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Predicting Teacher Well-being Through Teacher Leadership and Collective Teacher Efficacy

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Abstract

Teacher well-being has emerged as a critical determinant of teacher success and educational quality throughout the previous decade (Hascher et al., 2021). While individual factors like self-efficacy and emotional regulation are well-documented predictors of teacher well-being, collective dynamics such as teacher leadership and collective efficacy remain understudied in their predictive capacity. This study investigates whether these variables independently predict psychological well-being among Iranian EFL teachers, while identifying their relative predictive strength. Using validated instruments, 186 participants completed the Teacher Leadership Inventory (Angelle & DeHart, 2010), Perceived Collective Teacher Efficacy Scale (Skaalvik & Skaalvik, 2007), and Index of Psychological Well-Being at Work (Dagenais-Desmarais & Savoie, 2012). Multiple regression analysis demonstrated that both variables significantly predict well-being, with collective efficacy demonstrating stronger predictive power. The study highlights the significance of fostering school-wide coordination and leadership structures that promote collective agency. Implications include integrating collaborative professional development programs and leadership training to enhance psychological well-being of teachers.

Keywords: *Teacher Well-being, Collective Teacher Efficacy, Teacher Leadership*

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Introduction

Teacher well-being has emerged as a cornerstone of educational quality, directly influencing classroom dynamics and student outcomes. Recent research underscores its role in mitigating occupational stress, fostering positive teacher-student relationships, and enhancing systemic effectiveness. While individual factors such as self-efficacy and emotional regulation are well-

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documented predictors, collective dynamics such as teacher leadership and collective efficacy remain understudied in their predictive capacity.

In the realm of education, the potential for enhancing teacher well-being may be influenced by characteristics such as self-efficacy (Amirian et al., 2023; Azari & Amirian, 2021), resilience (Wei et al., 2024), teachers' workload stress (Bellibaş et al., 2024), and positive teacher emotions (Nwoko et al., 2023). Recent studies reveal that professional knowledge alone is insufficient for effective teaching, emphasizing the need for teacher agency and leadership to drive educational change (Amirian & Behshad, 2016; Harris & Kemp-Graham, 2017).

Teacher leadership, emerging as a critical driver of pedagogical innovation, has been linked to systemic improvements and school-wide initiatives. For instance, Harris and Jones (2019) highlight how teacher leadership catalyzes systemic improvements, while Berry et al. (2005) demonstrate its role in advancing school reform. Empowering teachers through leadership structures, as noted by Muijs and Harris (2003), enhances professional quality and institutional cohesion.

Collective teacher efficacy, another promising factor for school success and student achievement, has been explored in relation to productive teacher behaviors and improved student outcomes (Anderson et al., 2023; Ross, 1992; Salas-Rodríguez & Lara, 2023; Tschannen-Moran et al., 1998). Studies demonstrate its role in fostering environments that improve teacher well-being and performance (Goddard et al., 2000), while Qu (2024) identifies its stress-alleviating potential. Teacher well-being, a critical yet underexplored outcome, intersects with factors ranging from classroom interactions (Virtanen et al., 2019) to pupil well-being (Roffey, 2012). Though connections between collective efficacy and well-being (Herrera et al., 2022), collective efficacy and leadership (Angelle & Teague, 2014), and leadership and well-being (Cherkowski, 2018) exist, few studies predict well-being through these dual lenses.

This study addresses this gap by examining how teacher leadership and collective efficacy predict psychological well-being, while identifying their relative predictive strength. It posits that collective efficacy reduces hierarchical barriers (Wahlstrom & Louis, 2008) and enhances decision-making processes influencing school climate and well-being (Woo et al., 2022). Conversely, high well-being may foster commitment, reinforcing collective efficacy (Creemers & Reezigt, 1996). The findings aim to reframe educators' emotional and professional attributes, advocating for systemic strategies to empower teachers—a linchpin in advancing educational systems. This study investigates two key questions:

RQ₁: To what extent can teacher leadership and collective teacher efficacy together predict teacher psychological well-being?

RQ₂: Is collective teacher efficacy a better predictor of psychological well-being than teacher leadership?

Teacher Well-being

Teacher well-being is a multifaceted and dynamic state characterized by an educator's overall perception of their professional life as positive, encompassing elements such as hope, self-directed motivation, positive psychological resources, and professional skills (Zhou et al., 2024). Avola et al. (2025) view well-being as a continuum, ranging from mental health issues to positive psychological states—a perspective echoed by Stephan (2018). While conceptual

clarity has improved over time, empirical studies often focus on isolated factors rather than integrated models linking well-being to leadership or collective efficacy.

Teacher well-being has garnered significant attention in recent years (Amirian et al., 2025; Bonjakhi et al., 2024; Zhou et al., 2024) and several studies have explored the relationship between well-being and other constructs. For example, Wang et al. (2024) realized that teaching satisfaction and resilience serve as mediators in the relationship between teachers' self-efficacy and well-being. Fathi et al. (2020) demonstrated that self-efficacy and collective efficacy predict psychological well-being among Iranian EFL teachers but left much unexplained variance—highlighting the need for additional predictors such as teacher leadership.

The link between teacher leadership and well-being remains relatively underexplored but promising. Karaferye and Bellibaş (2025) posited that school leadership can be considered an essential contributor to teacher well-being. Liu et al. (2022) linked distributed leadership factors to Chinese teachers' well-being but did not address how teachers leading their peers might influence their own psychological health—a missing piece this study seeks to address.

Teacher Leadership

Teacher leadership encompasses a set of characteristics, qualities, and behaviors shown by educators, both inside and outside the educational setting, intended to positively influencing pupils' educational and emotional development (Nguyen et al., 2025; Zheng & Abdullah, 2024). It plays a pivotal role in developing teacher evaluations, professional development programs, and school reforms while enhancing job satisfaction and professional learning through collaborative involvement (Çilek et al., 2025).

The literature identifies several roles for teacher leaders, including possessing a high degree of professional autonomy, developing shared goals, managing activities beyond the classroom, enhancing instructional practices, supporting professional development, collaborating in decision-making, fostering partnerships with parents and communities, and promoting a culture of collaboration (Nguyen et al., 2025; Çilek et al., 2025). These roles highlight the capacity for teacher leadership to influence collective efficacy and well-being. For example, Liu (2021) found a significant link between collective teacher efficacy and teacher leadership within Chinese upper secondary schools. However, their study stops short of exploring how these factors impact psychological well-being.

Collective Teacher Efficacy

Collective teacher efficacy refers to teachers' consensus view of their ability to positively influence learner outcomes through collaboration (Zadok et al., 2025). It is widely understood as an essential contributor to student success (Benoliel & Schechter, 2023; Liu, 2021) and is shaped by emotional states, professional standing, school administration structures, and leadership behaviors (Nadav et al., 2025). Teachers displaying high levels of collective efficacy exhibit greater occupational satisfaction and dedication to the field while experiencing reduced stress and burnout (Mastorilli et al., 2025; Zhou, 2021).

Collective efficacy also acts as an intermediary in various contexts. Zadok et al. (2025) suggest that principal leadership indirectly influences teacher collaboration through collective efficacy. Özdemir et al. (2023) extended this by demonstrating how school leadership affects

instructional practices via collective efficacy while moderating factors like uncertainty avoidance. However, neither study examines whether these dynamics translate into enhanced teacher well-being—a critical gap this research seeks to address.

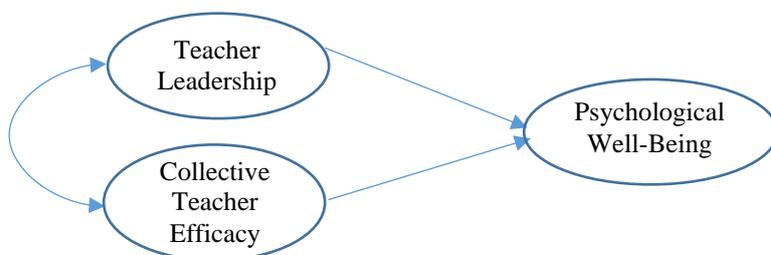
Teacher Well-being, Teacher Leadership, and Collective Teacher Efficacy

Teacher well-being encompasses life satisfaction, mental health, and emotional balance (Zhang et al., 2024; Golab et al., 2025). Studies have explored connections between teacher well-being and collective efficacy (Nadav et al., 2025), as well as teacher leadership (Bellibaş et al., 2024; Liu et al., 2022). Also, existing literature establishes that teacher leadership shapes evaluations, career advancement, and school reforms, enhancing job satisfaction (Yakob et al., 2025). Nguyen et al. (2025) as well as Shen et al. (2020) identified key roles of teacher leaders, including fostering collaboration, enhancing instruction, and developing shared goals. Teacher leadership can improve collective efficacy (Zadok et al., 2025), with informal aspects of teacher leadership being stronger predictors of collective efficacy than formal ones (Angelle & Teague, 2014). However, this relationship's conclusion stops short of exploring how teacher leadership and collective teacher efficacy contribute to psychological well-being. Studies show that collective teacher efficacy is a crucial determinant of learner outcomes (Benoliel & Schechter, 2023; Liu, 2021). Teachers showing superior collective efficacy exhibit increased job satisfaction and commitment (Klassen, 2025). In addition, collective efficacy mediates the relationship between principal leadership and teacher collaboration (Özdemir et al., 2023; Meyer et al., 2020), with principal instructional leadership positively impacting collective efficacy and job satisfaction (Fathi et al., 2021).

While existing studies confirm the potential of teacher leadership (Bellibaş et al., 2024) and collective teacher efficacy (Nadav et al., 2025; Fathi et al., 2020) to influence teacher effectiveness, few have comprehensively examined the ways in which these constructs engage to affect teacher's overall psychological well-being. Thus, our research intends to bridge this gap through investigating the interplay between teacher leadership, collective teacher efficacy, and teacher well-being, offering a novel perspective on the factors contributing to teacher's overall psychological health in Iranian EFL context. The conceptual framework of the present study is illustrated in Figure 1.

Figure 1

Collective Teacher Efficacy and Teacher Leadership as Predictors of Psychological Well-Being



Method

Participants

A sum of 186 EFL teachers from diverse cities in Iran participated in this study. These teachers were engaged in instructing English at different proficiency levels in both public and private language schools or institutes. The sampling method employed was convenience sampling, and participation was on a voluntary basis. Participants were recruited through various sources including social media platforms and direct contact through educational centers' administration. Although convenience sampling method entails inherent limitations in terms of generalizability with the potentiality of bias and lack of representativeness of the population (Emerson, 2021), it offers significant advantages in terms of practicality and accessibility, making it a flexible and efficient method for data collection (Doebel & Frank, 2023). The participants included both male (N=85) and female (N=101) instructors, aged between 18 and 58 years ($M = 32.99$, $SD = 8.38$), with teaching experience ranging from 1 to 38 years ($M = 9.31$, $SD = 7.42$). They were teaching in various instructional settings including governmental, non-governmental, and private language school in cities such as Mashhad, Tehran, and Bojnurd. Their primarily teaching mode was face-to-face instruction focusing on prevailing EFL curricula, such as Vision series in public schools and Summit or Interchange series in institutes. Some mediating variables like teachers' qualifications, educational policies, and disparities in institutional access to educational resources were not controlled for and assumed to be potentially affecting factors but the variety of respondents contributes to show a wider range of EFL teaching experiences in Iran. Informed consent was received from all participants, who were assured of the confidentiality of their provided information.

Instruments

Index of psychological well-being at work (IPWBW)

The Index of Psychological Well-Being at Work (IPWBW), developed by Dagenais-Desmarais and Savoie (2012), is a 25-item self-report instrument designed to assess psychological well-being in occupational contexts. It incorporates a six-point Likert scale (1 = Disagree to 6 = Strongly Agree) and originally includes five subscales: Interpersonal Fit at Work, Thriving at Work, Feeling of Competency at Work, Perceived Recognition at Work, and Desire for Involvement at Work. A sample item is: "*I know I am capable of doing my job.*"

The IPWBW demonstrates strong internal consistency, with the original study reporting a Cronbach's alpha of 0.83 for the overall scale. Subsequent validations, including confirmatory factor analysis (CFA), have supported its construct validity, though structural adaptations exist. For example, a 17-item version across five dimensions was validated in Indian contexts, establishing convergent and divergent validity (Sandilya & Shahnawaz, 2018).

Teacher leadership inventory (TLI)

The Teacher Leadership Inventory (TLI), developed by Angelle and DeHart (2010), is a 17-item self-report instrument designed to assess educators' perceptions of leadership behaviors in educational settings. It uses a four-point Likert scale (never, seldom, sometimes, routinely) to evaluate the frequency of leadership actions. A sample item includes: "*As a faculty, we stay current on education research in our grade level or subject area.*" The original framework

proposed a four-factor model (Sharing Expertise, Sharing Leadership, Supra-Practitioner, Principal Selection), though subsequent adaptations have identified alternative structures.

The TLI demonstrates moderate to strong reliability, with the original study reporting a Cronbach's alpha of 0.85 for the overall scale. However, subscale reliability varies: localized validations in Malaysia and China revealed weaker consistency for factors like Skills ($\alpha = 0.66$) and Principal Selection (α as low as 0.25). Structural validity studies, including exploratory factor analyses (EFA), identified three-factor models (e.g., Knowledge, Skills, Values) in non-Western contexts, with cumulative variance explaining up to 67.69% of the data.

Perceived collective teacher efficacy scale

The Perceived Collective Teacher Efficacy Scale, developed by Skaalvik and Skaalvik (2007), is a seven-item unidimensional instrument designed to assess educators' perspectives of their faculty's shared potentials to foster learning and collaborate effectively. It employs a five-point Likert scale (ranging from False to True) to evaluate beliefs about instructional competence, student motivation, classroom management, meeting student requirements, and building a supportive atmosphere. A sample item includes: "*Teachers in this school successfully address individual pupils' needs.*" The scale demonstrates moderate reliability, with the original study reporting a Cronbach's alpha of 0.79 for the unidimensional structure. While structural validity is not explicitly detailed in the provided sources, its alignment with broader collective efficacy frameworks (e.g., Bandura's 1993 group-level efficacy theory) suggests conceptual coherence.

Procedure

This correlational study aims to explore the relationships among teacher leadership, collective teacher efficacy, and teachers' psychological well-being within a sample of Iranian EFL teachers. At the outset, informed consent was obtained from all respondents, guaranteeing the confidentiality and anonymity of their information. Furthermore, respondents were clearly aware of their liberation to retreat from the study without confronting any contrary consequences. The data collection process began with the distribution of the links of three validated self-report scales corresponding to the variables under investigation through online platforms such as Telegram and WhatsApp in the spring of 2023. Respondents were requested to complete all items in the online version of the surveys for ease of data collection.

The collected data from the scales were analyzed employing standard multiple regression statistics in SPSS 23. The first step involved running preliminary analysis including identifying and addressing any missing data and outliers. After ensuring that all data were appropriate and assumptions of multiple regression were met, a multiple regression analysis was run to test the hypothesized relationships among the study's constructs. Standard multiple regression was employed to enter predictors into the regression model, as no hierarchy of importance had been established for the predictors (Field, 2013). Additionally, given the observed correlations between certain variables, particularly teacher leadership and collective teacher efficacy, multicollinearity was checked using tolerance and variance inflation factors (VIFs). A VIF of less than 10 and a tolerance greater than 0.1 indicated no violation of the multicollinearity assumption (Field, 2013). The model summary and standardized beta coefficients were interpreted to identify significant predictors. Part correlation coefficients were also utilized to assess the contribution of each variable to the total R-squared (Pallant, 2016). Outliers,

normality, linearity, homoscedasticity, and the independence of residuals were thoroughly examined. The Normal Probability Plot (P-P) of the Regression Standardized Residual and the scatter plot indicated no significant deviations from normality and confirmed the absence of outliers.

Results

The present study intended to investigate the way teacher leadership and collective efficacy can predict teacher well-being. To address this question, descriptive statistics, Pearson correlation and multiple regression were computed. Table 1 presents the descriptive statistics for all variables included in the study: teacher well-being (TWell-being), collective teacher efficacy (CTEfficacy), and teacher leadership (TLeadership). The mean score for teacher well-being was 102.77 (SD = 13.965), indicating a generally positive level of well-being among the participants. The mean scores for collective teacher efficacy and teacher leadership were 25.65 (SD = 4.774) and 46.76 (SD = 8.092), respectively, suggesting moderate levels of these constructs within the sample. Skewness and kurtosis values were within acceptable ranges, indicating a relatively normal distribution of the data (Table 1).

Table 1

Descriptive Statistics for Teacher Well-Being, Collective Efficacy, and Leadership

Variables	Min	Max	M	SD	Skewness	Kurtosis
T Well-being	65	125	102.77	13.965	-.598	.175
CT Efficacy	13	35	25.65	4.774	-.362	-.009
T Leadership	21	63	46.76	8.092	-.414	.734

The correlations between teacher well-being, collective teacher efficacy, and teacher leadership are displayed in Table 2. Teacher well-being showed a moderate positive correlation with collective teacher efficacy ($r = .43$, $p < .05$), suggesting that higher perceptions of collective efficacy are associated with greater psychological well-being among teachers. Teacher leadership also correlated positively with both teacher well-being ($r = .24$, $p = .06$) and collective teacher efficacy ($r = .44$, $p < .05$). These correlations indicate that while collective teacher efficacy demonstrates a statistically significant positive relationship with teacher well-being, the association between teacher leadership and well-being falls just short of significance ($p = .06$). Both constructs show positive relationships with well-being, though collective teacher efficacy demonstrates a stronger association.

Table 2

Correlations between Teacher Well-being, Collective Efficacy, and Leadership

Variables	1.	2.	3.
1. T Well-being	.		
2. CT Efficacy	.43*	.	
3. T Leadership	.24	.44*	.

Note: *Correlations are significant at $p < .05$.

Collective teacher efficacy and teacher leadership as predictors of teacher well-being

A multiple regression analysis was employed to examine the predictive power of teacher leadership and collective teacher efficacy on teacher well-being. The results are summarized

in Table 3. The overall model was statistically significant ($F(2,83) = 9.76, p < .01$), indicating that the combination of teacher leadership and collective teacher efficacy significantly predicts teacher well-being. The model explained approximately 19% of the variance in teacher well-being ($R^2 = .19$), suggesting that these two predictors contribute meaningfully to understanding teachers' psychological well-being.

Table 3

Model Summary for the Collective Teacher Efficacy and Teacher Leadership as Predictors of Teacher Well-being

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436 ^a	.190	.171	12.716

a. Predictors: (Constant), T Leadership, CT Efficacy

b. Dependent Variable: T Well-being

To evaluate the individual contributions of teacher leadership and collective teacher efficacy to predicting teacher well-being, regression coefficients were analyzed (Table 4). Among the two predictors, only collective teacher efficacy was identified to be statistically significant ($\beta = .405, t = 3.679, p < .01$). Teacher leadership did not significantly contribute to predicting teacher well-being ($\beta = .063, t = .576, p > .05$). The part correlation values indicated that collective teacher efficacy uniquely explains approximately 13% of the variance in teacher well-being, while teacher leadership explains only about .3%. No multicollinearity concerns were detected based on tolerance and VIF values.

Table 4

Teacher Well-being Coefficients

Model	B	t	Sig.	Part Correlation	Tolerance	VIF	
1	(Constant)	7.331	.000				
	CT Efficacy	.405	3.679	.000	.363	.806	1.241
	T Leadership	.063	.576	.566	.057	.806	1.241

This line of research sought to understand the extent to which teacher leadership and collective teacher efficacy together predict teacher psychological well-being. The results indicate that collectively, these two predictors explain approximately 19% of the variance in psychological well-being among teachers. Furthermore, this research intended to determine if collective teacher efficacy is a better predictor of psychological well-being than teacher leadership. The outcomes demonstrate that collective teacher efficacy uniquely explains approximately 13% of the variance in psychological well-being, whereas teacher leadership accounts for only about .3%. This confirms that collective teacher efficacy is a stronger predictor of teacher well-being than teacher leadership in this sample.

To sum up, the findings reveal that while both collective teacher efficacy and teacher leadership are positively correlated with psychological well-being, only collective teacher efficacy significantly predicts it when considered alongside teacher leadership in a regression model. These results underscore the importance of promoting a culture of collaboration that uplifts educators collectively to enhance their psychological health.

Discussion

This study aimed to probe the predictive power of teacher leadership and collective teacher efficacy on teacher well-being. Additionally, it attempted to identify which of the two independent variables served as a stronger predictor. To achieve this, a multiple regression analysis was run to evaluate the hypothesized model. The proposed model was found to be statistically significant; The predictors (teacher leadership and collective teacher efficacy) addressed 19% of the variance in the dependent variable, teacher well-being ($R^2 = .19$), which is a noteworthy amount. This result aligns with previous research that has reported similar relationships (Krishnan, 2001, 2012; Nielsen & Daniel, 2012; Sadeghi & Pihie, 2012). Prior studies have suggested that collective efficacy mediates the relationship between transformational leadership style (Ross & Gray, 2004) and both effectiveness and well-being (Krishnan, 2012; Tabbodi & Prahallada, 2009). Overall, this finding is consistent with the multifaceted nature of well-being due to its structure which is built upon various individual, contextual, and institutional factors (Kumari & Thapa, 2025).

Among the two variables, collective teacher efficacy emerged as the only strong predictor ($\beta = .405$; $p < .01$), uniquely explaining 13 percent of the variance. This finding is supported by various studies (e.g., Fathi & Savadi, 2018; Klassen & Chiu, 2011; Viel-Ruma et al., 2010). For instance, Herrera et al. (2022) explored the impact of organizational justice and collective efficacy on the subjective well-being of Chilean teachers, demonstrating that views on collective efficacy played a key role in elucidating well-being as an inherent factor. Similarly, Fathi et al. (2020) investigated a structural model involving self-efficacy, collective efficacy, and psychological well-being among Iranian EFL teachers. They found that both self-efficacy and collective efficacy uniquely contributed to psychological well-being, although teacher self-efficacy was a stronger predictor than collective teacher efficacy. This finding might contribute to explaining the relatively low predictive power of the model in this study. Also, the predictive ability of collective teacher efficacy aligns with Bandura's (1991) Social Cognitive Theory, which highlights the effect of collective practice in achieving common goals. Teachers who believe in their power of their team in overcoming challenges feel more advocated, efficient, and adept-essential factors of professional well-being (Nassir & Benoliel, 2024).

In contrast, the predictive power of teacher leadership was found to be insignificant ($\beta = .063$; $p > .01$) which may show the variations in the definition and experience of leadership roles across diverse school settings (Cordova et al., 2024). This aligns to some extent with Woo et al. (2022), who discussed that not all aspects of teacher leadership are related to teachers' psychological well-being. In fact, they discuss that certain effects of engaging in teacher leadership—such as increased workload or strained relationships—may overshadow the positive emotions associated with experienced teacher leaders' practices and hence diminish the positive psychological advantages connected with leadership responsibilities. It is probable that in some cases, poorly advocated or vaguely defined leadership tasks may turn into stressors rather than boosters of well-being. They also noted that not only the practices of teacher leaders but also their surrounding context could correlate with teacher well-being. Factors such as collaboration with other teachers, establishing a shared vision and goals based on that vision, facilitating learners' reflection through coaching, and building partnerships across educational settings—integral to teacher leadership—may relate to teachers' psychological well-being (Mart et al., 2015; Patti et al., 2015). Although our study revealed that this correlation is not

statistically significant, its potential existence should not be overlooked, especially given that collective teacher efficacy is another predictor in the model. This finding that merely collective teacher efficacy appeared as a direct predictor proposes that the advantages of leadership might be mediated through its effect of collective mindsets, rather than directly influencing well-being. Sudha et al. (2016) found that one style of teacher leadership (*Laissez-faire*) negatively impacted teachers' well-being. Furthermore, this result can be supported by Ross and Gray (2006) as well as Taggar and Seijts (2003), who posited that collective teacher efficacy mediates the relationship between teacher well-being and leadership, indicating that not all leadership styles may adequately influence teachers' psychological well-being.

One other reason collective teacher efficacy appeared as a more powerful predictor of teacher well-being than teacher leadership may lie in its direct effect on educators' motivation, emotional endurance, and sense of collective purpose. A collective belief system provides an atmosphere of trust and connection which can protect against prevailing stressors in the teaching profession (Ghasemi, 2025). On the other hand, diffusing nature of teacher leadership in practice, not transparent definition of leadership responsibilities, and lack of universally supported leadership styles may lead into educators' workload and affect their well-being (Wenner & Campbell, 2017). In educational settings where a strong culture of teamwork is fostered, have supportive leadership, and practice well-organized professional development programs, collective efficacy is more probable to flourish (Loughland & Ryan, 2020). Conversely, in schools with overly hierarchical leading style, teacher leadership may come across as burdensome or superficial (Song et al., 2023). As a result, while leadership may affect indirectly well-being –particularly through strengthening collective efficacy- its effects might be too variable or reliant on context to be assumed as a strong standalone predictor. This reflects that attempts aimed at improving teacher well-being can prove more efficient if they concentrate on constructing a shared sense of efficacy rather than merely expanding leadership responsibilities.

This study also suggests a correlation between the predictors in the model, specifically teacher leadership and collective teacher efficacy ($r = .44$) which reinforces the interdependence of these factors. This correlation aligns with findings from previous studies in the literature (Liu, 2021; Derrington & Angelle, 2013; Angelle & Teague, 2014; Fathi et al., 2020). Chen and Bliese (2001) indicated that more positive and engaging leadership is linked to higher levels of collective efficacy among followers. Angelle and Teague (2014) also identified a strong correlation between teacher leadership and collective efficacy. Given that this study was executed in a pedagogical environment where teamwork is essential, leadership often involves supporting team members to achieve goals through collaborative decision-making practices, which is central to collective efficacy (Maddux, 2002).

Higher mean scores in collective teacher efficacy suggest that teachers are committed to fostering student achievement. Similarly, higher mean scores in teacher leadership indicate a tendency among teachers to assist their colleagues and share innovative instructional ideas through professional development. Consequently, a stronger sense of collective efficacy is linked to an increased level of teacher leadership (Angelle & Teague, 2014). While this study cannot establish a causal link, it is evident that teachers who exhibit higher levels of teacher leadership in their educational environments also demonstrate greater collective efficacy among their colleagues.

Findings of this study contribute to the increasing literature that instead of attributing teacher well-being to merely personal factors, places it within relational and organizational frameworks. The results reinforce the idea that well-being is structured socially within educational settings and influenced significantly by relationships among colleagues, shared objectives, and a collective sense of empowerment (Hascher et al., 2021). This viewpoint supports distributed and transformational leadership models, which highlight developing environments that empower all the members instead of relying on top-down leading models (Yongli et al., 2025). Nevertheless, it is reflected that assuming leadership as an always-beneficial-force might be misleading. This requires a nuanced consideration of effective and appropriate leadership styles for every specific group of teachers. As for the limitations, using cross-sectional design limits the power of drawing causal conclusions (Kesmodel, 2018). In this case, longitudinal studies would better unveil the directional link of these constructs (Wiedermann et al., 2020). Moreover, self-reported data may have introduced bias and the particular cultural and educational setting of the participants may restrict the generalizability of the results (Scott & Balthrop, 2021). However, some practical implications can be suggested for educators, school leaders, and policymakers. Improving collective teacher efficacy should be a key focus, advocated by structured collaborative strategies like professional learning communities (PLCs), co-teaching models, and common planning efforts. Educational settings that prioritize joint decision-making, constructive communication, and reciprocal accountability are more probable to build collective agency (Harianto, 2024). This in turn can foster instructional efficiency and teacher well-being. Additionally, team-based and context-sensitive approaches should be adopted for leadership development programs focusing on trust-building, improving collaboration, and tailoring leadership roles to teachers' strengths and school requirements. School leaders should also find and mitigate the probable emotional and workload requirements related to leadership responsibilities by affording sufficient support systems. Looking ahead, future studies could find the mediating roles of factors like school climate, administrative leadership, and teacher autonomy in the connection between leadership, collective efficacy, and well-being. While qualitative approaches provide deeper understanding of how teachers perceive leadership and collaboration in practical settings, longitudinal research can also monitor changes in these constructs and provide richer insights into their lasting influences on teacher retention and professional satisfaction.

Conclusion

This research explored the predictive power of collective teacher efficacy and teacher leadership on teacher well-being, building on existing literature that highlights the significance of these factors in education. Guided by hypotheses positing a positive influence of teacher leadership on collective beliefs (Angelle & Teague, 2014), the role of teacher leadership in fostering supportive school cultures to enhance well-being (Cherkowski, 2018), and the centrality of collective efficacy in understanding well-being (Herrera et al., 2022), we proposed that these constructs are interrelated and contribute to teacher well-being.

Multiple regression results confirmed the statistical significance of the hypothesized model, demonstrating a predictive power of 19%. While this outcome supports the interconnectedness of teacher leadership and collective teacher efficacy with teacher well-being, our results underscored the critical and singular role of collective teacher efficacy in predicting teacher

well-being. In contrast, we did not find a strong correlation between teacher leadership and teacher well-being, a finding that aligns with research suggesting that the relationship between teacher leadership and well-being is complex and multifaceted (e.g., Woo et al., 2022). The restricted predictive power of teacher leadership in our model may be attributed to several factors, including contextual nuances and specific teacher characteristics. As Sudha et al. (2016) and Ross and Gray (2006) suggest, if teachers feel unsupported, teacher well-being and psychological states can diminish, thereby affecting not only their performance, but even the collective atmosphere of the organization, to a point of creating a negative impact. Our study lends support to this complexity. Therefore, for policies and practices aimed at enhancing teacher's efficacy, policymakers should seek to improve both professional development, collaborative performance, the enhancement of both team efforts and the personal performance of teachers to foster an ever-growing cycle of excellence in schools and its communities (Capone et al., 2019).

Implications of the Study

The findings emphasize the critical role of collective teacher efficacy in predicting teacher well-being. Educational leaders and teacher trainers should focus on fostering this construct to enhance both teacher well-being and student outcomes. To build collective teacher efficacy, schools can implement strategies such as mastery experiences (e.g., team-based problem-solving and shared instructional planning), vicarious learning (e.g., peer observations and sharing best practices), and supportive leadership (e.g., creating conditions for collaboration and fostering resilience). These strategies not only boost teachers' perceptions of their collective capacity but also foster a positive school culture that prioritizes both teacher and student success. Educational contexts with high collective efficacy are more probable to demonstrate inclusive practices, higher expectations for learners, and greater effort toward achieving challenging goals.

While teacher leadership did not appear as a strong predictor of well-being in this study, its correlation with collective teacher efficacy suggests it acts as a key factor in fostering collaborative environments. Teacher leadership involves empowering educators to take initiative in decision-making, mentoring peers, and contributing to school-wide improvements. Schools can maximize its impact by offering leadership development programs focused on instructional leadership skills, establishing recognition systems to acknowledge teachers' contributions, and encouraging collaborative decision-making to ensure educators' voices shape school policies. These initiatives can strengthen the link between leadership and collective efficacy by positioning teacher leaders as catalysts for fostering teamwork and shared accountability.

Limitations and Suggestions for Further Research

Although this study provides beneficial insights into the relationship between teacher leadership, collective teacher efficacy, and teacher well-being, it is crucial to consider certain limitations. A primary limitation stems from the study's reliance on quantitative measures, which inherently limits the depth of understanding regarding the complex dynamics between these constructs. To address this, future research should incorporate qualitative methods, like in-depth interviews and classroom observations, to provide richer insights into teachers' lived

experiences and their nuanced perspectives on the interplay between leadership, efficacy, and well-being. This will allow exploration of the underlying mechanisms through which teacher leadership and collective teacher efficacy influence well-being, providing greater contextual understanding.

Another limitation arises from the fact that our model accounted for only 19% of the variance in teacher well-being. While this establishes a statistically significant relationship, it indicates that a substantial portion of the variance remains unexplained. As such, future research should focus on refining the existing model by exploring potential mediating or moderating factors that influence the link between teacher leadership, collective teacher efficacy, and well-being. This could involve examining how other factors such as school context, specific leadership behaviors, or individual teacher characteristics might strengthen or weaken these associations. A further limitation is the specific EFL context of Iran, which might restrict the generalizability of the findings. To address this, future research should replicate this study in diverse cultural and pedagogical contexts to determine the extent to which these relationships hold true across different contexts. By addressing these limitations, future research is able to build upon the foundation laid by this study and foster a more comprehensive understanding of the factors influencing teacher well-being.

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Ethics Declarations

All procedures performed in this study were in accordance with the ethical standards of the national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards

Competing Interests

No conflict of interest is reported for this study

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