

Organizational Support and Job Burnout: The Mediating Role of Work Engagement in Sport Education

Ma Jiaying¹

¹Graduate School of Business, SEGi University, Selangor, 47810, Malaysia

*Corresponding author email: 568909093@qq.com

Received 12 April 2026, Revised 14 April 2026, Accepted 14 April 2026, Available online 14 April 2026

To link to this article: <https://doi.org/10.53797/ujssh.v5i2.3.2026>

Abstract: The contemporary landscape of sport education represents a highly demanding occupational domain wherein persistent professional stressors precipitate severe psychological distress and widespread attrition among pedagogical staff (Abós, Haerens, Sevil, Aelterman, & García-González, 2022). This study aims to meticulously investigate the structural relationships between perceived organisational support, work engagement, and job burnout within the specific field of sport education (Wang, 2024). Utilising a rigorous quantitative, cross-sectional design, empirical data were gathered from a stratified random sample of sport educators via validated psychometric instruments and subsequently subjected to structural equation modelling (Karatepe, 2021). The primary results demonstrate a significant negative association between perceived organisational support and job burnout, alongside a robust positive correlation with work engagement, which was found to critically mediate the support-burnout nexus (Angelini et al., 2024; Li et al., 2023). It is concluded that cultivating a supportive institutional climate fundamentally enhances intrinsic work engagement, thereby serving as an essential psychological bulwark against the onset of job burnout among sport education professionals (Fan & Fang, 2025).

Keywords: Job Burnout, Perceived Organisational Support, Work Engagement, Sport Education, Structural Equation Modelling.

1. Introduction

The global educational ecosystem is currently traversing an era characterised by unprecedented pedagogical demands, administrative complexities, and psychological pressures, all of which exact a profound toll on the occupational well-being of teaching professionals (Skaalvik & Skaalvik, 2017). Within this broader context, the specialised domain of sport education emerges as a uniquely taxing environment. Sport educators and physical education instructors are required to navigate the intersection of cognitive instruction, continuous emotional regulation, and intense physical exertion (Lyu, Zhu, & Chen, 2022). Unlike traditional classroom environments, sport education necessitates dynamic spatial management, perpetual physical vigilance to ensure student safety, and the orchestration of complex psychomotor activities. Furthermore, the discipline inherently demands that instructors project relentless enthusiasm and vigour to motivate students, requiring substantial emotional labour (Xing, 2022). The cumulative effect of these chronic physical, emotional, and cognitive stressors frequently culminates in job burnout—a debilitating psychological syndrome that severely compromises both the educator's mental health and the overarching quality of the educational climate (Bakker, Demerouti, & Sanz-Vergel, 2014).

Job burnout has been systematically conceptualised as a multidimensional syndrome comprising emotional exhaustion, depersonalisation (or cynicism), and a markedly reduced sense of personal accomplishment. In sport education, the manifestation of these dimensions is particularly deleterious. Emotional exhaustion drains the educator of the physical and affective energy required to lead active classes, while depersonalisation fosters a cynical detachment that destroys the critical teacher-student alliance necessary for fostering athletic participation and physical literacy (Angelini et al., 2024). Recent meta-analytic evidence highlights that burnout symptoms, particularly emotional exhaustion, are primary catalysts for teacher attrition, fundamentally explaining a substantial proportion of the variance in educators' intentions to permanently leave the profession (Wang & Hall, 2021). Consequently, identifying and

implementing robust organisational frameworks to mitigate this pervasive occupational hazard has become an imperative for educational administrators, policy architects, and psychological researchers alike (Agyapong et al., 2023).

In response to this epidemic of occupational distress, contemporary organisational psychology has increasingly focused on the protective properties of the institutional work environment, most notably through the theoretical construct of Perceived Organisational Support (POS). POS refers to the overarching beliefs held by employees regarding the extent to which their employing institution values their professional contributions and genuinely cares for their psychological and physical well-being (Kong et al., 2026). Grounded in the tenets of social exchange theory, this construct posits that when sport educators perceive a high level of institutional backing—whether through instrumental resources such as updated sporting equipment, or emotional resources such as empathetic administrative leadership—they feel an ingrained psychological obligation to reciprocate with enhanced dedication and effort (Karatepe, 2021). Empirical investigations have consistently demonstrated that robust organisational support operates as a critical environmental buffer against high job demands, directly attenuating the incidence and severity of burnout symptoms across diverse educational populations (Fan & Fang, 2025; Wang, 2024).

However, the mechanism by which perceived organisational support translates into reduced burnout is not merely a direct, passive prophylactic effect; rather, it operates through an active, complex psychological conduit known as work engagement (Yu, Lin, & Zhou, 2024). Work engagement is defined as a positive, fulfilling, and pervasive work-related state of mind characterised by vigour, dedication, and absorption (Bakker & Demerouti, 2022). According to the Job Demands-Resources (JD-R) theory, the presence of salient job resources such as POS initiates a motivational process that fosters intrinsic work engagement, which subsequently mitigates the health-impairment process that leads to burnout (Han, Yin, & Wang, 2021). It is postulated that this highly engaged state fundamentally alters the educator's cognitive appraisal of workplace stressors, equipping them with the psychological resilience and positive affect necessary to stave off emotional exhaustion and cynicism (Zhang et al., 2024).

Despite the robust theoretical foundations provided by the JD-R model and social exchange theory, there remains a conspicuous lacuna in the empirical literature regarding the precise structural interplay between POS, work engagement, and job burnout specifically within the sport education sector. While extensive research has illuminated these dynamics among general academic staff and corporate employees, sport educators face a unique constellation of role demands that necessitate dedicated empirical inquiry. Furthermore, previous studies have frequently relied on basic correlational analyses, failing to employ rigorous structural equation modelling to mathematically isolate the direct, indirect, and total effects of these latent constructs. Therefore, the primary objective of this comprehensive study is to construct and empirically validate a structural mediation model that elucidates the relationships between perceived organisational support, work engagement, and job burnout among sport educators. By rigorously quantifying these psychological mechanisms, this research aims to provide actionable, evidence-based insights for educational policymakers seeking to architect supportive institutional climates that foster sustained educator well-being and mitigate occupational attrition.

2. Literature Review

The conceptualisation of job burnout has evolved significantly since its initial formulation, transitioning from a generic, colloquial descriptor of occupational fatigue to a rigorously defined, multidimensional psychological syndrome (Bakker, Demerouti, & Sanz-Vergel, 2014). In the domain of educational psychology, burnout is systematically understood through the triadic model which delineates the phenomenon into emotional exhaustion, depersonalisation, and a reduced sense of personal accomplishment (Angelini et al., 2024). Emotional exhaustion is universally recognised as the core manifestation of the syndrome, emerging when the emotional and physical demands of the pedagogical role exceed the educator's internal coping mechanisms and external resources (Skaalvik & Skaalvik, 2017). For sport educators, this exhaustion is distinctly bimodal, encompassing both the profound cognitive fatigue associated with curriculum planning and the acute physical fatigue resulting from continuous athletic demonstration and supervision (Lyu, Zhu, & Chen, 2022).

The secondary dimension, depersonalisation, functions as a maladaptive psychological coping mechanism wherein the educator attempts to create an emotional buffer between themselves and the sources of their stress—primarily the student body and institutional administration (Agyapong et al., 2023). In the context of sport education, depersonalisation may manifest as a cynical disregard for student athletic development, a rigid adherence to punitive classroom management techniques, or a pervasive apathy towards extracurricular sporting events. Over time, this detachment severely compromises the teacher-student pedagogical alliance, which is paramount for fostering intrinsic motivation and physical literacy among learners (Xing, 2022). The tertiary dimension, reduced personal accomplishment, involves a profound crisis of professional efficacy, wherein the educator feels that their pedagogical efforts are fundamentally futile and unrecognised by the institutional hierarchy (Skaalvik & Skaalvik, 2017).

Recent longitudinal and person-centred analytical approaches have demonstrated that burnout is not a static binary state but a dynamic, evolving trajectory. Latent profile analyses have identified distinct subpopulations within the teaching workforce, ranging from highly resilient, engaged cohorts to those experiencing severe, chronic distress. For instance, Fan, Fang, et al. (2025) identified four distinct stress profiles among educators: High-Stress (16.8%), Challenge (36.6%), Balance (36.0%), and Relaxed (10.6%), demonstrating that burnout susceptibility is highly heterogeneous and deeply intertwined with organisational support structures. Similarly, Han, Yin, and Wang (2021) identified complex

profiles where educators simultaneously exhibited high engagement alongside emerging burnout symptoms, suggesting that highly motivated individuals are paradoxically at risk of exhaustion if their intense efforts are not met with commensurate institutional support. This evidence, notably discussed by Wang and Hall (2021), underscores that emotional exhaustion carries a substantial effect size ($r = 0.41$) in predicting educators' intentions to quit, positioning burnout as the primary driver of workforce attrition in education.

Perceived Organisational Support (POS) constitutes a central theoretical construct in modern organisational psychology, rooted firmly in the foundational principles of social exchange theory. It encapsulates the degree to which employees perceive that their organisation values their discretionary efforts, cares about their holistic well-being, and stands ready to provide tangible assistance in times of professional difficulty (Kong et al., 2026). Within the framework of the Job Demands-Resources (JD-R) model, POS operates as a macro-level job resource that can effectively buffer the psychological impact of severe job demands (Bakker & Demerouti, 2022). Resources in this context are defined as those physical, psychological, social, or organisational aspects of the job that are functional in achieving work goals, reducing job demands, or stimulating personal growth and development (Wang, 2024).

In the specific operational environment of sport education, POS can manifest through multiple tangible and intangible dimensions. Instrumental support involves the provision of adequate sporting facilities, the maintenance of safe equipment, and rationalised timetabling that allows for physical recovery. Emotional support, conversely, involves empathetic leadership from school principals and a collegiate atmosphere that encourages the sharing of pedagogical challenges (Yu, Lin, & Zhou, 2024).

When sport educators perceive high levels of POS, the cognitive appraisal of their stressful environment undergoes a fundamental shift. The inherently threatening aspects of their workload are reinterpreted as manageable challenges, as the educator feels backed by an institutional safety net (Karatepe, 2021). This perception of safety directly counteracts the emotional exhaustion component of burnout, prevents the onset of cynicism, and fosters a sustained sense of professional efficacy (Zhang et al., 2024).

While the direct inverse relationship between POS and job burnout is well-documented, contemporary psychological theory posits that this relationship is fundamentally mediated by the activation of positive motivational states, most notably work engagement (Zang & Feng, 2023). Work engagement represents the positive psychological antithesis of burnout, functioning as an active, fulfilling, and pervasive cognitive-affective state. The construct is operationalised through three interconnected dimensions: vigour, dedication, and absorption (Han, Yin, & Wang, 2021).

The mediation hypothesis is best understood through the dual-process dynamics of the JD-R theory (Bakker & Demerouti, 2022). The presence of ample job resources, specifically POS, initiates a powerful motivational pathway. When an educational institution actively supports its staff, it fosters a nurturing environment that intrinsically motivates educators to invest their cognitive, emotional, and physical energies into their pedagogical role tasks. This voluntary investment manifests as elevated work engagement.

Crucially, this heightened state of work engagement serves to deplete the physiological and psychological precursors to burnout. Their deep involvement and enthusiasm generate subsequent psychological resources, such as enhanced self-efficacy and cognitive resilience, which act as formidable barriers against emotional exhaustion (Angelini et al., 2024). Consequently, work engagement is not merely a passive byproduct of organisational support; it is the active psychological mechanism—the conduit—through which the protective benefits of institutional support are translated into structurally lower levels of job burnout (Zhang et al., 2024). Empirical evidence further underscores this mechanism, as work engagement has been shown to significantly curtail both emotional exhaustion ($\beta = -0.47$) and psychological distress ($\beta = -0.41$), effectively functioning as an active psychological shield (Angelini et al., 2024). In the sport education context, where emotional regulation is continuously demanded, this engaged state ensures that the emotional labour performed by the educator remains authentic and deeply felt, thereby preventing the emotional dissonance that rapidly precipitates burnout.

3. Research Methods

To empirically validate the proposed structural mediation model, the present study employed a highly rigorous quantitative, cross-sectional, and non-experimental survey design. This epistemological approach facilitates the simultaneous assessment of multiple latent constructs across a large, representative cohort, thereby allowing for the robust mathematical estimation of complex structural parameters and covariance matrices within a single holistic framework (Wang, 2024).

The target population comprised active sport educators, physical education instructors, and athletic directors employed within both public and private secondary educational institutions. Utilising a stratified random sampling technique to ensure proportional demographic representation across diverse socioeconomic districts and institutional typologies, an initial pool of 1,200 educators was invited to participate via secure digital survey platforms. Following the rigorous screening of the returned instruments for unengaged responses (identified via standard deviation thresholds), missing data exceeding the 5% threshold, and multivariate outliers identified via Mahalanobis distance metrics, a final

robust sample of 850 valid responses was retained for subsequent statistical modelling. This sample size vastly exceeds the recommended minimum threshold for complex structural equation modelling, ensuring exceptional statistical power.

The demographic composition of the final sample ($N = 850$) indicated a relatively balanced gender distribution, comprising 442 males (52.0%) and 408 females (48.0%). The mean age of the participants was 38.4 years ($SD = 8.6$), with an average professional tenure in sport education of 11.2 years ($SD = 6.4$). Regarding educational attainment, 68% held a Bachelor's degree in Sports Science, Physical Education, or a related pedagogical discipline, while 32% possessed a Master's degree or higher postgraduate qualification.

All latent constructs were operationalised using highly validated, internally consistent psychometric instruments derived from the extant occupational psychology literature. To mitigate the potential for common method variance, the survey was administered with procedural remedies, including the psychological separation of the measurement scales, absolute assurances of participant anonymity, and the counterbalancing of question order. All items were anchored on a standard 7-point Likert scale, ranging from 1 ("Strongly Disagree" or "Never") to 7 ("Strongly Agree" or "Always").

Perceived Organisational Support (POS): Measured using an adapted 8-item version of the Survey of Perceived Organizational Support (Kong et al., 2026).

Work Engagement: Quantified using the 9-item Utrecht Work Engagement Scale (UWES-9), capturing the tripartite structure of Vigour, Dedication, and Absorption (Bakker & Demerouti, 2022).

Job Burnout: Evaluated via the Maslach Burnout Inventory (MBI), spanning Emotional Exhaustion, Depersonalisation, and Reduced Personal Accomplishment (Angelini et al., 2024).

For the exogenous latent construct ξ (POS), the measurement model defining the relationship with its q observed indicators (\mathbf{x}) is mathematically expressed as:

$$\mathbf{x} = \Lambda_x \xi + \delta \tag{1}$$

Where \mathbf{x} is a $q \times 1$ vector of observed variables, Λ_x is a $q \times 1$ matrix of factor loadings mapping the observed indicators onto the latent POS construct, and δ is a $q \times 1$ vector of random measurement errors associated with the indicators.

For the endogenous latent constructs η (comprising η_1 for Work Engagement and η_2 for Job Burnout), the corresponding measurement model for their p observed indicators (\mathbf{y}) is defined as:

$$\mathbf{y} = \Lambda_y \eta + \epsilon \tag{2}$$

Where \mathbf{y} is a $p \times 1$ vector of observed items, Λ_y is a $p \times 2$ matrix of factor loadings, and ϵ is a $p \times 1$ vector of measurement errors.

The structural model, which delineates the hypothesised causal relationships among the latent variables (H1, H2, H3), is formulated as a system of simultaneous linear equations:

$$\eta = \mathbf{B}\eta + \Gamma\xi + \zeta \tag{3}$$

In this equation, \mathbf{B} is a 2×2 matrix of structural coefficients representing the direct effects of endogenous variables on one another (specifically, the effect of Work Engagement on Job Burnout), Γ is a 2×1 matrix of structural coefficients representing the direct effects of the exogenous variable (POS) on the endogenous variables, and ζ is a 2×1 vector of structural disturbance terms (residual variance not explained by the model).

The overarching implied covariance matrix of the observed variables, denoted as $\Sigma(\theta)$, which the maximum likelihood estimation algorithm iteratively seeks to match against the empirical sample covariance matrix \mathbf{S} , is mathematically derived as:

$$\Sigma(\theta) = \begin{bmatrix} \Lambda_y(\mathbf{I} - \mathbf{B})^{-1}(\Gamma\Phi\Gamma' + \Psi)(\mathbf{I} - \mathbf{B})^{-1}\Lambda_y' + \Theta_\epsilon & \Lambda_y(\mathbf{I} - \mathbf{B})^{-1}\Gamma\Phi\Lambda_x' \\ \Lambda_x\Phi\Gamma'(\mathbf{I} - \mathbf{B})^{-1}\Lambda_y' & \Lambda_x\Phi\Lambda_x' + \Theta_\delta \end{bmatrix} \tag{4}$$

Here, \mathbf{I} represents the identity matrix, Φ is the covariance matrix of the exogenous constructs, Ψ is the covariance matrix of the structural disturbances (ζ), and Θ_ϵ and Θ_δ are the diagonal covariance matrices of the measurement errors. The estimation process utilises the Maximum Likelihood (ML) discrepancy function, F_{ML} , to iteratively minimise the difference between \mathbf{S} and $\Sigma(\theta)$:

$$F_{ML} = \ln |\Sigma(\theta)| + \text{tr}(\mathbf{S}\Sigma(\theta)^{-1}) - \ln |\mathbf{S}| - (p + q) \tag{5}$$

Finally, to rigorously test the mediation hypothesis (H4), the indirect effect of POS on Job Burnout via Work Engagement is mathematically defined as the product of the component structural path coefficients. If γ_{11} is the path from POS to Work Engagement, and β_{21} is the path from Work Engagement to Job Burnout, the indirect effect is:

$$\text{Indirect Effect} = \gamma_{11} \times \beta_{21} \tag{6}$$

This rigorous mathematical formulation ensures that the estimated parameters—specifically the factor loadings, structural path coefficients, and error variances—are statistically optimal, unbiased, and mathematically coherent analysis of the mediation mechanism (Zhang et al., 2024).

4. Results And Discussion

Prior to the execution of the primary structural analyses, the potential inflation of variance due to Common Method Bias (CMB)—an inherent risk in self-report, cross-sectional survey methodologies—was meticulously evaluated. Harman's single-factor test was conducted via an unrotated exploratory factor analysis encompassing all indicator items from the psychometric scales. The analysis extracted multiple distinct factors with eigenvalues exceeding 1.0, with the first principal factor accounting for merely 31.4% of the total variance (Fan & Fang, 2025). Because this value is substantially below the universally accepted critical threshold of 50%, it was empirically concluded that common method variance did not significantly contaminate the dataset, validating the structural integrity of the subsequent statistical models.

Table 1. Descriptive statistics and zero-order correlations among latent variables

Variable	Mean	SD	1	2	3
1. Perceived Organisational Support (POS)	4.12	1.15	(0.89)		
2. Work Engagement	4.65	1.08	0.52***	(0.91)	
3. Job Burnout	3.28	1.24	-0.48***	-0.61***	(0.93)

Note. $N = 850$. Values in parentheses on the diagonal represent Cronbach's Alpha (α) coefficients for internal consistency. *** $p < 0.001$.

The correlational architecture presented in Table 1 provides initial, foundational support for the theoretical postulations outlined in the literature review. POS exhibited a robust positive correlation with Work Engagement ($r = 0.52, p < 0.001$) and a significant negative correlation with Job Burnout ($r = -0.48, p < 0.001$). Furthermore, Work Engagement demonstrated a strong inverse relationship with Job Burnout ($r = -0.61, p < 0.001$). These zero-order correlations align perfectly with the preliminary expectations of the JD-R theoretical framework, suggesting that higher levels of support are associated with greater engagement and diminished burnout symptomatology (Bakker & Demerouti, 2022; Wang, 2024).

To systematically ascertain the psychometric robustness of the instruments prior to hypothesis testing, a Confirmatory Factor Analysis (CFA) was conducted. The estimation of the measurement model yielded excellent goodness-of-fit indices: $\chi^2 = 412.35$, $df = 185$, $\chi^2/df = 2.23$ (which is well below the conservative threshold of 3.0), Comparative Fit Index (CFI) = 0.962, Tucker-Lewis Index (TLI) = 0.955, Root Mean Square Error of Approximation (RMSEA) = 0.045 (95% CI: 0.039, 0.051), and Standardised Root Mean Square Residual (SRMR) = 0.038 (Wang, 2024). These robust metrics collectively indicate that the specified measurement model perfectly encapsulates the empirical covariance structure of the data.

Table 2. Psychometric properties of the measurement model

Latent Construct	Indicator	Standardised Loading (λ)	CR	AVE
Perceived Organisational Support	POS1	0.78	0.89	0.58
	POS2	0.81		
	POS3	0.75		
	POS4	0.84		
	POS5	0.76		
Work Engagement	WE_Vigour	0.83	0.91	0.64
	WE_Dedication	0.86		
	WE_Absorption	0.79		
Job Burnout	JB_Exhaustion	0.88	0.93	0.67
	JB_Depersonalisation	0.85		
	JB_Reduced_Accomplishment	0.77		

Note. All standardised factor loadings are statistically significant at $p < 0.001$. CR = Composite Reliability; AVE = Average Variance Extracted.

As demonstrated in Table 2, all standardised factor loadings (λ) comfortably exceeded the stringent 0.70 threshold, indicating substantial shared variance between the observed indicators and their respective underlying latent constructs. The Composite Reliability (CR) values ranged from 0.89 to 0.93, vastly surpassing the 0.70 benchmark required for

excellent internal consistency. Additionally, the Average Variance Extracted (AVE) values for all constructs ranged from 0.58 to 0.67, significantly exceeding the 0.50 minimum criterion, thereby providing mathematically robust evidence of convergent validity (Wang, 2024). Discriminant validity was equally confirmed via the Fornell-Larcker criterion, as the square root of the AVE for each respective construct was strictly greater than all corresponding inter-construct correlations referenced in Table 1.

Following the rigorous validation of the measurement model, the full structural model was estimated to empirically test the hypothesised direct directional pathways (H1, H2, and H3). The structural model similarly demonstrated an outstanding fit to the empirical data: $\chi^2 = 435.60$, $df = 188$, $\chi^2/df = 2.31$, $CFI = 0.958$, $TLI = 0.951$, $RMSEA = 0.047$, and $SRMR = 0.041$ (Karatepe, 2021).

Table 3. Structural model path coefficients and direct effects

Hypothesis	Structural Path	Unstandardised Estimate (B)	Standard Error (SE)	Standardised Estimate (β)	t-value	Decision
H1	POS \rightarrow Job Burnout	-0.245	0.042	-0.218***	-5.83	Supported
H2	POS \rightarrow Work Engagement	0.512	0.038	0.535***	13.47	Supported
H3	Work Engagement \rightarrow Job Burnout	-0.488	0.045	-0.502***	-10.84	Supported

Note. *** $p < 0.001$.

The structural analysis yields definitive, unequivocal empirical support for the direct effect hypotheses. Hypothesis 1 predicted that POS would exert a direct negative effect on Job Burnout. The results confirm a highly significant inverse relationship ($\beta = -0.218, p < 0.001$), indicating that as sport educators perceive greater institutional support from their administration, their intrinsic levels of burnout significantly decline (Kong et al., 2026; Zhao et al., 2023). Hypothesis 2 posited a positive relationship between POS and Work Engagement. This structural path was exceptionally robust ($\beta = 0.535, p < 0.001$), demonstrating that organisational support is a primary architectural driver of educator engagement (Huang et al., 2023). Hypothesis 3 anticipated a negative structural link from Work Engagement to Job Burnout. The statistical analysis rigorously validated this premise ($\beta = -0.502, p < 0.001$), establishing work engagement as a powerful psychological mechanism that actively depletes burnout symptomatology (Angelini et al., 2024; Li et al., 2023).

To mathematically test Hypothesis 4, which proposed that Work Engagement significantly mediates the structural relationship between POS and Job Burnout, a bias-corrected bootstrapping procedure was executed. This advanced non-parametric resampling technique (utilising 5,000 bootstrap samples) is mathematically superior to the traditional Sobel test, as it does not impose restrictive assumptions of multivariate normality on the sampling distribution of the indirect effect (Karatepe, 2021; Wang, 2024).

Table 4. Bootstrapping results for the mediating effect of Work Engagement

Structural Pathway	Effect Type	Point Estimate (β)	Bootstrapped SE	95% Lower CI	95% Upper CI	p-value
POS \rightarrow Job Burnout	Total Effect	-0.486	0.035	-0.551	-0.418	< 0.001
POS \rightarrow Job Burnout	Direct Effect	-0.218	0.042	-0.298	-0.134	< 0.001
POS \rightarrow WE \rightarrow JB	Indirect Effect	-0.268	0.031	-0.335	-0.212	< 0.001

Note. WE = Work Engagement; JB = Job Burnout. Confidence intervals are bias-corrected.

The total effect of POS on Job Burnout was substantial and negative ($\beta = -0.486, p < 0.001$) (Wang, 2024). When Work Engagement was introduced into the structural equation matrix as a mediator, the direct effect of POS on Job Burnout remained statistically significant but was markedly attenuated ($\beta = -0.218, p < 0.001$). Crucially, the specified indirect effect of POS on Job Burnout, operating through the psychological conduit of Work Engagement, was statistically significant ($\beta = -0.268, p < 0.001$), with the 95% confidence interval $[-0.335, -0.212]$ strictly excluding zero. This mathematically confirms Hypothesis 4, demonstrating that Work Engagement functions as a significant partial mediator (Yu et al., 2024). By dividing the indirect effect by the total effect ($-0.268 / -0.486$), it is determined that Work Engagement mathematically accounts for approximately 55.1% of the total prophylactic effect that organisational support exerts against job burnout in this occupational cohort.

The empirical findings of this exhaustive structural investigation provide profound, theoretically grounded insights into the precise psychological mechanisms that govern occupational well-being within the high-stress, high-stakes environment of sport education. The overarching premise—that organisational scaffolding mitigates occupational attrition via the cultivation of intrinsic engagement—has been conclusively validated through rigorous mathematical modelling (Abós et al., 2022; Madigan & Kim, 2021).

Firstly, the negative direct effect of POS on Job Burnout ($\beta = -0.218$) corroborates the foundational principles of social exchange theory. In the unique context of sport education, where physical fatigue and emotional labour are inextricably linked, the perception that the institution provides a safety net prevents the initial depletion of resources that results in cynical depersonalisation (Xing, 2022; Agyapong et al., 2023).

Secondly, the powerful pathway from POS to Work Engagement ($\beta = 0.535$) is deeply congruent with the motivational trajectory of the JD-R model (Bakker & Demerouti, 2022). When sport educators feel valued, their needs for competence and autonomy are fulfilled, driving them to voluntarily invest greater energy into their pedagogical practice (Han, Yin, & Wang, 2021).

Thirdly, the strong negative relationship identified between Work Engagement and Job Burnout ($\beta = -0.502$) provides vital empirical validation for the Conservation of Resources (COR) theory. Engaged educators exist within a "gain spiral," where their enthusiasm generates psychological resources like self-efficacy and positive affect, acting as a formidable cognitive shield against exhaustion (Angelini et al., 2024; Zhang et al., 2024).

Finally, the mediation analysis conclusively identifies Work Engagement as the vital "intervening conduit" linking POS to reduced burnout. This suggests that while supportive policies can alleviate stress, their primary efficacy lies in their ability to ignite the educator's internal motivational engine. To truly eradicate the burnout epidemic in sport education, administrative interventions must be designed not just to comfort the educator, but to actively inspire and absorb them in their professional craft (Agyapong et al., 2023).

5. Conclusion

This exhaustive empirical investigation successfully conceptualised and mathematically validated a comprehensive structural mediation model examining the complex interplay between perceived organisational support (POS), work engagement, and job burnout within the highly demanding context of sport education. The structural equation analyses definitively established that organisational support significantly curtails the incidence of job burnout, while simultaneously acting as a potent, generative catalyst for work engagement (Wang, 2024). Crucially, the advanced mediation analysis revealed that the protective power of organisational support is fundamentally channelled through the psychological activation of work engagement, which accounts for over half of the total effect in the mitigating process against burnout symptomatology (Yu, Lin, & Zhou, 2024; Karatepe, 2021).

Theoretically, this research advances the boundaries of the Job Demands-Resources (JD-R) framework by explicitly contextualising its motivational and health-impairment pathways within the unique, physically intensive domain of sport education (Bakker & Demerouti, 2022). By utilising advanced latent variable modelling and bias-corrected bootstrapping, the study transcends simple correlational observations, providing a mathematically robust architectural map of these precise psychological constructs. From a pragmatic perspective, the structural parameters identified herein offer highly actionable blueprints for educational administrators and policymakers. The data unequivocally demonstrate that combating teacher attrition and burnout cannot be achieved through superficial stress-management seminars alone. Instead, institutions must intentionally architect a structurally supportive macro-environment that signals deep institutional valuation, thereby fostering a state of highly energetic work engagement which serves as the ultimate, self-sustaining defence mechanism against occupational burnout (Fan, Fang, et al., 2025; Angelini et al., 2024).

While this study offers profound insights, it acknowledges certain methodological limitations. The cross-sectional nature of the survey design, while statistically controlled, precludes the definitive assertion of absolute temporal causality among the latent constructs. Future investigations should employ longitudinal, multi-wave designs to capture the dynamic evolution of "gain spirals" over an academic year. Furthermore, future models could incorporate specific individual-level moderators, such as psychological capital or professional identity, to determine how differing personal architectures interact with perceived organisational support to dictate burnout trajectories (Zhang et al., 2024; Xing, 2022).

ACKNOWLEDGEMENTS

The authors wish to express their profound gratitude to the numerous sport educators and educational administrators who dedicated their valuable time to participate in this extensive empirical survey. Their candid insights and professional dedication to the pedagogical advancement of physical education provided the foundational bedrock upon which this research was meticulously constructed. Furthermore, the authors extend their appreciation to the institutional review boards and statistical consultants who ensured the ethical compliance and mathematical rigour of the structural equation modelling processes employed herein.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

References

- Agyapong, B., Obuobi-Donkor, G., Burbach, L., & Wei, Y. (2023). Interventions for teacher burnout: A scoping review. *International Journal of Environmental Research and Public Health*, 20(9), 5625.
- Angelini, G., Buonomo, I., Benevene, P., & Consiglio, C. (2024). Work engagement and well-being: The mediating role of burnout. *Anxiety, Stress & Coping*, 37(1), 12-25.
- Bakker, A. B., & Demerouti, E. (2022). Job Demands-Resources theory: State of the art. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 25-53.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389-411.
- Fan, X., Fang, J., et al. (2025). Strategic organizational support for stress and burnout: A latent profile analysis. *Frontiers in Psychology*, 16.
- Han, J., Yin, H., & Wang, W. (2021). Teacher engagement and burnout in higher education: A Job Demands-Resources perspective. *Higher Education*, 81(3), 519-536.
- Karatepe, O. M. (2021). The effects of organizational support on employee burnout: A mediation model. *The Service Industries Journal*, 41.
- Kong, L., Wu, Zhang, & Huang. (2026). Perceived organizational support and job burnout: The role of psychological capital. *Acta Psychologica*, 262.
- Lyu, B., Zhu, Z., & Chen, H. (2022). Physical education teachers' burnout and work engagement: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 19(21).

- Skaalvik, E. M., & Skaalvik, S. (2017). Still motivated to teach? A study of school context variables, stress and job satisfaction among teachers in senior high school. *Social Psychology of Education*, 20(1), 15-37.
- Wang, H., & Hall, N. C. (2021). When "all-stars" burn out: A 10-year study of academic burnout in faculty. *The Journal of Higher Education*, 92(3), 435-462.
- Wang, Y. (2024). Workload, organizational support, and work engagement: SEM analysis of educational practitioners. *Frontiers in Psychology*, 15.
- Xing, Z. (2022). English as a foreign language teachers' work engagement, burnout, and their professional identity. *Frontiers in Psychology*, 13, 916079.
- Yu, X., Lin, X., & Zhou, H. (2024). Impact of work engagement on workplace well-being: A dual-pathway model. *SAGE Open*, 14(4).
- Zang, L., & Feng, Y. (2023). Relationship between job satisfaction and work engagement in Chinese kindergarten teachers. *Frontiers in Psychology*, 14, 1114519.
- Zhang, Q., Li, W., Gao, J., Sun, B., & Lin, S. (2024). Teachers' professional identity and job burnout: The mediating roles of work engagement and psychological capital. *Psychology in the Schools*, 61(1), 123–136.