PRINCIPALS' AUTHENTIC LEADERSHIP AND TEACHERS' WORK ENGAGEMENT IN THE UAE SCHOOLS: MULTI-MEDIATING EFFECTS OF TEACHERS' WELL-BEING DIMENSIONS AMID EDUCATIONAL REFORM

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Abstract: Globally, the sustainability of teacher work engagement has become a pressing concern amid ambitious educational reforms, increasing professional demands, and rising teacher turnover, particularly in the UAE. This study investigates how principals' authentic leadership shapes teachers' work engagement through the mediating influence of multidimensional well-being. Drawing upon Conservation of Resources (COR) theory and the Job Demands–Resources (JD–R) model, the research tested both direct and mediated relationships among authentic leadership, teachers' psychological, social, workplace, and subjective well-being, and their engagement. Data from 422 teachers in the UAE first-cycle schools across ten Emirates were analyzed using partial least squares structural equation modeling (PLS-SEM). The findings revealed a fully mediation model: authentic leadership did not directly predict teacher engagement but indirectly enhanced it through all four dimensions of well-being. Specifically, principals who demonstrated self-awareness, relational transparency, and moral integrity fostered teachers' psychological, social, workplace, and subjective well-being, which in turn strongly stimulated their engagement. These results highlight well-being as a crucial mechanism linking leadership to sustained engagement under reform-intensive conditions. The study enriches leadership and well-being research by illustrating the enabling function of authentic leadership as a contextual resource provider rather than a direct driver of engagement. Practically, the findings underscore the importance of integrating authentic leadership practices with comprehensive well-being initiatives in leadership development programs and school policies to strengthen teacher engagement and educational reform outcomes.

Keywords: authentic leadership; teacher well-being; psychological well-being; social well-being; workplace well-being; subjective well-being; work engagement.

1. INTRODUCTION

Education systems worldwide are experiencing profound transformations as they seek to enhance learning outcomes and equip future generations with the skills needed to address increasingly complex challenges (Xu & Pang, 2024). Among the institutional variables subject to reform, evidence consistently indicates that the success of educational change depends heavily on teacher motivation and engagement (Alazmi & Al-Mahdy, 2022). Teachers are not only implementers of reform but also central agents in translating policy into effective classroom practice (Kusmawan et al., 2025). Within this shifting landscape, school leadership has emerged as a decisive factor influencing teachers' commitment and engagement (Alazmi & Al-Mahdy, 2022; Xu & Pang, 2024). In the United Arab Emirates (UAE), the education sector has been undergoing sustained and far-reaching reform over the past two decades (Ibrahim & Aljneibi, 2022), reflecting the nation's strategic ambition to transition toward a knowledge-based economy (Baroudi & Abi Haidar, 2025). Guided by the UAE Vision 2031, these reforms have emphasized curriculum modernization, the cultivation of global competencies, the integration of digital

technologies, and the introduction of performance-based teacher evaluations (UAE-MOE, 2023). While such initiatives aim to align the UAE's education system with international benchmarks, they have also intensified job demands, particularly for early-cycle teachers (grades 1–4), who carry the critical responsibility of establishing foundational learning. These heightened demands, though essential for national progress, place substantial pressure on teachers, with potential implications for their professional commitment and work engagement (Ibrahim & Aljneibi, 2022; Mizyed & Eccles, 2023).

With a teaching workforce of approximately 22,214 teachers, 17,295 female and 4,919 male across 196 public First-cycle schools (UAE71, 2023; UAE-MOE, 2023), the UAE faces persistently high rates of teacher attrition and a shortage of highly qualified educators (Rai & Beresford-Dey, 2023). National turnover rates are estimated to range between 20% and 60%, among the highest globally (Mohammad & Borkoski, 2024). According to the 2019 Teaching and Learning International Survey (TALIS) (OECD, 2019), nearly half of novice teachers and more than one-third of experienced teachers in the UAE reported changing schools, compared to 22% and 19%, respectively, in other OECD countries (Mohammad & Borkoski, 2024). In response, policymakers have introduced initiatives to enhance teachers' well-being, professional recognition, and social standing in an effort to strengthen their engagement with the profession (Alhameli & Upadhyay, 2023). However, the UAE's ambitious education reforms and cultural context have imposed specific demands that, in some schools, have contributed to lower levels of work engagement (Al Samkari & David, 2019; Mohammad & Borkoski, 2024). Research indicates that many teachers experience growing psychological strain, including reduced job satisfaction, emotional exhaustion, and burnout, as they adapt to the rapid pace of reform (Alazmi & Al-Mahdy, 2022; Siyam et al., 2025). These conditions not only diminish teachers' engagement but also drive some to exit the profession altogether. Within the Arab cultural context, teachers are traditionally expected to "dedicate themselves to teaching like a candle," a metaphor that conveys noble ideals of self-sacrifice but can impose unrealistic expectations, leaving teachers particularly vulnerable to attrition.

Recent data further illustrate this challenge. A Gallup report (2025) shows that overall work engagement in the UAE stands at just 26%, with employee engagement declining by three percentage points between 2021 and 2024. These figures highlight the urgency of addressing teacher engagement, especially in primary schools where foundational learning takes place. Teachers' work engagement, defined by vigor, dedication, and absorption in their work, is widely recognized as a critical driver of educational quality (Nwoko et al., 2025). Engaged teachers play a decisive role in shaping student outcomes and academic performance (Kusmawan et al., 2025), while their well-being supports sustained professional growth and resilience (Zhou et al., 2024). In the context of ongoing educational reforms in the UAE, sustaining teacher commitment and engagement is not only essential for individual schools but also central to the long-term success of the education system (Al Samkari & David, 2019; Ibrahim & Aljneibi, 2022).

Effective school leadership is strongly associated with teacher engagement, with transformational, instructional, and distributed leadership models being the most frequently examined in the literature (Karacabey et al., 2025; Liu et al., 2021). Transformational leadership motivates teachers to exceed expectations by fulfilling higher-order needs, cultivating trust, and nurturing organizational purpose (Yu & Jang, 2024), thereby enhancing engagement and alignment with long-term goals (Noor et al., 2024; Nurtjahjani et al., 2021; Sultana et al., 2024). Instructional leadership promotes engagement by pointing out the quality of teaching (Kilag & Sasan, 2023), strengthening teachers' belief in their capacity to influence student success (Zahed-Babelan et al., 2019), and expanding their teaching competencies (Kilag & Sasan, 2023). Distributed leadership, by encouraging collaborative decision-making among school staff and stakeholders (Samancioglu et al., 2020), fosters collective ownership (Sarong, 2024) and has been shown to improve teacher work engagement (Tucaliuc et al., 2025). While these approaches focus largely on extrinsic motivation and performance outcomes, authentic leadership places greater emphasis on relational and intrinsic dimensions (Xu & Pang, 2024), potentially offering a more intricate perspective on teacher engagement within the UAE's educational context.

Unlike the dominant leadership models, which emphasize motivation and engagement in alignment with organizational goals, authentic leadership emphasizes self-reflection through self-awareness and an internalized moral perspective (Iqbal et al., 2018). It also prioritizes relationship-building through relational transparency and trust (Xu & Pang, 2024). Authentic leaders embody positive virtues and psychological strengths, fostering mutual trust, self-development, and transparent interactions while serving as role models for ethical conduct (Nübold et al., 2020). Although authentic leadership is sometimes treated as conceptually distinct, meta-analytic evidence suggests that positive leadership styles, including transformational, authentic, empowering, ethical, and servant leadership, share important commonalities and can produce similar effects on work engagement (Decuypere & Schaufeli, 2021). Importantly, the cultural values of the UAE, which emphasize moral purpose, honesty, and integrity, align strongly with authentic leadership principles and align with concepts such as Islamic work ethics and Islamic leadership (Alhameli & Upadhyay, 2023). Authentic leadership may therefore be particularly salient in this context, functioning as a developmental form of positive leadership that incorporates ethical dimensions (Urooj et al., 2024). Prior research demonstrates that ethical leadership is closely associated with positive teacher attitudes and behaviors (Almutairi et al., 2025; Polat et al., 2024), and in the educational reform context, principals' authentic leadership (PAL) has been shown to strengthen teacher engagement by enhancing professional self-efficacy, as evidenced in Kuwait (Alazmi & Al-Mahdy, 2022). These results underscore the significance of

examining how PAL supports teacher engagement in the UAE's primary schools, where sustained reform and transformation have characterized the education system for more than two decades.

Existing research indicates that the influence of principals' leadership on teacher engagement is often mediated by workplace factors, yet relatively little attention has been paid to teachers' psychological resources (Herdian et al., 2023; Shao et al., 2025). This gap is particularly problematic in early-cycle schools, where teachers face heightened emotional demands (Cuadrado et al., 2024; Mulyani et al., 2021). Although direct evidence on the prevalence of anxiety and stress among UAE teachers remains limited, international studies show that teachers frequently experience chronic stress stemming from excessive demands (Mizyed & Eccles, 2023), leading to emotional exhaustion and burnout (Einav et al., 2024; Holmström et al., 2023). Such findings underscore the relevance of examining teacher well-being as a potential mechanism linking leadership to engagement.

Teacher well-being, encompassing psychological, social, workplace, and subjective dimensions, is increasingly recognized as a critical mediator of work-related outcomes. Psychological well-being, often associated with professional efficacy and self-confidence (Gilar-Corbi et al., 2024; Okçu et al., 2025), is vital for teachers' health, satisfaction, and instructional quality. Social well-being reflects the quality of relationships and a sense of belonging within the school community (Siyam et al., 2025). Workplace well-being encompasses teachers' perceptions of their work environment, including social, emotional, physical, and economic factors (Sun et al., 2022). Subjective well-being, encompassing life satisfaction and happiness, reflects individuals' overall evaluation of their lives (Karakus et al., 2024). These dimensions of well-being can function as personal resources that enable teachers to manage job demands and sustain engagement (Adil & Kamal, 2020; Jia et al., 2022; Manasia et al., 2020). Moreover, Almutairi et al. (2025) and Xu and Pang (2024) revealed that PAL has a positive effect on teachers' well-being. Empirical studies further suggest that well-being mediates the relationship between leadership styles and organizational outcomes such as commitment and performance (Iqbal et al., 2018; Kohnen et al., 2024; Xu & Pang, 2024).

Guided by the Conservation of Resources (COR) theory and complemented by the Job Demands–Resources (JD-R) model, this study investigates the direct impact of principals' authentic leadership on teacher work engagement in first-cycle schools in the UAE, within the context of educational reform. More critically, it explores the mediating roles of teachers' psychological, social, workplace, and subjective well-being in this relationship. By examining these pathways, the study contributes to a deeper understanding of how authentic leadership can cultivate a resilient, engaged, and high-performing teaching workforce in an environment characterized by rapid and ongoing change.

Based on the foregoing, this study seeks to answer the following research questions:

1. To what extent does principals' authentic leadership influence teachers' work engagement in the UAE's first-cycle schools?
2. Do teachers' psychological well-being, social well-being, workplace well-being, and subjective well-being serve as mediators in the relationship between principals' authentic leadership and teachers' work engagement in the UAE's first-cycle schools?

2. LITERATURE REVIEW AND HYPOTHESIS BUILDING

2.1 Theoretical Framework

Integrating the Conservation of Resources (COR) theory and the Job Demands–Resources (JD-R) model provides an academically rigorous framework for examining the interrelation of authentic leadership with teachers' work-related well-being and work engagement amidst the pressure of education reform within the UAE. Education reforms are typically experienced as increasing the demands at the workplace, and they exert immense pressure upon teachers who are adjusting to evolving institutional demands and ensuring effective work output (Xu & Pang, 2024). In such a demanding situation, authentic leadership by school principals emerges as a chiefstay job resource—working not only as a leadership approach but also as an organizational factor for nullifying the harmful effect of the demands at the workplace and, simultaneously, reinforcing teachers' motivation (Adil & Kamal, 2020; Alazmi & Al-Mahdy, 2022).

Authentic leadership (AL) is described along four dimensions: "self-awareness, relationship transparency, balanced information processing, and an internalized morality" (Adil & Kamal, 2020; Walumbwa et al., 2008). These dimensions transcend administrative practice and directly impact teachers' personal resources, most notably their well-being (Xu & Pang, 2024). According to the COR framework, authentic leadership facilitates the preservation and building of resources, and the JD-R model underscores the manner through which such resources underlie motivational processes leading to work engagement (Adil & Kamal, 2020; Demerouti, 2025). Teachers' well-being, framed within four related domains, centrally informs the process (Pradhan & Hati, 2022; Xu & Pang, 2024). Psychological well-being is fortified through authentic leaders who engender optimism, resilience, and self-efficacy, such that teachers can more effectively buffer against the impact of stress and prolong positive affect (Els & Jacobs, 2023; Naiboğlu & Bilgivar, 2021). Social well-being is bolstered through the openness and trust that fortify collegiate relations, organizational trust, and group commitment (Shie & Chang, 2022; Siyam et al., 2025). Workplace well-being benefits when authentic leaders facilitate fairness, justice, and happiness at work and promote an organizational climate conducive to professional development (Adil & Kamal, 2020; Xu & Pang,

2024). In the same way, subjective well-being, with hedonic satisfaction and eudaimonic purpose, is enabled through authentic leadership, enabling significant work experience and life satisfaction (Farid et al., 2022).

Together, these manifestations of well-being enable teachers' coping with rising demands at work and aid the three dimensions of engagement: vigor, dedication, and absorption (Adil & Kamal, 2020; Sypniewska et al., 2023). The mediational role of well-being outlines the mechanism whereby authentic leadership exerts an indirect influence on causing engagement through augmenting teachers' psychological resources, social connections, work satisfaction, and life satisfaction (Adil & Kamal, 2020; Baquero, 2023; Farid et al., 2022; Wirawan et al., 2020). COR theory underscores the motivational need for maintaining and cumulative resources, and the JD-R model spells out the process whereby authentic leadership, as an instrumental job resource, combines with demands to yield elevated personal resources that translate into stronger engagement outcomes.

This multi-dimensional framework is particularly pertinent for the UAE, where prospective education reforms prioritize the type of leadership accountable for teachers' welfare and motivation (Siyam et al., 2025). Figure 1 provides the conceptual model guiding the present work.
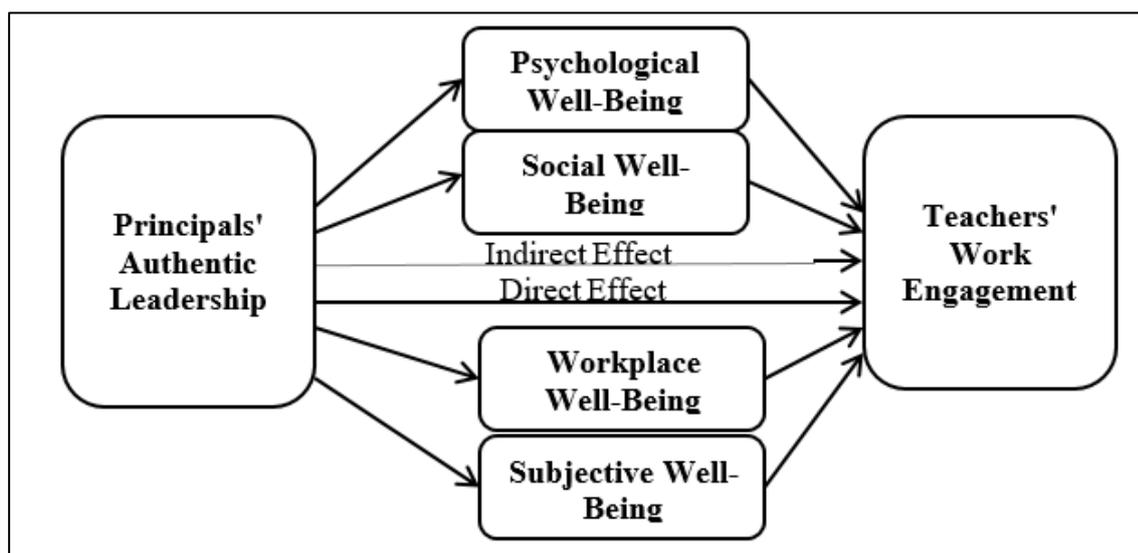

Figure 1: The Conceptual Model

2.2 Hypothesis Building
2.3.1   Authentic Leadership (AL) and Teacher Work Engagement(TWE)

Authentic leadership is among the primary paradigms of leadership that encourages psychological wellness and organizational effectiveness (Xu & Pang, 2024). Luthans and Avolio (2003) defined it as a development-oriented process founded upon self-knowledge and positive regulation of behavior that facilitates leaders and followers achieving substantial self-development. Walumbwa et al. (2008) outlined it in much greater detail as four primary dimensions, self-knowledge, balanced processing, relational transparency, and internalized moral focus, that characterize authentic leaders and allow them to establish credibility, trust, and positive relational connections. In school education, those are particularly vital, as school principals who are authentic leadership exemplars are capable of fostering school cultures where there is motivation, engagement, and commitment amongst the instructors (Alazmi & Al-Mahdy, 2022; Shao et al., 2025; Xu & Pang, 2024).

Work engagement, as measured by the dimensions of vigor, dedication, and absorption, is an overall determining factor of both teacher performance and student achievement (Alazmi & Al-Mahdy, 2022; Wang et al., 2024). In the framework of the UAE education reforms, teaching professionals face increased expectations, rapid policy changes, and elevated levels of accountability. In such a climate, authentic leadership is an indispensable resource, offering clarity, consistency, and moral guidance (Rai & Beresford-Dey, 2023). In fostering decision-making participation (balanced processing) and open and trustworthy relationships (relational transparency) with the people on the ground, authentic principals increase teachers' resilience, purpose, and motivation (Al Samkari & David, 2019; Xu & Pang, 2024). Previous research is a clear indication that authentic leadership is one of the best predictors of organizational employee engagement (Baquero, 2023). Empirical research offers much evidence for such a relationship existing in numerous settings. For instance, one study in Kuwait established positive effects of authentic leadership on teacher engagement via occupational self-efficacy (Alazmi & Al-Mahdy, 2022), while Herdian et al. (2023) established direct and indirect effects through school climate and mediation via teacher efficacy. Başaran and Kiral (2020) established the predictive potential of balanced processing, while Indonesia (Niswaty et al., 2021) and Emirati (Al Samkari & David, 2019) research validated it as an accelerator of staff work performance and engagement. In general, the research points out authentic leadership as an overriding variable that influences teacher engagement, especially in reforming first-cycle UAE school settings. In response, the following hypothesis is introduced in the present study:

Hypothesis 1: Principals' authentic leadership has a positive and direct impact on work engagement for the UAE's first-cycle school teachers in the educational reform context.

2.3.2 The Mediating Roles of Teachers' Psychological, Social, Workplace, and Subjective Well-Being in the Educational Reform Context

Authentic leadership is a major contextual stimulus for promoting work engagement among teachers (Herdian et al., 2023; Shao et al., 2025); however, psychological resources are needed for developing work engagement of this kind (Alazmi & Al-Mahdy, 2022). Teacher well-being is gaining recognition as a multi-dimensional resource encompassing their perceptions regarding psychological, social, work-pace, and subjective components (Heng & Chu, 2023; Pradhan & Hati, 2022), which, in aggregate, form the basis of the motivational underpinnings of work engagement, comprised of vigor, dedication, and absorption, especially in situations wherein policy reforms exacerbate the challenges of educators (Greenier et al., 2021; Nwoko et al., 2025; Shu, 2022). According to Pradhan and Hati (2022) and Xu and Pang (2024), the well-being of teachers encompasses four interconnected dimensions, of which psychological well-being is a dimension of optimum functioning, including autonomy, sense of purpose in life, environmental mastery, and personal growth, encapsulating teachers' sense of meaning and capability in their professional work lives (Chan et al., 2021; Kamaruzaman & Surat, 2021). Social well-being highlights the sense of integration and contributions of educators within the school community, characterized by social acceptance, social trust, and coherence (Kaihoi et al., 2022). Workplace well-being encompasses context-related experiences of fairness, safety, manageable workload, recognition, and appropriate resources, which affect teachers' everyday assessments of work (Sun et al., 2022). Subjective well-being refers to general assessments of life, including life satisfaction and emotional balance, which widen the thought–action repertoire and resilience of teachers (Dreer, 2024; Fu et al., 2022). Although these dimensions are conceptually distinct, they interlink and synergistically interact so as to reflect educators' lived experience and functioning within professional and personal contexts.

Grounded in COR theory and the JD-R model, the different dimensions of well-being are conceptualized as a reservoir of personal and contextual resources that buffer the impact of strain and enhance teachers' energy and commitment to their professional roles (Dreer, 2023; Granziera et al., 2021; Shao et al., 2025). Empirical evidence suggests that each dimension of well-being contributes to work engagement through distinctive mechanisms, which become particularly salient in times of transformational change. For instance, psychological well-being generates vigor and dedication by fostering purpose, efficacy, and adaptive coping strategies (Heng & Chu, 2023; Greenier et al., 2021; Wang et al., 2024). Social well-being enhances collegial trust, cultivates supportive environments, and establishes positive social norms, thereby reducing uncertainty and enhancing work engagement (Kaihoi et al., 2022; Karkouti et al., 2022). Workplace well-being strengthens engagement by ensuring justice, safety, and the availability of resources, which enable teachers to be fully absorbed and to invest discretionary effort (Arnold & Rahimi, 2025; Hamzah et al., 2021; Ortan et al., 2021). Subjective well-being fosters cognitive flexibility, enhances adaptability, and cultivates persistence and motivation essential for work engagement (Dreer, 2024; Fu et al., 2022; Zhang et al., 2024). Within the UAE's first-cycle schools, where reforms have increased accountability, role expectations, and uncertainty (Ibrahim & Aljneibi, 2022; Siyam et al., 2025), teacher well-being plays a pivotal role. Higher well-being equips teachers to approach reforms positively, regulate emotions, and maintain focused effort, thereby strengthening their engagement. Based on this, the following hypotheses are proposed:

Hypothesis 2: Teachers' psychological well-being positively and directly predicts their work engagement under the educational reform context in the UAE's first-cycle schools.

Hypothesis 3: Teachers' social well-being positively and directly predicts their work engagement under the educational reform context in the UAE's first-cycle schools.

Hypothesis 4: Teachers' workplace well-being positively and directly predicts their work engagement under the educational reform context in the UAE's first-cycle schools.

Hypothesis 5: Teachers' subjective well-being positively and directly predicts their work engagement under the educational reform context in the UAE's first-cycle schools.

Authentic leadership is a crucial positive leadership style that emphasizes the importance of self-awareness, relational openness, balanced processing, and an internalized moral compass (Walumbwa et al., 2008). By developing positive emotion and the resources of psychological capacity, authentic leaders create a favorable environment of morality that promotes workers' skills of self-regulation and resilience (Yollu & Korkmaz, 2024). In the educational sector, AL produces teachers demonstrating increased adaptability and enhanced well-being, since their own emotional stability enables them to handle complex professional and personal challenges (Xu & Pang, 2024; Xu & Yang, 2024). Authentic principals foster freedom of expression, joint decision-making, and teacher recognition, which reduce pressure and fatigue and enable empowerment and inclusion, valuable conditions of higher well-being (Xu & Pang, 2024).

Empirical research substantiates these claims across diverse contexts. Drawing on the COR theory, Brunetto et al. (2024) demonstrated that AL fosters the well-being of employees in nonprofit organizations by enriching their psychological resources. Within educational settings, studies by Xu and Pang (2024) and Xu and Yang (2024) confirmed that AL enhances teachers' well-being during reform initiatives in Chinese primary schools, while Shi and Zhang (2024) reported similar findings among teachers in Taiwan. Collectively, these results underscore the

consistent positive influence of authentic leadership on employee well-being across different cultural and institutional environments.

In the context of first-cycle schools in the United Arab Emirates, where recent reforms have intensified accountability pressures and heightened uncertainty (Ibrahim & Aljneibi, 2022; Siyam et al., 2025), AL emerges as a critical factor in sustaining teachers' well-being across its multidimensional domains: psychological, social, workplace, and subjective. Authentic principles strengthen psychological well-being by cultivating psychological safety and resilience (Naiboğlu & Bilgivar, 2021; Zhang et al., 2021), reinforce social well-being through building trust and fostering collaborative networks (Shie & Chang, 2022), and advance workplace well-being by implementing supportive practices and allocating resources effectively (Adil & Kamal, 2020; Baquero, 2023). Moreover, they enhance subjective well-being by nurturing a positive organizational climate that promotes happiness and life satisfaction (Xu & Pang, 2024). These outcomes are essential not only for retaining qualified teachers but also for ensuring the success of educational reforms in the UAE's evolving school landscape (Ibrahim & Aljneibi, 2022; Siyam et al., 2025). Accordingly, the following hypotheses are proposed:

Hypothesis 6: Principals' authentic leadership positively and directly predicts teachers' psychological well-being under the educational reform context in the UAE's first-cycle schools.

Hypothesis 7: Principals' authentic leadership positively and directly predicts teachers' social well-being under the educational reform context in the UAE's first-cycle schools.

Hypothesis 8: Principals' authentic leadership positively and directly predicts teachers' workplace well-being under the educational reform context in the UAE's first-cycle schools.

Hypothesis 9: Principals' authentic leadership positively and directly predicts teachers' subjective well-being under the educational reform context in the UAE's first-cycle schools.

Building on hypotheses two through nine, we propose that principals' authentic leadership exerts not only a direct influence on teachers' work engagement but also an indirect effect through the mediating role of teachers' well-being—including psychological, social, workplace, and subjective dimensions. Although empirical studies explicitly examining this pathway remain limited, related evidence lends strong support to this proposition. For example, Baquero (2023) demonstrated that workplace well-being mediated the relationship between authentic leadership and work engagement among hotel employees in the United Arab Emirates. Similarly, Farid et al. (2022) confirmed that both hedonic and eudaimonic well-being positively mediated the link between authentic leadership and engagement in Pakistan's telecommunications sector. Within the educational context, Xu and Pang (2024) found that teachers' well-being mediated the association between authentic leadership and organizational commitment among primary school teachers in China.

Grounded in the JD-R model, authentic leadership—embodying self-awareness, balanced processing, relational transparency, and an internalized moral perspective—constitutes a vital job resource that strengthens teachers' psychological and contextual capacities (Shie & Chang, 2022; Xu & Pang, 2024). This resourceful leadership style is particularly significant in UAE primary schools undergoing reform, where accountability pressures and uncertainty are high (Alazmi & Al-Mahdy, 2022; Al Samkari & David, 2019). By fostering integrity, encouraging voice, and involving teachers in decision-making, authentic principals enhance multiple facets of well-being that, in turn, nurture teachers' self-efficacy, positive affect, and adaptive self-regulation. These processes activate the motivational pathway of engagement—manifested in vigor, dedication, and absorption (Alazmi & Al-Mahdy, 2022; Farid et al., 2022). Accordingly, teachers' well-being functions as a proximal conduit through which authentic leadership is translated into sustained engagement under reform pressures. Hence, the following hypotheses are advanced:

Hypothesis 10: Teachers' psychological well-being positively mediates the correlation between principals' authentic leadership and teachers' work engagement in the context of educational reform in the UAE's first-cycle schools.

Hypothesis 11: Teachers' social well-being positively mediates the correlation between principals' authentic leadership and teachers' work engagement in the context of educational reform in the UAE's first-cycle schools.

Hypothesis 12: Teachers' workplace well-being positively mediates the correlation between principals' authentic leadership and teachers' work engagement in the context of educational reform in the UAE's first-cycle schools.

Hypothesis 13: Teachers' subjective well-being positively mediates the correlation between principals' authentic leadership and teachers' work engagement in the context of educational reform in the UAE's first-cycle schools.

3. METHODS

3.1 Data Collection and Participants

The study data were obtained from 196 public first-cycle schools from the ten emirates of the UAE that cater to first-cycle learners (Grades 1–4). These are the bedrock of learners' character formation and are central pillars for cultivating foundational competencies in reading, writing, and numeracy while facilitating critical thinking and creativity. As such, they play a strategically pivotal role in the UAE's attempts at sustainable education development. Despite that, professionals at these schools are faced with mounting professional demands as well as those from society. The demographic profile of first-cycle centers is also reflective of the broader UAE environment, wherein expatriates constitute almost 89% of the total population. Studying teachers' work

engagement here therefore provides topical insights concerning their vigor, commitment, as well as their absorption amidst demands flowing from education reform.

A stratified random sampling technique was employed to ensure representativeness by dividing the population according to emirate and gender, followed by proportionate random selection within each stratum. Before data collection, ethical clearance was obtained from the relevant education authorities. Of the 500 questionnaires distributed, 422 valid responses were returned, resulting in an 84.4% response rate. Of the 500 questionnaires that were distributed, 422 valid answers were collected, giving a response rate of 84.4%. The sample was overwhelmingly made up of female educators (76.3%), of whom the majority were aged between 25 and 45 years. Nearly 90% of respondents had at least a bachelor's degree, while a majority indicated more than ten years of teaching experience. Table 1 offers further information about the spread of respondents across various emirates. Generally, the demographic profile of the sample roughly matches that of first-cycle UAE school teachers.

Table 1: The Respondents' Characteristics (n= 422)

Characteristics	Category	N	%
Gender	Male	100	23.7
	Female	322	76.3
	Total	**422**	**100**
Age Group	25-30 Year	87	20.6
	31-35 Year	56	13.3
	36-40 Year	87	20.6
	41-45 Year	80	19.0
	46-50 Year	74	17.5
	Over 50 Year	38	9.0
	Total	**422**	**100**
Education Level	Bachelor	287	68.0
	Diploma	44	10.4
	Master	81	19.2
	Doctorate	10	2.4
	Total	**422**	**100**
Teaching Experience	3-5 years	47	11.1
	6-10 years	66	15.6
	11-15 years	95	22.5
	16-20 years	103	24.4
	More than 20 years	111	26.3
	Total	**422**	**100**
Emirate Name	Abu Dhabi	83	19.7
	Sharjah	36	8.5
	Dubai	45	10.7
	Ajman	23	5.5
	AL Fujairah	55	13.0
	Ras Al Khaimah	43	10.2
	AL Ain	73	17.3
	AL Dhafra	30	7.1
	Sharjah / Eastern	28	6.6
	Umm Al Quwain	6	1.4
	Total	**422**	**100**

3.2 Measures

According to the conceptualized theoretical model, there are six key central constructs as shown in Figure 1. To warrant the validity and reliability of measurement, the study adopted psychometrically established scales that have been widely applied in past studies. Each of the constructs was operationalized by adopting a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), appropriately covering educators' perceptions of principals' authentic leadership (PAL) and work engagement of teachers, as well as teachers' psychological, social, workplace, and subjective well-being. Authentic leadership was assessed by administering the "Principals' Authentic Leadership Questionnaire (PALQue)" developed by Walumbwa et al. (2008). The measure consists of 16 items that capture the Four Dimensions identified as a second-order construct: relational transparency (PAL-RT), internalized moral perspective (PAL-IMP), balanced processing (PAL-BP), and self-awareness (PAL-SA). Teachers' psychological, social, workplace, and subjective well-being were measured by using the validated scale developed by Pradhan and Hati (2022) that consists of: psychological well-being (consisting of 8 items), social well-being (consisting of 9 items), workplace well-being (consisting of 9 items), and subjective well-being

(consisting of 4 items). Teachers' work engagement (TWE) was measured by using the "Utrecht Work Engagement Scale (UWES)" developed by Schaufeli et al. (2002), consisting of 17 items operationalized at the second-order construct that consists of vigor, dedication, and absorption.

3.3 Procedure

Due to the predictive emphasis of the study, the measurement and structural model were assessed through the SEM-PLS approach, using the Smart-PLS 3.3.3 software. PLS-SEM is extensively recognized as a powerful method for research that is predictive as well as research that analyzes complex frameworks (Alshammakh & Azmin, 2021; Hair et al., 2021). As opposed to covariance-based SEM, the former provides improved statistical power in predictive settings as well as enhanced flexibility for multiple-construct models (Henseler & Schuberth, 2023). As such, the approach is best suited to studying the predictive effect of principals' authentic leadership (PAL) combined with teachers' psychological (TPWB), social (TSWB), workplace (TWWB), as well as subjective well-being (TSuWB) on teachers' work engagement (TWE), together with assessing the mediation roles of the four dimensions of well-being.

It was carried out in two separate stages. In the first, the measurement model was evaluated for both validity and reliability. Higher values than 0.70 for the Composite Reliability (CR) indicated internal consistency (Hair et al., 2021), while Average Variance Extracted (AVE) values of at least 0.50 confirmed convergent validity (Hair et al., 2021). The PLS Algorithm was used to evaluate item loading, which demonstrates convergent validity at the construct level when it exceeds 0.60 (Alhindaassi et al., 2025; Hair et al., 2021). Discriminant validity was ascertained using the HTMT criterion, where values needed to be less than 0.90 (Al Azzani et al., 2024; Henseler et al., 2015). In the second phase, the PLS-SEM analyzed the explained variance (R^2). According to Cohen (1988), if the R^2 value exceeds 0.26, the model enjoys substantial explanatory ability. Moreover, the effect of latent variables upon the dependent variable was assessed using the f^2 analyses, providing a complement to the R^2 evaluations (Hair et al., 2012). According to Cohen (2013), f^2 values report the effect sizes, as follows: small (0.02 to 0.15), medium (0.16 to 0.35), and large (> 0.35). Additionally, predictive relevance (Q^2), where values above zero reflect predictive validity (Hair et al., 2021). Path significance was tested during bootstrapping based on 5,000 resamples, where the one-tailed hypotheses were significant at $t \geq 1.645$ ($p < 0.05$) as well as $t \geq 2.33$ ($p < 0.01$) (Hair et al., 2021).

4. RESULTS

4.1 Measurement Model Results

Following the guidelines provided by Hair et al. (2021) and Meeker et al. (2022), the present research carried out a careful analysis of the measurement model, including tests of construct validity, convergent validity, as well as discriminant validity. As presented in Table 2, the Cronbach's alpha values ranged between 0.80 and 0.91, which were all above the minimum recommendation of 0.70, thereby confirming appropriate internal reliability. Likewise, the values of Composite Reliability (CR) also fell between 0.87 and 0.92, all above the threshold requirement of 0.70, further substantiating construct consistency.

To establish convergent validity, three specific items (TPWB2, TWWB9, and TWE-A1) were also dropped during analysis because their factor loadings decreased below the threshold value set at 0.60. As reflected in Table 2, the remaining items demonstrated loading values above 0.60, thereby meeting the convergent validity threshold at the construct level. Moreover, the values of the AVE for each construct were observed to be beyond the conventional threshold value set at 0.50, thereby confirming that the latent constructs significantly captured the variance underlying their respective indicators. Altogether, these results provide strong empirical support for the convergent validity of the measurement model, consisting of six constructs and a total of 60 items.

Table 2: Construct Reliability and Convergent Validity (Loading and AVE) (after deleting some items)

Constructs	Dimension	Item	Loading (≥0.60)	Cronbach's Alpha (≥0.70)	CR (≥0.70)	AVE (>0.50)
Principals' Authentic Leadership (PAL)	Relational Transparency (PAL-RT)	PAL-RT1	0.83	0.89	0.92	0.69
		PAL-RT2	0.85			
		PAL-RT3	0.88			
		PAL-RT4	0.78			
		PAL-RT5	0.81			
	Internalized Moral Perspective (PAL-IMP)	PAL-IMP1	0.79	0.80	0.87	0.62
		PAL-IMP2	0.83			
		PAL-IMP3	0.82			
		PAL-IMP4	0.72			
	Balanced Processing (PAL-BP)	PAL-BP1	0.83	0.87	0.92	0.79
		PAL-BP2	0.91			
		PAL-BP3	0.92			
	Self-Awareness (PAL-SA)	PAL-SA1	0.78	0.86	0.91	0.71
		PAL-SA2	0.85			

		PAL-SA3	0.87			
		PAL-SA4	0.87			
"Teachers' Psychological Well-being (TPWB)"		TPWB1	0.66	0.88	0.90	0.57
		TPWB3	0.60			
		TPWB4	0.78			
		TPWB5	0.82			
		TPWB6	0.81			
		TPWB7	0.81			
		TPWB8	0.80			
"Teachers' Social Well-being (TSWB)"		TSWB1	0.79	0.91	0.92	0.58
		TSWB2	0.81			
		TSWB3	0.83			
		TSWB4	0.67			
		TSWB5	0.71			
		TSWB6	0.80			
		TSWB7	0.80			
		TSWB8	0.64			
		TSWB9	0.75			
"Teachers' Workplace Well-being (TWWB)"		TWWB1	0.73	0.89	0.91	0.57
		TWWB2	0.77			
		TWWB3	0.78			
		TWWB4	0.77			
		TWWB5	0.77			
		TWWB6	0.78			
		TWWB7	0.66			
		TWWB8	0.76			
"Teachers' Subjective Well-being (TSuWB)"		TSuWB1	0.69	0.85	0.90	0.70
		TSuWB2	0.89			
		TSuWB3	0.89			
		TSuWB4	0.85			
Teachers' Work Engagement (TWE)	Vigour (TWE-V)	TWE-V1	0.71	0.89	0.91	0.64
		TWE-V2	0.78			
		TWE-V3	0.84			
		TWE-V4	0.84			
		TWE-V5	0.82			
		TWE-V6	0.80			
	Dedication (TWE-D)	TWE-D1	0.77	0.88	0.92	0.69
		TWE-D2	0.83			
		TWE-D3	0.85			
		TWE-D4	0.88			
		TWE-D5	0.81			
	Absorption (TWE-A)	TWE-A2	0.71	0.80	0.87	0.56
		TWE-A3	0.73			
		TWE-A4	0.82			
		TWE-A5	0.67			
		TWE-A6	0.81			

* "These Items, TPWB2, TWWB9, and TWE-A1, were deleted from the list due to the testing of Loading <60." Further discriminant validity evaluation was also performed using the HTMT, wherein all observed values in Table 3 were below the recommended threshold of 0.90 (Al Azzani et al., 2024; Henseler et al., 2015). Recent methodological debates point up the preference of HTMT as a more reliable threshold than the traditional Fornell–Larcker standard or even cross-loadings, the latter often proving unsuccessful as measures to determine problems related to discriminant validity (Hair et al., 2021; Henseler et al., 2015). As such, the use of HTMT allows a more rigorous as well as accurate assessment of the uniqueness of constructs.

Table 3: Discriminant Validity Results by HTMT

Construct	PAL-BP	PAL-IMP	PAL-RT	PAL-SA	TWB-TPWB	TWB-TSWB	TWB-TSuWB	TWB-TWWB	TWE-A	TWE-D	TWE-V
PAL-BP											
PAL-IMP	0.88										

PAL-RT	0.80	0.88								
PAL-SA	0.80	0.83	0.77							
TWB-TPWB	0.39	0.45	0.38	0.43						
TWB-TSWB	0.79	0.82	0.79	0.75	0.51					
TWB-TSuWB	0.63	0.71	0.63	0.67	0.51	0.76				
TWB-TWWB	0.77	0.82	0.75	0.85	0.52	0.88	0.83			
TWE-A	0.60	0.65	0.58	0.60	0.40	0.75	0.71	0.76		
TWE-D	0.47	0.49	0.39	0.51	0.56	0.54	0.53	0.61	0.47	
TWE-V	0.72	0.78	0.68	0.69	0.48	0.75	0.73	0.86	0.82	0.54	

Key: "PAL = Principals' Authentic Leadership, TWE= Teacher Work Engagement, PAL-RT= Relational Transparency, PAL-IMP= Internalized Moral Perspective, PAL-BP= Balanced Processing, PAL-SA= Self-Awareness, TPWB= Psychological Well-being, TSWB= Social Well-being, TWWB= Workplace Well-being, TSuWB= Subjective Well-being, TWE-V= Vigour, TWE_D= Dedication, and TWE_A= Absorption."

In summary, the findings provide convincing empirical support for the measurement model, with high construct reliability, as well as convergent as well as discriminant validity corroboration. The framework contains six latent constructs measured by a combined 60 indicators, showing stability on all psychometric tests. Figure 2 gives a pictorial representation of the comprehensive measurement model, which was estimated based on the PLS algorithm. It depicts the path coefficients, indicator loadings, and the R² values, each being instrumental in assessing the explanatory strength as well as the overall quality of the model.
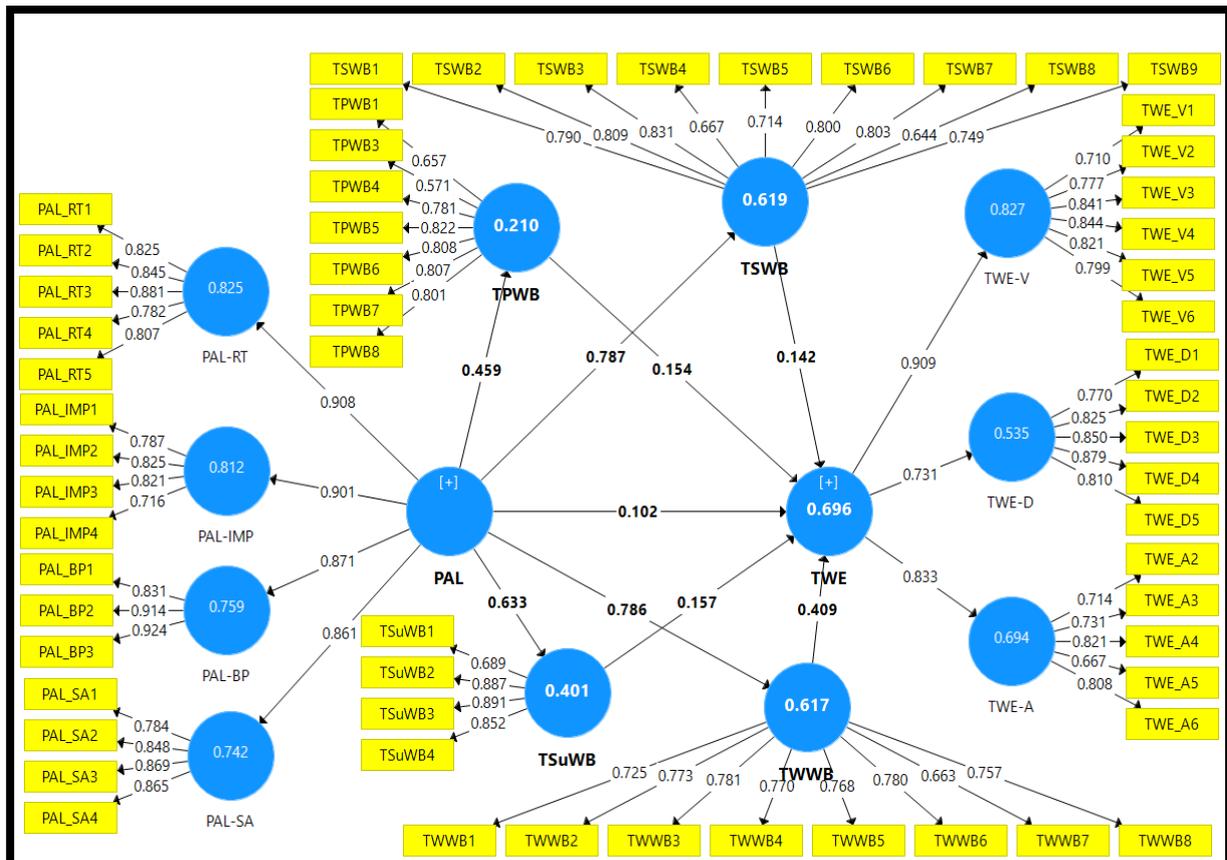

Figure 2: The Comprehensive Measurement Model Results

4.2 Structural Model Assessment Results

4.2.1 Testing the Direct Effects

To determine the statistical significance of the proposed relationships, a bootstrapping procedure comprising 5,000 resamples was executed. One-tailed tests were employed, with hypotheses recognized as significant at t ≥ 1.645 (p < 0.05) and t ≥ 2.33 (p < 0.01), in accordance with established standards (Hair et al., 2021). The analysis examined nine direct relationships among the fundamental constructs: principals' authentic leadership (PAL), teachers'

psychological well-being (TPWB), social well-being (TSWB), workplace well-being (TWWB), subjective well-being (TSuWB), and work engagement (TWE), within the framework of educational reform in the UAE's first-cycle schools. Table 4 and Figure 3 display the results of the path coefficients (β), t-statistics, and p-values for the direct hypotheses. As indicated, the results provided strong support for eight of the nine hypothesized relationships, while the first hypothesis (H1) received no support. Specifically, PAL recorded a small-sized, statistically non-significant positive effect on TWE (β = 0.102, t = 1.458, p = 0.073). Conversely, the psychological, social, workplace, and subjective well-being of the teacher each registered significant positive values affecting TWE during the process of educational reform (β = 0.154, t = 4.717, p < 0.001; β = 0.142, t = 2.584, p < 0.001; β = 0.409, t = 6.106, p < 0.001; β = 0.157, t = 3.068, p < 0.001, respectively), as a result validating hypotheses H2 through H5. Moreover, PAL was found to register a significant and statistically significant positive effect on the psychological, social, workplace, as well as subjective well-being of the teachers (β = 0.459, t = 11.401, p < 0.001; β = 0.787, t = 30.004, p < 0.001; β = 0.786, t = 29.761, p < 0.001; β = 0.633, t = 18.386, p < 0.001, respectively), as a result validating hypotheses H6 through H9.

Table 4: The Direct Hypotheses Results

Hypo - NO.	Direct Hypothesis	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
H1	PAL -> TWE	0.102	0.070	1.458	0.073	Not Supported
H2	TPWB -> TWE	0.154	0.033	4.717	0.000	Supported
H3	TSWB -> TWE	0.142	0.055	2.584	0.005	Supported
H4	TWWB -> TWE	0.409	0.067	6.106	0.000	Supported
H5	TSuWB -> TWE	0.157	0.051	3.068	0.001	Supported
H6	PAL -> TPWB	0.459	0.040	11.401	0.000	Supported
H7	PAL -> TSWB	0.787	0.026	30.004	0.000	Supported
H8	PAL -> TWWB	0.786	0.026	29.761	0.000	Supported
H9	PAL -> TSuWB	0.633	0.034	18.386	0.000	Supported

Key: "PAL = Principals' Authentic Leadership, TPWB= Psychological Well-being, TSWB= Social Well-being, TWWB= Workplace Well-being, TSuWB= Subjective Well-being, and TWE= Teacher Work Engagement."
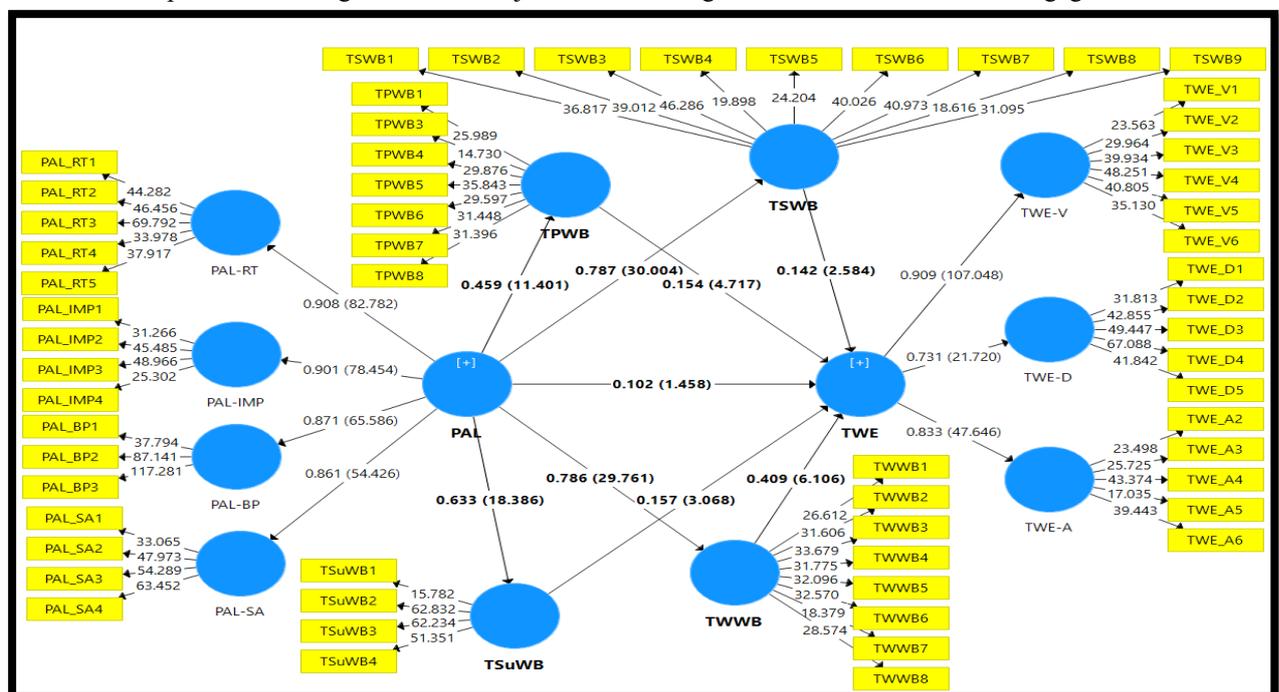

Figure 3: PLS bootstrapping Outputs

In addition, the R² statistic was employed to capture the proportion of variance in the dependent variables explained by their respective predictors. As shown in Figure 2 and Table 5, the results demonstrate that principals' authentic leadership (PAL), together with teachers' psychological well-being (TPWB), social well-being (TSWB), workplace well-being (TWWB), and subjective well-being (TSuWB), collectively accounted for 70% of the variance in teachers' work engagement (TWE). Moreover, PAL alone explained 21% of the variance in TPWB, 62% in TSWB, 62% in TWWB, and 40% in TSuWB, underscoring the strong explanatory power of the model within the context of educational reform in the UAE's first-cycle schools (Cohen, 1988).

Beyond R², the effect sizes of the latent variables on the dependent variables were assessed using f² analyses, thereby complementing the variance-explained evaluations (Hair et al., 2012). As Cohen (2013) notes, while p-values indicate the statistical significance of an effect, they do not convey its magnitude; f² values therefore provide additional insight into practical significance, with thresholds defined as small (0.02–0.15), medium (0.16–0.35), and large (>0.35). As reported in Table 5, the estimated effect sizes of PAL, TPWB, TSWB, TWWB, and TSuWB on TWE were 0.02, 0.05, 0.02, 0.14, and 0.04, respectively, all of which fall within the small-effect range. By contrast, the effect sizes of PAL on TPWB, TSWB, TWWB, and TSuWB were 0.27 (medium), 1.63 (very large), 1.61 (very large), and 0.67 (large), respectively, indicating substantial explanatory power of PAL in shaping teachers' well-being outcomes.

Table 5: R² Values and Impact Size f²

Construct	R²	Effect Size (f²)	Result
TWE			
PAL	0.696	0.02	Small
TPWB	0.696	0.05	Small
TSWB	0.696	0.02	Small
TWWB	0.696	0.14	Small
TSuWB	0.696	0.04	Small
TPWB			
PAL	0.210	0.27	Medium
TSWB			
PAL	0.619	1.63	Very High
TWWB			
PAL	0.617	1.61	Very High
TSuWB			
PAL	0.401	0.67	High

Finally, the predictive significance of the model was determined using the Q² metric obtained from the blindfolding technique. While R² is used to report the explanatory strength of the model, Q² assesses the predictive accuracy of the model based on the degree to which the observed values would be reconstructed based on the parameter estimates of the model. As presented in Table 6, all the Q² values significantly exceeded the threshold value of 0.000, hence reflecting that the model has moderate to high predictive significance aligned with the standards provided by Hair et al. (2021), which categorize 0.35 as indicative of a large predictive effect, 0.15 as medium, and 0.02 as weak. The implication here is that the structural model not only explains significant variance on the endogenous constructs but also achieves high predictive accuracy, hence increasing its strength in the paradigm of the educational reform among the first-cycle schools in the UAE.

Table 6: Predictive Relevance (Blindfolding) Q²

Endogenous Construct	SSO	SSE	Q² (=1-SSE/SSO)	Predictive Relevance
Teachers' Work Engagement (TWE)	6752	4733.345	0.30	Moderate
Teachers' Psychological Well-Being (TPWB)	2954	2707.367	0.10	Moderate
Teachers' Social Well-being (TSWB)	3798	2468.707	0.35	High
Teachers' Workplace Well-being (TSWB)	3376	2208.453	0.35	High
Teachers' Subjective Well-being (TSuWB)	1688	1222.51	0.28	Moderate

4.2.2 Testing the Direct Effects

Mediation analysis was conducted through the bootstrapping procedure based on 5,000 subsamples at the 95% confidence interval, a technique that is considered more accurate and reliable than traditional ones (Hair et al., 2021). Adhering to the research methodological guidelines provided by Hair et al. (2021) as well as Zhao et al. (2010), the current research explored the mediation roles of teachers' psychological well-being (TPWB), social well-being (TSWB), workplace well-being (TWWB), and subjective well-being (TSuWB) intervening between the principals' authentic leadership (PAL) and teachers' work engagement (TWE) relationship within the first-cycle schools' UAE educational reform. As indicated in the empirical findings presented in Table 7, there is strong

evidence that TPWB, TSWB, TWWB, and TSuWB significantly mediate the PAL-TWE relationship. In details, the bootstrapped indirect effects were statistically significant for TPWB ($\beta = 0.071$, t = 4.532, p < 0.001), TSWB ($\beta = 0.111$, t = 2.573, p < 0.01), TWWB ($\beta = 0.321$, t = 6.273, p < 0.001), and TSuWB ($\beta = 0.100$, t = 2.994, p < 0.01) that the respective bootstrapped 95% CI intervals do not include zero. These findings support hypotheses H10 up to H14. In addition, as indicated in Table 4, the direct effect exerted by PAL on TWE was not statistically significant, indicating that teachers' psychological, social, workplace, and subjective well-being serve as full mediators in the PAL-TWE relationship within the first-cycle schools' educational reform in the UAE.

Table 7: The Indirect Hypotheses Results

Hypo - NO	Indirect Direct Hypothesis	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	BCI LL 5%	BCI UL 95%	Decision
H10	PAL -> TPWB -> TWE	0.071	0.016	4.532***	0.048	0.099	Supported
H11	PAL -> TSWB -> TWE	0.111	0.043	2.573**	0.038	0.182	Supported
H12	PAL -> TWWB -> TWE	0.321	0.051	6.273***	0.240	0.406	Supported
H13	PAL -> TSuWB -> TWE	0.099	0.033	2.994**	0.044	0.154	Supported

Note: "***: p<0.001", **: p<0.01.
Key: "PAL = Principals' Authentic Leadership, TPWB= Psychological Well-being, TSWB= Social Well-being, TWWB= Workplace Well-being, TSuWB= Subjective Well-being, and TWE= Teacher Work Engagement."

5. DISCUSSIONS

Authentic leadership has been consistently identified as a significant predictor of teachers' attitudes and behaviors in the workplace, yet a more nuanced understanding of how it exerts its effect through particular mechanisms and under which specific conditions is still essential (Xu & Pang, 2024). Differing from previous studies, this investigation, conducted in the UAE's first-cycle schools, differs in two important ways. Firstly, it openly applies the COR theory and the JD-R model to examine the connection between principals' authentic leadership (PAL) and teachers' work engagement (TWE), consequently further developing an application of these theories in school settings and refining our understanding of authentic leadership effectiveness in school settings that are subject to reform efforts. Secondly, it proposes a multi-mediation framework that integrates teachers' psychological, social, workplace, and subjective well-being as mediators and provides strong evidence that psychological resources play a pivotal role in teachers' work engagement. The following sections elaborate on the empirical findings, discuss the practical implications, and outline the limitations of this study.

5.1 Interpretation of the Findings

This study generates a set of noteworthy findings that together illuminate the intricate mechanisms through which teachers' work engagement (TWE) is affected by principals' authentic leadership (PAL) within the reform-intensive educational context of the UAE. Contrary to initial assumptions, the examination found that PAL had not had a statistically significant direct effect on teachers' work engagement, a result that diverges from earlier evidence drawn from Indonesian educational settings (Herdian et al., 2023), Chinese academic environments (Shao et al., 2025), and Pakistan's telecommunication organization (Farid et al., 2022). Far rather than being contrary to existing research, this unexpected result supports a growing academic understanding that the link between AL and involvement is not fundamentally determined by direct connections but by psychological and contextual resources (Alazmi & Al-Mahdy, 2022; Niswaty et al., 2021). This unexpected result may also be attributed to contextual differences—specifically, the nature of educational reform in the UAE, which could potentially impose stressors that dilute the immediate impact of leadership styles on engagement.

Conversely, research finds substantial evidence backing the positive direct influence of teachers' psychological, social, workplace, and subjective well-being on their engagement, corroborating the significance of well-being to maintain vigor, devotion, and absorption. The findings align with a large body of literature that identifies well-being as a significant precursor to engagement (Arnold & Rahimi, 2025; Shu, 2022). The multimodality of well-being with its cognitive, emotional, social, and contextual manifestations appears to be vital to enhance teachers' professional resilience and engagement (Dreer, 2023; Hascher & Waber, 2021). Evidently salient is the substantial influence of workplace well-being that corroborates Skaalvik and Skaalvik's (2017) claim that organizational resources yield better predictors of engagement over individual comportments within stressful environments. In addition, the PAL revealed a significant positive effect on each of the four dimensions associated with teachers' well-being, thus underscoring the crucial role of leadership in enhancing flourishing. Authentic leaders, with their qualities of transparency, ethical integrity, understanding of oneself, and integrated processing (Xu & Pang, 2024), create relationship settings that enhance teachers' efficacy, sense of belonging, and overall well-being. This insight is congruent with an overwhelming collection of studies linking authentic leadership with increased well-being across diverse organizational contexts (Karakus et al., 2024; Shie & Chang, 2022). Convincing evidence from

schools across Dubai (Siyam et al., 2025), Taiwan (Shie & Chang, 2022), and China (Xu & Pang, 2024) reinforces across cultures the importance of authentic leadership (AL) to improve teachers' well-being, and this, specifically, within the context of challenges of educational reforms. Importantly, the study demonstrates that the psychological, social, workplace, and subjectivity-based dimensions of well-being fully mediate the relationship between authentic leadership and work engagement. The workplace well-being emerged as the strongest mediator of the four, and this points to such potential of authentic leaders to affect teachers' perceptions about organizational justice, psychological protection, and mutual support. The comprehensive mediation is congruent with that revealed by Xu and Pang (2024) within Chinese educational settings and by Farid et al. (2022) within Pakistan's telecommunication organization, with both studies specifying well-being to be the key mechanism linking leadership with engagement.

This result aligns with theoretical models, including the COR theory and the JD-R model, accounting for how resources, such as authentic leadership, can safeguard and maximize well-being to foster work engagement (Bon & Shire, 2022; Demerouti, 2025; Shao et al., 2025). Through the derivation of empirical evidence of full mediation of teachers' psychological, social, workplace, and subjective well-being in the PAL-TWE link, this research extends authentic leader–follower development models (Gardner et al., 2005) and strengthens theoretical perspectives that emphasize "gain spirals," whereby accumulated resources progressively enhance outcomes such as engagement (Wang et al., 2024). Finally, the explanatory (R^2) and predictive (Q^2) indicators further validate the model's strength and provide support to its generalizability to settings characterized by educational reform. These findings suggest that authentic leadership, combined with resources of well-being, creates a significant model of predicting a future of engagement outcomes, making this of particular relevance to developing countries implementing ambitious education reforms.

5.2 Practical Implications

The results of this investigation highlight that, while the authentic leadership of principals does not have a direct effect on the engagement of teachers in their work, it is instrumental in enhancing their psychological, social, occupational, and subjective well-being, which subsequently acts as a driving force for enduring engagement. These observations hold considerable significance for school leadership, teacher support systems, and educational policy, especially within contexts experiencing intensive educational reform, such as the UAE. First, effective leadership should extend beyond mere supervisory roles to emphasize the establishment of supportive and resource-abundant school environments. Principals who demonstrate self-awareness, relational transparency, and equitable decision-making cultivate a culture characterized by trust and respect, which is essential for protecting the well-being of teachers and maintaining long-term engagement (Alazmi & Al-Mahdy, 2022; Xu & Pang, 2024). Second, prioritizing initiatives aimed at enhancing teacher well-being is of utmost importance. Interventions that advocate for psychological well-being through mindfulness practices and psychoeducation, along with programs that develop social-emotional skills, nurture positive interpersonal relationships, and promote work–life balance, not only alleviate stress but also empower teachers' engagement (Shu, 2022). Such measures ought to be perceived not as marginal welfare initiatives but rather as strategic investments that augment teachers' personal and professional assets, safeguard their mental health, and enhance their professional engagement. Third, principals are vital in influencing organizational climates that mitigate burnout and encourage engagement. It is imperative to ensure manageable workloads, foster open communication, and institutionalize inclusive practices to create environments where teachers feel valued and supported (Shie & Chang, 2022). Lastly, at the policy level, frameworks for leadership development should explicitly incorporate authentic leadership training, embed contextually pertinent professional learning opportunities, and equip future principals to nurture school cultures centered on well-being. The allocation of resources by governmental bodies and educational organizations is crucial, involving the provision of sustainable financing for mental health services, counseling, and infrastructures that facilitate work–life balance, including sufficient leave policies and stress-monitoring systems (Xu & Pang, 2024). Moreover, it is essential to integrate teacher well-being within comprehensive educational reform initiatives. Acknowledging that well-supported and engaged educators are pivotal to the successful execution of reforms, policies should intentionally target the elements that enhance teacher well-being in order to ensure the enduring effectiveness of educational transformation. In summary, these measures establish authentic leadership and systemic investments in teacher well-being as critical mechanisms for fostering engagement and bolstering the sustainability of educational reform efforts.

6. LIMITATIONS AND FUTURE RESEARCH

Despite the significant contributions of this study, several limitations warrant acknowledgment. First, its cross-sectional design restricts the capacity to establish causal relationships among the examined constructs. To enable stronger causal inferences, future research should adopt longitudinal or experimental designs. Second, the reliance on a relatively small sample drawn from first-cycle public schools in the UAE limits the generalizability of the findings. Greater validity and robustness could be achieved through larger-scale studies conducted across more diverse educational settings. Third, while the proposed model demonstrated strong explanatory and predictive utility, its replication across both developed and developing nations, or through cross-national comparative studies, may yield more contextually grounded insights. Finally, this study employed multidimensional teacher well-being as mediators to illuminate the psychological pathways through which AL influences TWE. Although this approach

advances understanding of the mediating role of well-being, future studies should also incorporate other organizational and individual factors. Potential avenues include teachers' professional identity, social status, beliefs about student learning, or resilience, which may together provide a more comprehensive account of the dynamic interplay between leadership, well-being, and engagement.

7. CONCLUSIONS

Drawing on the COR theory and the JD-R model, this study advances empirical understanding of the role of PAL in shaping teachers' work engagement within the context of educational reform. This contribution is particularly salient given the recent global surge in teacher attrition and the resulting shortage of highly qualified educators, a challenge especially pronounced in the United Arab Emirates. The findings reveal that PAL does not exert a direct influence on teachers' work engagement; rather, its effect operates indirectly through the enhancement of teachers' psychological, social, workplace, and subjective well-being. In addition, the study demonstrates that PAL directly strengthens each of these four dimensions of teacher well-being, all of which significantly and positively contribute to teachers' engagement at work. Taken together, these insights highlight the strategic importance of cultivating principals' integrity and credibility, while simultaneously prioritizing teachers' holistic well-being—psychological, social, workplace, and subjective—as essential pillars for advancing effective and sustainable educational reform.

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