The Interplay Between EFL Teacher Leadership, Teacher Immunity and Teachers' Meta-emotions

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Article information	Abstract
	To date, research has identified the predictive role of teacher immunity (TI) and meta-emotions in student outcomes. However, nothing is known yet about the antecedent role of teacher leadership (TL) in TI and meta-emotions. This research investigated the relationship between TL and TI, and examined whether TL can predict teachers' meta-emotions. To do so, 389 Iranian EFL teachers were asked to complete three electronic surveys on TL, TI and teachers' meta-emotions. The language teacher immunity Scale, TL Scale, and Meta-emotions Scale were adopted to gather the data. The results of structural equation modeling (SEM) indicated that EFL teachers who exhibited higher levels of leadership were inclined to be more immune. Besides, TL could positively predict interest and compassion care, while it could negatively predict contempt, tough control, and suppression. The findings contribute to our comprehension of the antecedents of TI and teacher's meta-emotions in EFL contexts and provide implications for educational cultural reform and teacher education programs.

INTRODUCTION

Research suggests that growing educational demands worldwide are urging teachers to embrace leadership positions and fulfill their responsibilities as teacher leaders (Shah & Zhang, 2020). While many language teachers have the potential to become leaders, they require specific support and conditions to develop their leadership skills and identity effectively (Davis & Sánchez, 2023). Teacher leadership refers to teachers' ability to take on leadership roles beyond their conventional classroom responsibilities, thereby, positively influencing student learning, teaching methods, and educational context improvement efforts (Ghamrawi et al., 2023). TL represents a fundamental change from viewing teaching as an isolated endeavor to recognizing teachers as influential figures working within collaborative environments (Campbell et al., 2022). Many researchers associate the initial aim of TL with promoting teacher flourishing by nurturing a collaborative and supportive environment (Granville-Chapman et al., 2024). Investigating TL is highly important because if novice teachers with the potential to become

effective teacher leaders are overlooked or underestimated, it could result in teacher attrition, which has become one of the most alarming issues in language education in recent years (Lovett, 2023; Sulis et al., 2023).

Despite its considerable significance, TL in language education has often been ignored in favor of program management (Whitehead & Greenier, 2019). This neglect means that the potential benefits of fostering language TL are not fully realized. By prioritizing program management over TL, language institutions may miss out on the opportunity to cultivate a more dynamic and effective teaching environment. A lack of status and support, along with an authoritarian leadership style, are among the major challenges to language TL development (McGee et al., 2015; Whitehead & Greenier, 2019). It is crystal clear that for language teacher leaders, the demand will be even greater than for educational leaders in other subjects, as they are expected to undertake leadership roles in mentoring, curriculum design, coordination, test preparation, assessment, and supervising teachers and teacher training (Shah & Zhang, 2020). Shah (2017) and Shah and Zhang (2020) identify several reasons that heighten the demand for teacher TL among ELT (English language teaching) professionals. First, the inherently complex nature of language teaching which requires multidimensional expertise, including cultural mediation across linguistic and sociocultural divides necessitates collaborative leadership approaches to support teachers. Second, increasing workloads, driven by the global expansion of ELT and increasing student diversity in classrooms, further underscore the need for sustainable TL frameworks. These responsibilities may place additional pressure on language teachers, especially if they are carried out without any institutional support.

Typically, in response to intense pressure, language teachers create a defense mechanism (Hiver & Dörnyei, 2017). This defense mechanism is termed teacher immunity (TI), and is characterized as a system that protect them from the adverse, unwanted, and detrimental effects of external influences (Hiver & Dörnyei, 2017). In other words, TI is a significant indicator of how teachers behave and react in response to difficulties and obstacles, and it profoundly impacts their careers. Thus far, it has been found that TI serves as a potential predictor of EFL teachers' professional identity, autonomy, and motivation (Namaziandost et al., 2024). However, there is a scarcity of research on teacher-related variables contributing to TI. This study responds to the call made by Azari Noughabi et al. (2022) to explore the factors contributing to language TI by examining the relationship between TL and TI.

Furthermore, if teacher leaders are good at emotional meaning-making, especially in distressing conditions, they will be capable of establishing an educational environment that revitalizes themselves and lays the groundwork for improved learning for their students (Beatty, 2002). While emotions constitute a pivotal aspect of the professional experiences of language teachers and despite growing research interest in affective dimensions over the past decade, a significant imbalance persists in ELT between the predominant focus on cognitive aspects and attention to emotional factors (Richards, 2020). There is no doubt that being open to exploring one's inner emotional world fosters resilience, which is one of the main requirements for teacher leaders (Bagdžiūnienė et al., 2022). What is more, people sustain their ability to recover by being emotionally prepared to delve into and learn from their emotions and pains (Boler, 1999).

Meta-emotions refer to the feelings individuals experience in response to their own emotions (Greenberg, 2002). They prompt us to become aware of our initial emotions and encourage us to evaluate them, thereby fostering a deeper understanding of our emotional responses (Sodoma, 2023). Teachers with a high level of meta-emotions often express their emotions more elaborately and display more purposeful and systematic behavior patterns (Liu, 2021). As teacher leaders become actively involved in educational and workplace development, they tend to feel a stronger sense of ownership (Louis et al., 1996). This increase enhances their motivation, fosters positive emotions, and strengthens their sense of self-worth (Muijs & Harris, 2006).

Despite the growing attention to language teachers' primary emotions (i.e., the first, immediate emotional reactions to a situation, such as enjoyment or anxiety) there remains a limited understanding of their secondary emotions (emotional reactions to the primary emotions), or meta-emotions. Similarly, although SLA scholars acknowledge the importance of emotional awareness and teachers' self-regulation of disruptive emotions such as anger and anxiety in language education, research has not yet examined teachers' feelings about their own emotions, referred to as meta-emotions therefore, a significant gap exists in the field of ELT regarding the antecedents of these meta-emotions. Since promoting TL often intensifies workloads (Price & McCallum, 2015; Sugden, 2010), investigating its relationship with TI and meta-emotions is urgent. If TL exacerbates negative meta-emotions or reinforces negative immunity (e.g., resistance to change), it could accelerate attrition. Conversely, if TL fosters adaptive immunity and positive meta-emotions, it may mitigate turnover. Therefore, finding the link between TL and meta-emotions and TI is significant, as it can reveal whether TL's demands are offset by protective factors (TI and positive meta-emotions) or if they intensify negative meta-emotions and maladaptive immunity. As a result, the findings can help institutions design better support systems for the betterment of EFL teachers' life. Therefore, this study aims to determine whether TL can predict language teachers' levels of immunity and their meta-emotions.

LITERATURE

Teacher leadership

As early as 1999, instructional leadership began to be questioned and criticized due to its top-down style, in which teachers were regarded as followers of the decisions made by principals (Hallinger & Heck, 1999). In response to these criticisms, a new framework of leadership named distributed leadership was introduced. Distributed leadership is frequently conceptualized as shared leadership (Pearce & Conger, 2003) or collective leadership (Leithwood & Mascall, 2008). This framework offers the distribution of agency and encourages team decision-making rather than relying on standalone leaders (Gronn, 2002). This new model of leadership also transferred to teacher leadership in England as a 'new way of looking at leadership (Muijs & Harris, 2006). Based on this model, TL is described as the process through which teachers impact their peers, administers, principals, and other school community members to enhance teaching practices, ultimately aiming to boost student learning and foster educational

excellence (Katzenmeyer & Moller, 2009). In other words, leadership is the result of interactions and relationships among teachers who collaborate in an academic workplace to improve educational outcomes (Reinders, 2023). The core tenet of TL is closely connected to ideas of individual empowerment and decentralized management (York-Barr & Duke, 2004). Wieczorek and Lear (2018) note that the main objective of TL is to foster and sustain a professional environment, cultivate social unity, and establish trust among teachers.

While TL is well acknowledged in the field of education, its exploration within English ELT particularly in the Iranian context remains limited. Existing studies in Iran (e.g., Ghadiri Shirvan, 2021; Koosha et al., 2015) highlight the need for further attention to TL's role in ELT, suggesting gaps in understanding how institutional, cultural, or policy factors shape TL practices in this setting. Considering the rapid growth and transformation in ELT environments, teachers need to feel empowered and supported (McGee et al., 2015). That is why, in recent years, interest in TL and strengthening professionalism has been increasing. Many applied linguists also advocate for moving from hierarchical models of leadership to a horizontal one to foster commitment to development, professional trust, and shared learning (Underhill, 2005).

Whitehead and Greenier (2019) investigated ELT university students' views regarding the necessary qualities and characteristics that define an effective teacher leader. Their participants believed that flexibility, self-reflection, rapport, passion, balance and purpose are important qualifications for EFL teacher leaders. The authors concluded that effective language TL arises from the interplay and interaction of various traits, all aimed at cultivating positive attitudes towards language learning and inspiring and motivating EFL learners to pursue their own development.

Similarly, TL has been found to play a significant role in enhancing organizational effectiveness particularly for EFL teachers, by helping them overcome challenges related to extensive administrative workloads and limited autonomy (Shah & Zhang, 2020). Besides, Aliu et al. (2024) refer to teacher professional growth and increased students' achievement and motivation as the outcomes of TL. Notably, as reported by Greenier and Whitehead (2016) by incorporating the principles of leadership into ELT education, teachers can be more successful in overcoming the challenges of language teaching, improve and expand their skills, and attain higher levels of professional success. They further argue that teacher leaders are expected to have emotional qualities such as passion, enthusiasm, attention to their moods, and empathy.

Apparently, emotional variables can play a significant role in the performance of teacher leaders. As long as teacher leaders can effectively regulate their emotions, they are more probable to overcome stressful situations and maintain a productive environment (Blose, 2014). Along the same line, Tore and Duman-Saka (2023) observe a significant positive relationship between TL and organizational happiness, as well as between the positive emotions and the total score of TL. Despite the fact that leadership might be affected by cultural contexts, except for a handful of studies, such as Khany and Ghoreyshi (2013) investigating the link between teacher leadership and classroom management, and Koosha et al. (2015) investigating teachers' perceptions of this concept, the current literature has mostly overlooked how TL relates to other teacher-related variables.

Teacher immunity

The term language TI is a concept which has been newly introduced in the realm of language teacher psychology by Hiver and Dörnyei (2017) to explain the links between psychological elements involved in language teaching and the practical realities of classroom dynamics. Recently, it has attracted significant attention due to its crucial role in enhancing teachers' well-being (Namaziandost & Heydarnejad, 2023). TI is defined as teachers' potential to endure and recover from the emotional pressures and demands inherent in their profession. It encompasses psychological and emotional well-being on the one hand, and physical health on the other, allowing teachers to manage the challenges and problems encountered in their teaching careers (Hiver, 2017). It is a strategy that helps teachers adapt and protect themselves when facing different teaching challenges (Hiver, 2017).

According to Hiver and Dörnyei (2017), TI forms in response to stressful and challenging situations, helping educators maintain their "professional equilibrium" and improve their teaching effectiveness. They also suggest that TI is of two types: productive (positive) or maladaptive (negative). The former fosters many positive attributes such as motivation, hope, commitment, and resilience (Hiver, 2017). It also enables effective teaching and facilitates teacher reflection and protect them from various constraints present in the environment where language instruction occurs (Hiver & Dornyei, 2017). In contrast, the latter is akin to biological immunity, causing conservatism and resistance to change, which can prevent teacher professional development. Rahmati et al. (2019) found that this type of immunity is related to fossilization in education and a reluctance to adopt new teaching methods. According to Ahmadi et al. (2020), the maladaptive TI type is as common as the productive one among Iranian teachers. They further associated maladaptive immunity with burnout and reluctance to change. In contrast, Maghsoudi (2021) discovered that the productive immunity type is more predominant among Iranian EFL teachers. The study also revealed that, unlike gender, the number of years of education significantly influenced the immunity levels of the participants. Additionally, the findings suggested that TI is a transient and dynamic construct that tend to fluctuate in response to the reinforcement or deficiency of its constituent elements, such as efficacy and attitude.

Research has shown that a wide range of factors contribute to the formation and development of TI. For example, at early stages of teaching career, TI is significantly shaped by various external influences, including educational resources, teacher training programs, and language teaching conferences (Pennington & Richards, 2016). According to Dobakhti and Khalili (2024) Iranian EFL teachers' income, age, the ability to regulate their emotions are the primary, secondary, and tertiary factors, respectively, in explaining the variance in their TI. However, for British teachers, emotion regulation ranked first, followed by teacher reflection and professional identity. Azari Noughabi et al. (2022) found that teachers who have a higher level of L2 grid and engagement are better equipped with teacher immunity and are able to handle professional challenges. By the same token, Wang et al. (2022) showed that in the context of Asia, both work engagement and psychological well-being can significantly predict TI. Likewise, Azizpour et al. (2023) reported a positive correlation between language TI, the level of occupational stress, the average years of teaching background, and teaching enjoyment.

Meta-emotions

Perceived as secondary emotions following primary emotions (Greenberg, 2002), meta-emotions are divided into positive and negative meta-emotions. Positive meta-emotions involve being aware of, recognizing, and accepting positive emotions, and expressing them appropriately. In contrast, negative meta-emotions involve being aware of, recognizing, and accepting negative emotions, and preventing them. An example for the former can be trying to comfort yourself to regulate your anger and an example for the latter is feeling anxious in response to our fearful self. Contrary to negative meta-emotions, positive ones are associated with reduced emotional suppression, improved emotional acceptance, enhanced decision-making abilities, and more effective coping strategies (Hurrell et al., 2017). According to Neff's (2003) meta-emotional theory, positive meta-emotions, such as interest and compassion can enhance well-being by reflecting and supporting one's own emotions. These meta-emotions foster an accepting attitude towards one's emotions, suggesting that positive meta-emotions can elucidate the psychological processes of mindfulness and acceptance that sustain well-being.

Mitmansgruber et al. (2009) argue that meta-emotions play a crucial role in emotion regulation process (the process of amplifying, reducing, or sustaining the behavioral, cognitive, experiential, or physiological components of emotion in accordance with an individual's objectives and significantly affect psychological well-being (Gross & Thompson, 2007). They influence the intensity and quality of primary emotions, guide behavior and decision making, and subsequently enhance psychological well-being (Miceli & Castelfranchi, 2019). The domain of their influence is not limited to emotions, instead they significantly influence cognition and meta-cognition both directly and indirectly shaping how individuals reflect on their own thinking processes (Norman & Furness, 2016).

Since the teaching profession in general, and language teaching in particular, involves experiencing and undergoing intense emotional activity, meta-emotions can be of great significance. Ciucci and Baroncelli (2024) state that investigating teachers' meta-emotions is highly important in that they can provide a deeper insight into their role as emotional socializers. Teacher meta-emotions can impact their teaching behaviors, their ability to build rapport with students, the quality of their relationships with students, and the instructional strategies they use in the classroom (Frenzel et al., 2021). Research has shown that teachers' perception of their own emotion determines their reactions to students' negative emotions. By recognizing and regulating their own emotional responses, teachers can more effectively address and mitigate the impact of students' negative emotions. Similarly, teachers' emotional management skills and the levels of their emotional awareness influence how they behave with students (Sutton & Wheatley, 2003). Besides, it has been found that minimizing negative meta-emotions helps to maintain well-being and mindfulness (Ryan & Deci, 2001).

Research has shown that meta-emotions significantly influence both immediate emotional experiences and future emotional responses (Bartsch et al., 2008). This connection renders the study of language teachers' meta-emotions particularly crucial, given that language teaching inherently involves navigating diverse emotional experiences that directly impact instructional effectiveness (Richards, 2020). Although the empirical applicability of the construct of teachers'

meta-emotions has been proven in public education (Ciucci & Baroncelli, 2024), it has not yet been explored in the context of language education. Therefore, this research bridges this gap by examining the relationship between TL and teachers' meta-emotions. Furthermore, it seeks to fill the gap regarding the link between TL and TI. Thus, this study addresses the following questions:

1. Does TL significantly predict TI of Iranian EFL teachers?
2. Does TL significantly predict Iranian EFL teachers' meta-emotions?

METHODOLOGY

Participants

This study comprised 389 Iranian EFL teachers working in various language institutes across Iran. Among them, 190 were female and 199 were male. The teachers' ages ranged from 23 to 45 years (M = *32.1*, SD = *5.4*), with teaching experience spanning from 2 to 18 years. The participants were selected through convenience sampling. All participants held academic degrees in fields such as applied linguistics, English literature, and English translation. Initially, the researchers contacted 415 teachers via phone, email, or social media whichever contact details were available to ask if they were willing to complete the questionnaires. Of these, 389 responded and agreed to participate (94% response rate).

Instruments

Language TI scale

To assess teachers' immunity, the LTI scale designed by Hiver (2017) was applied. The scale includes 39 items, among which 7 items assess teaching self-efficacy, 5 assess burnout, 5 assess resilience, 5 assess attitudes toward teaching, 6 assess openness to change, and 6 assess classroom affectivity. Responses to the items are arranged on a 6-point scale (1 = strongly disagree; 6 = strongly agree). The Cronbach's alpha for the scale was .94 in this study.

TL scale

The TL scale, developed by Xie et al. (2020), was utilized to measure TL. This scale comprises 32 items that address six factors: community, association, assessment, professional learning, instructional, and policy leadership. The response format utilized a four-point scale (nearly always not, sometimes, often, and nearly always). The Cronbach's alpha for the scale was .92 in this study.

Meta-emotions scale

The meta-emotions scale devised by Mitmansgruber et al. (2009) was used to gather data on teachers' meta-emotions. This scale includes 28 items measuring anger (4 items), compassionate

care (7 items), interest (5 items), contempt/shame (5 items), tough control (5 items), and suppression (2 items). The instrument's reliability was demonstrated by subscale alphas ranging from 0.76 to 0.91 (Mitmansgruber et al., 2009). The items are evaluated on a 5-point Likert scale, from 0 (never true) to 6 (always true).

Procedure

After obtaining informed consent from the participants, a questionnaire link was distributed to EFL teachers through various social media platforms, including Telegram, WhatsApp and Eitaa, depending on each teacher's ease of access and preference. This approach ensured a wide reach and facilitated participation by accommodating the preferred communication channels of different teachers, thereby enhancing the overall response rate and diversity of the sample. Teachers were assured of the confidentiality and anonymity of their responses to encourage honest and accurate participation. Once all the teachers completed the scales, the collected data were subjected to statistical analysis.

Data analysis

To investigate the association between TL and TI, as well as the association between TL and teachers' meta-emotions covariance-based structural equation modeling (CB-SEM) was utilized. Smart PLS 4 software was employed for both confirmatory factor analysis (CFA) and SEM. To confirm model fit, an initial assessment using fit indices was conducted, followed by a review of modification indices. After making any adjustments, the fit indices were reevaluated.

RESULTS

Initially, the reliability and validity of the data were calculated to determine whether the values met the criteria specified in Table 1. The results indicated that the measurement model possesses adequate reliability and validity.

Table1
Conditions for establishing reliability and validity

Index	Critical Value
Reliability	• CR and CA > 0.7
Convergent Validity (CV)	• Loading factors are significant at $p < 0.05$ • Loading factor > 0.5 • CR > AVE • AVE > 0.5
Discriminant Validity	• AVE > MSV
Goodness of Fit Statistics	• $X^2/df < 3$, RMSEA < 0.09, GFI > 0.9, AGFI > 0.8, NFI > 0.9, CFI > 0.9

In evaluating the outer model, both reliability and convergent validity were examined. Indicator reliability was determined by examining factor loadings, while latent variable reliability was evaluated using composite reliability. Indicator reliability, defined as the squared factor loadings, should be at least 0.5. The results demonstrated that all indicators exhibited adequate

reliability, with values exceeding 0.5. As shown in Table 2, the Cronbach's alpha for all variables surpassed the acceptable threshold of 0.7, indicating good reliability. Furthermore, the composite reliability coefficient for each variable exceeded the desired value of 0.7, confirming the adequacy of composite reliability. CV was assessed through the average variance extracted (AVE), with a minimum acceptable value of 0.5. In this model, the CV of all main variables exceeded 0.5, indicating a satisfactory and acceptable level (see Table 2).
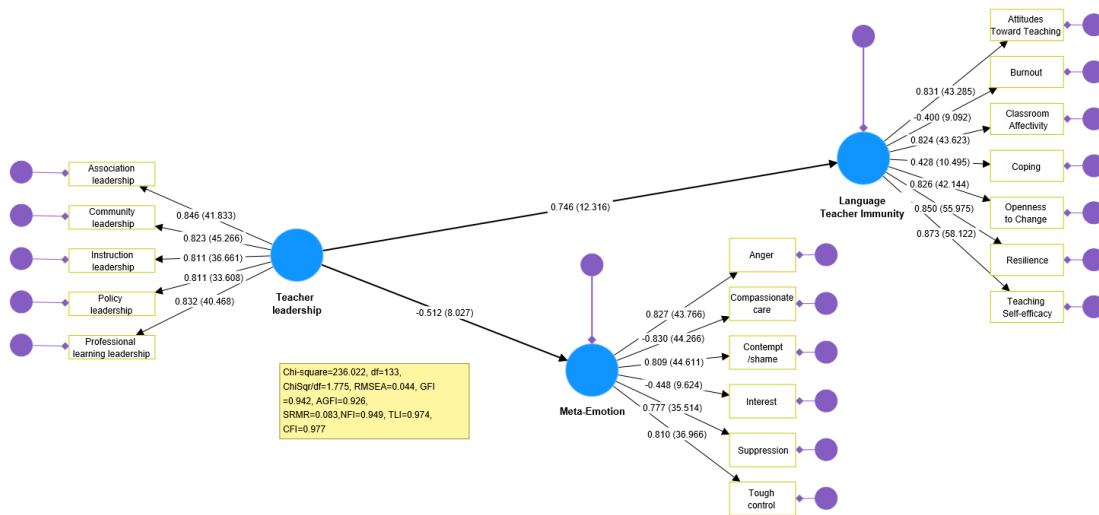

Figure 1 Model in the standardized coefficient estimation state

Figure 1 illustrates the CFA and SEM in terms of standardized coefficient estimation and coefficient significance. In Model 1, TL is designated as the independent variable, while TI and teachers' Meta-Emotions serve as dependent variables. Within this model, the coefficients between latent variables (represented by ellipses) and questionnaire items (represented by rectangles) are termed factor loadings, whereas the coefficients between main variables are referred to as path coefficients or structural equation coefficients. The numbers in parentheses denote the absolute value of the t-statistic, which tests all measurement equations (factor loadings and path coefficients). According to this model, a factor loading is considered significant at the 95% confidence level if the t-statistic falls outside the range of -1.96 to +1.96.

Table 2

Convergent validity

Latent Variables	Item	Loading Factor	t	CA	CR	AVE
Anger	Ang1	0.809	39.201	0.892	0.893	0.674
	Ang2	0.861	50.457			
	Ang3	0.811	38.805			
	Ang4	0.803	36.334			
Compassionate Care	CC1	0.817	38.392	0.86	0.878	0.507
	CC2	0.81	40.187			
	CC3	0.808	36.112			
	CC4	0.818	41.614			
	CC5	0.817	42.166			
	CC6	0.299	6.091			
	CC7	0.383	8.419			

Latent Variables	Item	Loading Factor	t	CA	CR	AVE
Contempt/shame	Con1	0.861	46.434	0.914	0.914	0.727
	Con2	0.85	47.64			
	Con3	0.83	45.255			
	Con4	0.868	56.912			
Interest	Intr1	0.805	41.157	0.917	0.919	0.688
	Intr2	0.869	57.611			
	Intr3	0.839	57.486			
	Intr4	0.842	46.731			
	Intr5	0.79	38.273			
Suppression	Sup1	0.778	15.898	0.839	0.845	0.733
	Sup2	0.928	17.168			
Tough Control	TC1	0.822	45.677	0.926	0.926	0.715
	TC2	0.833	49.753			
	TC3	0.855	52.984			
	TC4	0.867	58.524			
	TC5	0.849	46.758			
Attitudes toward Teaching	ATT1	0.812	37.582	0.909	0.909	0.667
	ATT2	0.805	35.046			
	ATT3	0.806	35.699			
	ATT4	0.853	45.883			
	ATT5	0.806	43.34			
Burnout	Bur1	0.824	43.194	0.708	0.764	0.658
	Bur2	0.812	45.454			
	Bur3	0.807	36.389			
	Bur4	0.779	35.716			
	Bur5	-0.832	44.206			
Classroom Affectivity	CA1	0.873	56.571	0.889	0.91	0.612
	CA2	0.851	56.524			
	CA3	0.831	42.88			
	CA4	0.828	42.397			
	CA5	0.823	43.513			
	CA6	0.361	7.581			
Coping	Cop1	0.804	39.989	0.897	0.899	0.637
	Cop2	0.797	35.316			
	Cop3	0.808	39.146			
	Cop4	0.828	47.122			
	Cop5	0.751	28.911			
Openness to Change	OTC1	0.807	38.88	0.875	0.88	0.578
	OTC2	0.794	38.064			
	OTC3	0.796	34.264			
	OTC4	0.852	53.485			
	OTC5	0.84	52.291			
	OTC6	0.344	7.193			
Resilience	Res1	0.841	50.603	0.924	0.924	0.708
	Res2	0.853	52.09			
	Res3	0.849	53.185			
	Res4	0.834	47.221			
	Res5	0.829	48.02			
Teaching Self-efficacy	TSE1	0.718	27.011	0.865	0.864	0.509
	TSE2	0.804	37.424			
	TSE3	0.802	40.411			
	TSE4	0.827	41.15			
	TSE5	0.793	30.642			
	TSE6	0.457	10.13			
	TSE7	0.409	7.884			

Latent Variables	Item	Loading Factor	t	CA	CR	AVE
TL	Association leadership	0.846	41.833	0.914	0.913	0.68
	Policy leadership	0.811	33.608			
	Professional learning leadership	0.832	40.468			
	Instruction leadership	0.811	36.661			
	Community leadership	0.823	45.266			

Table 3

Goodness of fit statistics

Goodness of Fit Statistics	Estimated	Critical Value
Chi-square	236.022	-
Degrees of Freedom	133	-
P value	1.775	-
ChiSqr/df	0.044	< 3
RMSEA	0.034	< 0.09
RMSEA Low 90% CI	0.053	-
RMSEA High 90% CI	0.942	-
GFI	0.926	> 0.8
AGFI	0.083	> 0.8
NFI	0.949	> 0.9
TLI	0.974	> 0.9
CFI	0.977	> 0.9

To evaluate the CFA model, several fit indices including Chi-square (χ^2), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), Incremental Fit Index (IFI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) were checked. In this study, the chi-square/degree of freedom ratio was 1.775, which is below the reference value of 3, suggesting a good fit, as values below 3 are considered acceptable (Jöreskog, 1990). The RMSEA value of less than 0.1 indicates an adequate model fit, with the value in this study being 0.044, suggesting a very good fit. The confidence interval for RMSEA also indicates an appropriate fit. GFI and AGFI assess the overall fit of the model, with values near 1 signifying a better fit. In this study, both indices exceeded 0.9, suggesting a good fit, although values closer to 1 are preferable. The NFI, NNFI, and IFI assess the model's fit relative to a baseline model, with values approaching 1 indicating a superior fit. In this study, all indices suggested that the model fits well overall. The chi-square value further supported this, showing no significant deviation between the model and the data. Collectively, these indices confirmed that the model meets the necessary criteria and can be considered well-fitting.

Table 4

Hypothesis testing

Hypothesis	Beta	t-value	P	R-sq	Result	Sign
TL -> Language TI	0.746	12.316	0.000	0.306	supported	+
TL -> Meta-Emotion	-0.512	8.027	0.000	0.18	supported	-
TL -> Anger	-0.597	7.587	0.000	0.246	supported	-
TL -> Compassionate Care	0.612	8.575	0.000	0.238	supported	+
TL -> Contempt/shame	-0.689	9.355	0.000	0.29	supported	-
TL -> Interest	0.442	7.672	0.000	0.186	supported	+
TL -> Suppression	-0.45	6.648	0.000	0.165	supported	-
TL -> Tough Control	-0.498	7.736	0.000	0.171	supported	-
TL -> Attitudes toward Teaching	0.541	8.068	0.000	0.212	supported	+
TL -> Burnout	0.54	8.343	0.000	0.197	supported	-
TL -> Classroom Affectivity	0.785	12.869	0.000	0.331	supported	+
TL -> Coping	0.582	10.317	0.000	0.269	supported	+
TL -> Openness to Change	0.562	10.263	0.000	0.241	supported	+
TL -> Resilience	0.683	10.16	0.000	0.296	supported	+
TL -> Teaching Self-efficacy	0.327	7.68	0.000	0.253	supported	+

Table 4 presents the results of hypothesis testing for the relationship between TL and various dependent variables. The analysis includes estimates of beta coefficients, *t*-values, *p*-values, R-squared values, results, and significance for each hypothesis. Below is a summary of the findings:

The findings demonstrated that TL has a significant impact on several aspects, with a mix of positive and negative effects across different outcomes. TL positively affects TI, indicating that strong leadership enhances teachers' immunity in language teaching contexts. This positive relationship also extends to Attitudes toward Teaching, Classroom Affectivity, Coping, and Openness to Change, Resilience, and Teaching Self-efficacy. In these areas, effective teacher leadership fosters a more positive attitude towards teaching, helps reduce burnout, improves classroom affectivity, enhances coping strategies, encourages openness to change, builds resilience, and boosts teaching self-efficacy.

TL negatively influences Meta-Emotions of Anger, Contempt/Shame, Suppression, and Tough Control. However, it enhances Interest and Compassion care. These findings suggest that strong leadership can reduce negative meta-emotional outcomes and behaviors. These results highlight the multifaceted impact of teacher leadership, showing that while it promotes several positive outcomes, it also mitigates various negative emotional responses and behaviors.

DISCUSSION

The main purposes of this study were to investigate the relation between TL and TI, as well as the connection between TL and teachers' meta-emotions. Therefore, this work has provided valuable insights into various psychological teacher-related variables that play a significant role in TL processes and TI. Regarding the association between TL and TI, the findings suggest that TL predicts TI, indicating that changes in TL are likely to result in corresponding changes in TI. This finding highlights the importance for language institute owners to adopt a distributed

leadership model, rather than relying on a single supervisor acting as a leader to make all decisions regarding instructional practices and teaching materials. Such a shift is particularly critical in the Iranian EFL context, where teachers often face limited TL across educational settings including universities, schools, and private language institutes. Institutional policies frequently restrict educators' agency by imposing decisions upon them in multiple aspects (Ghadiri Shirvan, 2021; Koosha et al., 2015).

The link between TL and TI can be associated with the fact that teachers with higher leadership skills are more successful at classroom management (Zembat et al., 2023). They proceed with their teaching based on a plan that considers class challenges and potential difficulties. As a result, they are better equipped to handle these challenges successfully and benefit from increased TI. Another explanation for the positive relationship between TL and TI might be that distributed leadership is associated with a higher tendency for teacher self-efficacy and collaboration (Liu et al., 2021). This suggests that when teachers are given the opportunity to engage in leadership, they are more willing to collaborate and support each other especially once facing unpredictable challenges. Consequently, they can manage themselves in distressing situations, maintain effective functioning, and stay hopeful and motivated. Meanwhile, the positive association between TL and TI aligns with the assertion that TL involves organizing the educational environment to achieve desired behaviors, addressing potential problems, and resolving existing issues using appropriate methods by resilient teachers (Çubukçu & Girmen, 2008). Our study also corroborated the findings of Shah and Zhang (2020), which state that TL practices help EFL teachers overcome the challenges they face and enhance organizational effectiveness. This finding also lends support to those of Triska (2007), emphasizing the necessity of strengthening teacher leadership in maintaining healthy academic environments for teachers.

Another important finding concerning the influences of TL on TI is its negative relationship with teacher burnout. Therefore, TL is pivotal in mitigating the risk of burnout. This negative relationship suggests that the more language teachers are empowered and involved in leadership, the less vulnerable and insecure they will feel. This negative link aligns with Xia and Butler's (2023) finding that leadership initiates contribute to the reduction of teacher burnout.

Regarding the second research question, it was found that TL is an antecedent of various meta-emotions. More specifically, TL can positively predict the positive meta-emotions of interest and compassionate care, while it can negatively predict negative meta-emotions namely, contempt, strict control, and suppression. This finding can be explained by the fact that the relevance of events and situations to people's goals, needs, and desires gives rise to positive meta-emotions. In other words, as individuals perceive themselves to be closer to achieving their goals and having their needs met, the likelihood of experiencing positive meta-emotions increases. In contrast, in situations where people do not have a sense of certainty, control, and agency, negative meta-emotions are more likely to be triggered. For instance, the meta-emotion of anger is mostly triggered in conflict situations (Jaeger & Bartsch, 2006). Similarly, when teachers feel they have control and are given a voice in decision-making, they experience more positive meta-emotions. Conversely, in academic situations where decisions are made without considering teachers' input, they experience negative meta-emotions.

Aligned with previous research by Zhang and Ye (2024), which reported that TL can trigger different emotions such as teacher enthusiasm, we found that TL can ignite secondary emotions (i.e., meta-emotions). The findings also support those of Katzenmeyer and Moller (2001) suggesting that when teachers are empowered to take on leadership roles, their level of teachers' self-esteem and work satisfaction will significantly enhance which in turn leads to a better performance, higher motivation, and retention in their profession. Our findings were also in line with Tore and Duman-Saka's (2023) observation of a significant positive relationship between teacher leadership and positive emotions. Besides, our findings confirmed Beatty's (2002) conclusion that TL brings about significant positive impacts on emotional preparedness, personal resilience, and well-being. The results support the findings of Khany and Ghoreyshi (2013), indicating that TL improves teacher classroom management efficacy, resulting in a significant facilitation of the teaching process.

CONCLUSION

This research brings the concept of teachers' meta-emotions into the realm of language teaching and is the first attempt to investigate the link between TL and TI, and TL and teachers' meta-emotions. The findings provided evidence to show that TI, TL, and teachers' meta-emotions exist in unity. It was also demonstrated that TL plays a fundamental role in driving EFL teachers' meta-emotional responses. This study elucidates the critical importance of teacher leadership in fostering a positive and supportive organizational climate and promoting TI in EFL teaching settings. Our study encourages reforming the leadership style of English language institutions to one that fosters healthy and collaborative leadership for teachers. To reach this end, policy makers in language institutes are recommended to give teachers power and leadership roles to feel more immune in their job and have a better emotional experience and psychological well-being. For example, teachers could participate in selecting course materials, syllabus development, and placing students in appropriate proficiency levels. By empowering and supporting teachers, they can become more resilient to professional challenges and gain greater emotional awareness, an aspect often overlooked by most teacher education programs. To provide a high and consistent level of leadership in all institutions, teacher trainers are invited to hold leadership interventions. For example, language institutions should train teachers in action research methods, as this approach empowers them to design and implement evidence-based interventions in their classrooms (Frost, 2012). Furthermore, institution managers can hold regular meetings, providing a platform for teachers to express their opinions and participate in decisions regarding various aspects, including book selection, syllabus development, and similar policies. Despite the contributions made by this research, there were some limitations that can be addressed by future research. The data collected in this study were limited to quantitative data gathered through questionnaires. Gathering additional data through qualitative methods can add to the credibility and depth of the understanding of the issue at hand. Caution should be taken not to generalize the findings due to the self-report nature of the data, which might be influenced by social desires and cultural biases of the participants. Besides, this study was limited to Iranian teachers, and the sampling was conducted using a convenience sampling method. However, we included a large sample size to moderate this limitation. Future studies should focus on teachers from different nationalities to obtain a

more representative and generalizable sample. Additionally, to find out the other potential predictors of TI, and teachers' meta-emotions other teacher-related variables such as self-efficacy, autonomy and mindfulness can be incorporated to such structural models. By integrating these additional variables, the models can become more comprehensive and offer a deeper insight into the dynamics involved in EFL teaching settings.

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