisfactory consistency (see Table 3) in line with Taber's (2018) guidelines.

Validity was assessed through both convergent and discriminant validation tests. To assess the degree of alignment among all the constructs of the instrument, a convergent validity test was conducted from two distinct perspectives: Composite reliability (CR) and Average variance extracted (AVE). The results validated all variables as the obtained values surpassed the predefined thresholds, specifically $CR > 0.70$, and $AVE > 0.50$, and as established by Lai (2021). To explore the distinctions among the overlapping constructs, a discriminant validity test was conducted. The acquired values for each construct were found to be consistent with the established threshold values (>0.7) as indicated by (Hair & Alamer, 2022).

Table 3. *Reliability and Validity matrix*

Variables	Alpha value	CR	AVE	1	2	3	4	5	6	7
1 Situation Selection (SS)	.79	.89	.78	.88						
2 Situation Modification (SM)	.78	.90	.79	.59**	.88					
3 Attention Deployment (AD)	.80	.91	.79	.53**	.51**	.88				
4 Reappraisal (R)	.81	.90	.80	.56**	.52**	.54**	.89			
5 Suppression (S)	.80	.89	.80	.38*	.42**	.49**	.42*	.89		
6 Seeking Social Support (SSp)	.78	.89	.78	.42**	.45**	.47*	.50**	.46**	.88	
7 Professional Development (PD)	.79	.90	.78	.40**	.33*	.40*	.44**	.32*	.48**	.88

Note. Discriminant validity values are represented by bold values.

Significant at: * $p < 0.05$, ** $p < 0.01$.

3.7. Descriptive Analysis

To assess the utilization of ER strategies by EFL teachers in response to challenges encountered in their classrooms, descriptive statistical analyses using Mean and Standard Deviation measures were conducted. The findings indicate that EFL teachers effectively

employ all ER strategies, with mean values exceeding 3, as recommended by Mishra *et al.* (2019). This highlights the proficiency of EFL teachers in utilizing these strategies to manage their emotions in the classroom.

Upon closer examination, "Situation Selection" was found the most frequently used strategy, with the highest mean value of 3.95. Conversely, "Suppression" was the least frequently used strategy, with the lowest mean value among the six ER strategies, standing at 3.45, as illustrated in Table 4. Furthermore, the level of professional development among EFL teachers was found to be satisfactorily robust, indicating that they actively participate in activities and programs designed to improve their professional effectiveness.

3.8. Structural Model Assessment

The study thoroughly examined the proposed research model using the Structural Model Approach, which involved evaluating the relationships of the outlined hypotheses. Results showed that ER strategies significantly impact EFL teachers' professional development at a significance level of 0.01. Specifically, Situation Selection, Attention Deployment, Reappraisal, and Seeking Social Support were found to be significantly linked with professional development, supporting our hypotheses. On the other hand, Situation Modification and Suppression did not show a significant association with professional development, leading us to reject the hypotheses related to these ER strategies.

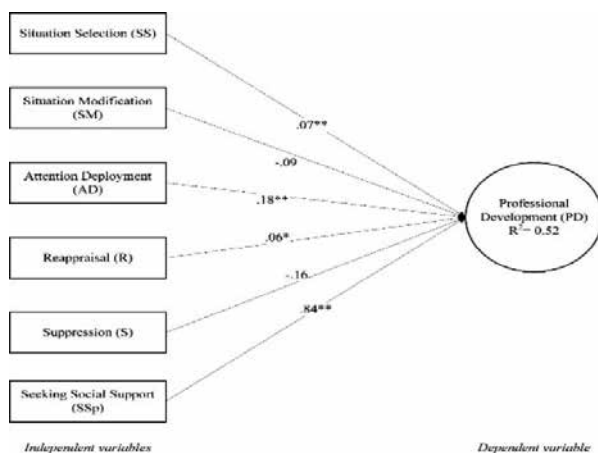


Figure 3. Structural Model Assessment

The R² value of 0.52 shows that ER strategies collectively account for 52% of the influence, as shown in Figure 2. Regarding the individual contribution of ER strategies, the study found that Seeking Social Support had the most significant impact on professional development, accounting for 84% of the contribution. This suggests that seeking assistance from colleagues, mentors, or external sources is crucial to advancing one's professional development. In contrast, Reappraisal had the lowest contribution, constituting only 6% of

the overall impact on teachers' professional development. This indicates that the cognitive process of reframing and altering one's emotional reaction to situations has a minor impact on professional advancement.

4. DISCUSSION

In today's educational landscape, the competence of EFL teachers greatly affects the effectiveness of their instructional practices. Professional development, therefore, plays a crucial role in enhancing the effectiveness of instructional methods for EFL teachers. Additionally, the integration of ER strategies has been identified as a critical factor that influences the professional development of EFL teachers. However, little attention has been given to the importance of ER strategies in the professional development of EFL teachers in existing literature. To address this issue, this study explored the prevalence of ER strategies and their impact on the professional growth of EFL teachers in higher education institutions in China. Using a process model approach, this study provides empirical evidence of the importance of emotional regulation behaviours in the professional growth of EFL teachers. The study also affirms the reliability of the theoretical framework within the Chinese context and suggests potential applications for further validation in other cities and countries. Incorporating the process-oriented model of emotion regulation into EFL teachers' professional development programs can empower educators with the skills and strategies needed to effectively manage their emotions in the classroom. This not only enhances their own well-being and professional growth but also contributes to the overall success of EFL students.

4.1. Utilization of ER Strategies by EFL Teachers

In terms of utilization, the findings of this study underscore a noteworthy aspect of EFL teaching. It reveals that EFL teachers exhibit a high level of competence in utilizing a wide array of emotional regulation tactics. These techniques play a crucial role in assisting instructors navigate the complicated and often challenging classroom dynamics. This finding is consistent with Deng *et al.*'s (2022) findings, who also noted that EFL teachers effectively employ ER methods. Their findings underscore the consistency and relevance of this phenomenon in the EFL training context, mirroring the results of the current study.

4.2. Relationship of ER behaviors with Professional Development of EFL Teachers

In terms of the role of ER strategies, the findings of the study have highlighted a noteworthy influence on the professional development of teachers. Specifically, our research indicates that EFL teachers who demonstrate proficiency in effectively managing their emotions possess a greater possibility of attaining success and advancement in their careers. This correlation highlights the integral connection between ER skills and professional growth among EFL educators. In addition, it is worth noting that, to our knowledge, there have been limited studies conducted on this particular topic. However, Fan and Wang (2022) have contributed to this area of inquiry by identifying a strong and positive influence of ER on EFL teachers' progress in the workplace. Their findings corroborate the implications of

the current study, further emphasizing the critical role that ER strategies play in the career trajectory of EFL educators.

Similarly, Derakhshan, Wang, *et al.* (2023) have put forth perspectives that align with the emerging consensus on the importance of ER in the teaching profession. They argue that the absence of negative emotions such as aggression, anxiety, and dissatisfaction is conducive to a teacher's success. These ideas correspond to our own findings, underscoring the notion that emotional well-being and the effective regulation of emotions are essential components of a successful teaching career. Moreover, the validity of this finding can be substantiated by acknowledging that Bardach *et al.* (2022) have demonstrated discernible distinctions in emotional characteristics between successful and less successful instructors. Specifically, educators who exhibit favourable emotional attributes such as a strong sense of well-being and effective emotion regulation tend to excel in their teaching careers. It is worth noting that this finding parallels the insights revealed by Stark *et al.* (2022), who emphasized the positive influence of instructors' well-being on their overall effectiveness in the teaching profession.

This convergence underscores the significance of emotional well-being and proficient emotion regulation as pivotal factors contributing to success within the teaching domain. The implications of these studies collectively emphasize the role of ER in shaping the professional journey of educators, aligning with our study's conclusion regarding EFL teachers. Expanding on this theme, it is worth considering the practical implications of these findings for EFL teacher training and development programs. As the findings suggest, incorporating ER training into teacher education can be highly beneficial. Teacher training institutions should recognize the value of equipping future EFL educators with the tools and skills necessary to manage emotions effectively in the classroom. Furthermore, ongoing professional development opportunities should focus on nurturing emotional intelligence and providing teachers with strategies for handling challenging situations. Additionally, training programs should pay more attention to encouraging EFL teachers to consider how their preferences and personal traits may affect their selected ER strategies. This reflective process can motivate teachers to adapt or optimize their employed ER strategies efficiently, which is likely to further enhance their effectiveness.

5. CONCLUSIONS

This study sheds light on the crucial correlation between ER techniques and the professional advancement of EFL teachers in Chinese higher educational institutions. The study's results demonstrate that EFL teachers adeptly employ diverse ER strategies to regulate their emotions amidst various classroom complexities. Additionally, the study highlights the significant impact of these strategies on teachers' career growth. Educators who excel in ER strategies are more likely to achieve success in their profession, emphasizing the essential role of emotional intelligence in their teaching journeys. These findings are in line with previous research, emphasizing the significance of incorporating ER training in teacher education programs to promote a more productive and harmonious learning environment.

Furthermore, it is important to acknowledge the study's limitations which stemmed from time and resource constraints. Firstly, this research focused exclusively on Chinese EFL teachers at a higher education level, which limits its findings' generalizability. An-

other limitation pertains to the use of self-reported surveys, which may introduce potential response bias. To mitigate these limitations, future research should employ cross-cultural investigations from diverse teacher populations to shed light on how cultural variations influence the utilization of ER regulation strategies among EFL teachers. Researchers may also employ a mixed-methods approach to combine survey data with qualitative insights, conduct longitudinal studies to track the evolving nature of emotional regulation, and engage in comparative analyses to identify potential cultural or contextual variations.

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