

Effects of Supportive Work Environment on Employee Retention among Healthcare Professionals in Kerala: The Mediating Role of Organizational Engagement

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ABSTRACT:

This study examines the impact of a supportive work environment on employee retention among healthcare professionals in Kerala, with organizational engagement serving as a mediating variable. Grounded in Social Exchange Theory and the Resource-Based View, the study investigates how workplace factors such as perceived climate, supervisory relationships, peer interaction, and perceived organizational support influence employees' intention to remain with their organizations. A quantitative cross-sectional research design was adopted, and data were collected from healthcare professionals working in public and private hospitals across Kerala. Structural Equation Modeling (SEM) and regression analyses were employed to test the proposed relationships. The findings reveal that a supportive work environment has a significant positive effect on both organizational engagement and employee retention. Organizational engagement was also found to positively influence employee retention. Furthermore, the results indicate that organizational engagement partially mediates the relationship between a supportive work environment and employee retention. The study highlights the importance of fostering supportive workplace practices and enhancing employee engagement as strategic approaches to reducing turnover and strengthening workforce stability in the healthcare sector. The findings provide valuable implications for healthcare administrators and human resource managers seeking to retain skilled professionals in Kerala's healthcare system.

Keywords:

Supportive Work Environment, Employee Retention, Organizational Engagement, Healthcare Professionals, Perceived Organizational Support, Social Exchange Theory, Kerala Healthcare Sector.

Article History

Received: 03 February 2026

Revised: 06 March 2026

Accepted: 12 March 2026

How to cite this article:

Krishnan, V. (2026). Effects of Supportive Work Environment on Employee Retention among Healthcare Professionals in Kerala: The Mediating Role of Organizational Engagement. *LEADER: International Journal of Business Management*. 14(1), 43-56.

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Introduction

In the contemporary era of global healthcare, human resource management faces an unprecedented challenge in retaining skilled professionals. The efficiency, reliability, and overall quality of any healthcare system depend heavily on the strength, capability, and psychological stability of its workforce. Unlike industrial or commercial sectors where workforce shortages primarily affect financial output, critical shortages in healthcare directly jeopardize patient safety, healthcare delivery standards, and community well-being. This vulnerability is exceptionally pronounced in the state of Kerala, India. Internationally celebrated for its progressive "Kerala Model of Health"—characterized by high life expectancy, low infant mortality, and robust grassroots public health indicators—the state's healthcare machinery relies intensely on its medical, nursing, and frontline personnel (Salim & Gurumoorthy, 2025).

Despite these laudable achievements, Kerala's healthcare sector faces a severe structural threat: the systemic migration and voluntary turnover of its highly trained medical staff. Often dubbed a primary hub for global health workforce migration, hospitals in Kerala lose significant numbers of qualified professionals to Western nations, the Middle East, and lucrative private setups in urban Indian clusters. In this volatile environment, relying solely on competitive economic compensation is no longer a viable, long-term retention blueprint. Consequently, organizational scholars and healthcare administrators have shifted their focus toward non-monetary strategic interventions. Chief among these is the engineering of a supportive work environment (SWE) designed to foster deep-rooted organizational engagement (OE), which serves as a psychological anchor keeping healthcare workers tied to their domestic institutions.

Employee retention (ER) is broadly conceptualized as an institution's systematic effort to create an environment that encourages highly skilled staff to remain with the organization over an extended duration (Kundu & Lata, 2017). Within hospital environments, high turnover rates trigger cascading crises, including increased medical error rates, compromised patient care continuity, and steep financial burdens related to

recruiting and retraining replacement staff. Managing these attrition rates requires a deep understanding of what drives an individual's intent to stay. Research indicates that retention problems emerge as the most critical workforce management challenges of the modern era, requiring hospitals to look beyond traditional administrative compliance and embrace proactive talent management strategies (Padmavathi, 2023). In highly stressful clinical environments, retention is heavily dictated by how employees view their immediate workplace conditions and how deeply they identify with their employing institution.

A supportive work environment (SWE) is widely recognized as a multi-dimensional construct that encompasses the physical, structural, and interpersonal conditions provided by an employer. According to established organizational frameworks, a truly supportive environment comprises several core dimensions: a healthy perceived organizational climate, constructive supervisory relationships, cooperative peer group interactions, and robust perceived organizational support (Kundu & Lata, 2017; Padmavathi, 2023). When applied to healthcare professionals, these dimensions take on added significance. Perceived climate addresses the physical layout, structural safety protocols, and operational balance of hospital wards, which are vital for reducing the severe emotional exhaustion common among frontline workers. Supervisory relationships look at the leadership dynamics between clinical directors, nursing superintendents, and their staff, ensuring that supervisors provide constructive feedback rather than purely punitive management. Peer group interactions reflect the collaborative teamwork required across inter-disciplinary clinical teams (such as doctors, nurses, and laboratory techs) to handle emergency trauma and complex cases. Finally, perceived organizational support (POS) measures how much the hospital administration visibly values its staff's daily contributions and structural well-being (Padmavathi, 2023).

The theoretical mechanism linking a supportive environment to employee retention is rooted primarily in Social Exchange Theory (SET), originally formulated by Blau (1964). SET posits that organizational relationships are driven by a norm of reciprocity. When an institution provides favorable working conditions, structural

empowerment, and psychological safety, employees feel an implicit psychological obligation to reciprocate with positive work behaviors and attitudes (Naz et al., 2020; Padmavathi, 2023). Within hospital networks, this reciprocity manifests as an increased intention to stay, enhanced clinical dedication, and decreased turnover intentions (Naz et al., 2020). Conversely, when a work environment is perceived as unsupportive, rigid, or indifferent to the physical and mental strains of medical care, the social exchange cycle breaks. This breakdown often drives staff to withdraw from their roles or seek employment elsewhere.

However, direct paths from a supportive environment to long-term retention often do not tell the whole story. Instead, this relationship is frequently transmitted through vital psychological states, most notably organizational engagement (OE). Distinct from job engagement—which measures an employee's immersion in their immediate, everyday tasks—organizational engagement refers to the psychological absorption, dedication, and alignment of an employee with the broader goals, values, and identity of the entire institution (Kundu & Lata, 2017; Putra & Surya, 2024). Engaged employees view themselves as an integral part of the organization's long-term vision. They willingly invest their emotional, cognitive, and physical energies into driving institutional success (Almerri, 2023).

When hospitals invest heavily in establishing a supportive work environment, they lay the groundwork for high organizational engagement, which in turn acts as a primary psychological driver of retention (Putra & Surya, 2024). This mediating pathway can also be viewed through the lens of the Resource-Based View (RBV) of the firm (Barney, 2001). In a highly competitive healthcare environment like Kerala's, a highly engaged and loyal workforce is a rare, valuable, inimitable, and non-substitutable strategic asset that gives an institution its primary competitive edge.

While the existing literature clearly establishes the value of supportive work climates and organizational engagement in corporate, hospitality, and fast-food sectors (Almerri, 2023; Naz et al., 2020; Putra & Surya, 2024), there remains a distinct geographical and sector-specific literature gap regarding healthcare systems in

developing states, specifically Kerala. Hospital environments in Kerala operate under highly distinct and intense conditions. Medical professionals here navigate highly literate, exceptionally demanding patient populations, grueling shift rotations, and systemic resource constraints, all while dealing with constant recruitment pressures from overseas healthcare networks (Jose, 2017; Salim & Gurumoorthy, 2025).

Past research shows that specific human resource practices and workplace conditions in Kerala significantly alter the internal psychological states of healthcare workers, such as their overall job satisfaction and field performance (Jose, 2017; Salim & Gurumoorthy, 2025). Yet, empirical models that explicitly trace the mediating influence of organizational engagement between a multi-dimensional supportive work environment and employee retention among these healthcare professionals remain scarce.

This empirical study directly addresses this research gap. By investigating both public and private hospital institutions across Kerala, this paper explores how the sub-dimensions of a supportive work environment (perceived climate, supervisor relationship, peer interaction, and POS) influence employee retention among healthcare professionals. Crucially, it evaluates the exact extent to which organizational engagement mediates this relationship. By providing an integrated structural model, this study aims to offer hospital administrators, public health policymakers, and HR managers a practical roadmap. The findings can help design systemic, non-monetary workplace strategies to stabilize Kerala's healthcare workforce, curb the domestic brain drain, and ultimately elevate the standard of patient care across the region.

Literature Review

The conceptual mechanism connecting a supportive work environment, organizational engagement, and employee retention is deeply rooted in Social Exchange Theory (SET), originally formulated by Blau (1964). SET posits that organizational interactions are governed by a fundamental norm of reciprocity: when an institution provides its workforce with favorable, structurally empowering, and psychologically safe conditions, employees experience a felt obligation

to reciprocate with highly positive work attitudes and constructive behavioral outcomes (Naz et al., 2020; Padmavathi, 2023). In hospital ecosystems, this reciprocal cycle manifests when healthcare professionals receive systemic investments from their employers; they instinctively return this favor by immersing themselves emotionally and cognitively within the institution, which minimizes their underlying intent to leave (Jose, 2017; Kundu & Lata, 2017).

Complementing SET is the Resource-Based View (RBV) of the firm (Barney, 2001), which frames human capital as a strategic imperative. In knowledge-intensive and high-stress environments like Kerala's health sector, highly skilled healthcare professionals—such as specialized doctors, registered nurses, and community health networks—represent an organization's most valuable, rare, inimitable, and non-substitutable strategic assets (Salim & Gurumoorthy, 2025). Cultivating a supportive work climate acts as an institutional resource that generates sustained competitive advantages by stabilizing the workforce and preventing critical talent drains (Almerri, 2023; Putra & Surya, 2024).

Supportive Work Environment and Employee Retention

A supportive work environment (SWE) is conceptualized as a multi-dimensional construct comprising the operational, social, and structural components of an organization that facilitate an employee's daily duties and promote psychological well-being (Kundu & Lata, 2017). Based on foundational paradigms, SWE is divided into four distinct sub-dimensions: *perceived climate*, *supervisory relationships*, *peer group interactions*, and *perceived organizational support (POS)* (Kundu & Lata, 2017; Padmavathi, 2023). Within medical institutions, perceived climate dictates the structural layout, ergonomic comfort, shift distributions, and safety protocols of hospital units. This sub-dimension is vital because poor physical or psychological climates rapidly accelerate cognitive exhaustion and physical burnout among clinical professionals (Naz et al., 2020).

Supervisory relationships represent the leadership styles exhibited by head clinicians, nursing superintendents, and administrative management. When supervisors offer constructive

feedback, technical guidance, and empathetic leadership, healthcare workers report far lower turnover intentions (Jose, 2017). Peer group interactions denote the quality of inter-professional collaboration and teamwork across diverse diagnostic and clinical teams, which is essential for managing acute emergencies and complex inpatient loads (Salim & Gurumoorthy, 2025). Finally, perceived organizational support measures how extensively the hospital administration respects their staff's vocational contributions and structural safety (Padmavathi, 2023).

Empirical research consistently demonstrates that a comprehensive SWE acts as a strong direct predictor of employee retention (ER). When healthcare professionals operate in a workplace that values their safety, optimizes their workloads, and offers cooperative peer systems, their occupational distress drops, which significantly suppresses their voluntary turnover intentions (Naz et al., 2020; Padmavathi, 2023; Putra & Surya, 2024).

Supportive Work Environment and Organizational Engagement

The quality of a workplace climate is a key driver of employee engagement levels. Organizational engagement (OE) represents an employee's comprehensive psychological absorption, emotional identification, and behavioral alignment with the overarching goals, values, and strategic identity of the entire employing institution, rather than just their day-to-day tasks (Kundu & Lata, 2017; Putra & Surya, 2024). Prior literature establishes that corporate environments characterized by rigid hierarchies, isolated functional units, or low institutional care stifle workforce enthusiasm, leading to severe psychological withdrawal (Almerri, 2023).

Conversely, when an organization systematically designs a supportive work environment through clear interpersonal communication, visible supervisor backing, and an inclusive socio-operational climate, employees respond with heightened cognitive and emotional commitment (Kundu & Lata, 2017; Padmavathi, 2023). This dynamic is particularly evident among healthcare professionals in regional public and private sectors. For instance, empirical assessments of nursing workforces and frontline community

workers demonstrate that structural human resource investments and positive work perceptions are strong precursors to elevated levels of work and institutional engagement (Jose, 2017; Salim & Gurumoorthy, 2025). When clinicians perceive that their hospital treats them as valuable institutional stakeholders, their underlying psychological conditions—such as meaningfulness, safety, and psychological availability—are maximized, prompting them to invest their full discretionary energy into the institution (Jose, 2017).

Organizational Engagement and Employee Retention

Retaining high-performing professionals requires more than just neutralizing dissatisfaction; it demands the cultivation of proactive, positive psychological bonds between the individual and the institution. Highly engaged employees view themselves as permanent stakeholders in the organization's corporate trajectory, finding personal meaning in the firm's milestones, which naturally drives down their turnover intentions (Almerri, 2023; Kundu & Lata, 2017). When employees experience high organizational engagement, they develop strong affective attachments to the firm, rendering alternative employment options outside the current institution less appealing (Putra & Surya, 2024).

In modern healthcare networks, this psychological anchor is critical. Medical professionals navigate emotionally taxing workloads, stringent regulatory standards, and complex patient expectations daily (Jose, 2017; Salim & Gurumoorthy, 2025). Engaged healthcare professionals exhibit greater emotional resilience, demonstrate superior clinical performance, and express a significantly higher intent to remain within their current hospital systems long-term (Jose, 2017; Kundu & Lata, 2017). Consequently, organizational engagement serves as an essential internal metric for predicting long-term workforce stability and mitigating institutional brain drain (Almerri, 2023; Putra & Surya, 2024).

The Mediating Role of Organizational Engagement

While a supportive work environment lays the structural foundation for retention, the relationship is rarely a simple direct path. Rather, it

is heavily transmitted through specific internal psychological shifts within the workforce. Social Exchange Theory explains that ambient institutional resources (SWE dimensions) must first transform an individual's psychological state before manifesting as long-term behavioral compliance, such as the decision to stay with an employer (Kundu & Lata, 2017; Padmavathi, 2023). In this framework, organizational engagement serves as the vital psychological pathway through which structural support translates into long-term retention (Putra & Surya, 2024).

When hospitals invest in supportive supervisors, functional inter-professional peer setups, and supportive organizational climates, these structural components ignite organizational engagement. This heightened engagement then directly solidifies the professional's long-term commitment to the institution (Jose, 2017; Putra & Surya, 2024). Although this mediating sequence has been verified in corporate and service domains—such as fast-food franchises in Pakistan (Naz et al., 2020), industrial firms in Kuwait (Almerri, 2023), e-commerce enterprises in India (Padmavathi, 2023), and the hospitality sector in Bali (Putra & Surya, 2024)—it remains under-explored in high-stakes healthcare environments.

This context is vital in regions like Kerala, where medical professionals operate within highly demanding, literate patient environments while facing intense recruitment pressure from international markets (Jose, 2017; Salim & Gurumoorthy, 2025). Understanding this indirect path can help healthcare systems design non-monetary, climate-focused retention strategies.

Hypotheses

Based on the empirical pathways, theoretical models, and regional contextual realities reviewed in the literature, the following hypotheses are proposed for empirical testing:

- **H1:** A Supportive Work Environment (SWE) has a direct, positive, and significant effect on Employee Retention (ER) among healthcare professionals in Kerala.
- **H2:** A Supportive Work Environment (SWE) has a direct, positive, and

significant effect on Organizational Engagement (OE) among healthcare professionals in Kerala.

- **H3:** Organizational Engagement (OE) has a direct, positive, and significant effect on Employee Retention (ER) among healthcare professionals in Kerala.
- **H4:** Organizational Engagement (OE) significantly mediates the relationship between a Supportive Work Environment (SWE) and Employee Retention (ER) among healthcare professionals in Kerala.

Research Methodology

To empirically evaluate the relationships among a Supportive Work Environment (SWE), Organizational Engagement (OE), and Employee Retention (ER), this study adopts a systematic, quantitative, and cross-sectional research design. The structural framework translates the variables validated by Kundu and Lata (2017) and Putra and Surya (2024) into an empirical model specifically tailored to the professional characteristics of the healthcare sector in Kerala. The approach operates within a positivist paradigm, relying on a deductive strategy where structural hypotheses derived from Social Exchange Theory (SET) and the Resource-Based View (RBV) are tested using objective statistical metrics (Naz et al., 2020; Padmavathi, 2023). Given the requirement to analyze direct, indirect, and mediating paths simultaneously, Structural Equation Modeling (SEM)—specifically Partial Least Squares Structural Equation Modeling (PLS-SEM)—serves as the primary analytical technique. This method is highly suited for models combining multi-item reflective latent variables and complex structural dimensions without requiring strict data normality (Naz et al., 2020; Putra & Surya, 2024).

The target population for this investigation consists of full-time clinical professionals, including medical doctors, registered nurses, and allied healthcare staff, actively employed across public and private tertiary healthcare institutions in Kerala. This population navigates a highly distinct and demanding clinical ecosystem characterized by elevated public health literacy, intense patient expectations, and persistent recruitment pressures from international healthcare markets (Jose, 2017;

Salim & Gurumoorthy, 2025). To capture the structural variations inherent across the state's healthcare delivery setup, a stratified random sampling technique will be utilized. The geographic landscape of Kerala will serve as the primary strata, divided into South Kerala (e.g., Thiruvananthapuram, Kollam), Central Kerala (e.g., Ernakulam, Thrissur), and North Kerala (e.g., Kozhikode, Kannur). Within each geographic stratum, healthcare institutions will be categorized by sector type (Public vs. Private) to ensure an equitable, balanced, and representative distribution of respondents. Following the statistical requirements of PLS-SEM and regional empirical baselines in Kerala's nursing sector, a minimum target of 350 to 400 completed questionnaires will be established to achieve sufficient statistical power (Jose, 2017).

Primary data collection will be executed via a structured, self-administered questionnaire administered through a hybrid approach of physical paper forms and digital surveys (Google Forms) over a cross-sectional timeframe of approximately three to four months. Administrative clearance and formal ethical approval will be secured from the human resource departments and institutional ethics committees of the participating hospitals prior to deployment. To control for common method bias and social desirability bias, the survey instruments will include a clear introductory cover letter guaranteeing absolute anonymity and explicit confidentiality, verifying that all collected data will be processed strictly in aggregate format for academic purposes.

The operationalization of the core constructs relies on established, highly validated measurement scales adapted from the literature to fit the specific linguistic and institutional context of Kerala's healthcare delivery system. All items are measured utilizing a uniform five-point Likert scale, anchored from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). The independent variable, Supportive Work Environment (SWE), is conceptualized as a multi-dimensional construct adapted from Kundu and Lata (2017) and Padmavathi (2023), broken down into four core sub-dimensions with four items each: perceived climate (assessing layout and ward safety), supervisor relationship (measuring managerial feedback and supervisor empathy), peer group

interaction (evaluating inter-professional coordination and clinical teamwork), and perceived organizational support (measuring institutional valuation of staff well-being). The mediating variable, Organizational Engagement (OE), is adapted from the six-item institutional scale by Saks (2006) and Kundu and Lata (2017), designed to capture the employee's psychological pride, absorption, and alignment with the hospital network's broader mission rather than immediate daily job tasks. The dependent variable, Employee Retention (ER), is measured through a five-item scale adapted from standard stay-intention frameworks, evaluating the clinician's long-term career commitment and cognitive intent to remain at their current hospital system (Kyndt et al., 2009; Naz et al., 2020). Demographics such as age, gender, sector type (public vs. private), and total years of professional experience will be factored into the model as control variables to isolate alternate influences on retention.

Statistical processing of the data will be conducted using SmartPLS 4 alongside SPSS for initial descriptive coding and data cleaning. The evaluation of the PLS-SEM model follows a strict, sequential two-stage process consisting of measurement model assessment followed by structural model assessment. Stage one focuses on the measurement (outer) model to verify the reliability and validity of the reflective scales. Individual indicator reliability will be confirmed by ensuring factor loadings meet or exceed the 0.70 threshold. Internal consistency reliability will be established using Cronbach's Alpha and Composite Reliability (CR), with both metrics requiring values strictly above 0.70. Convergent validity will be supported when the Average Variance Extracted (AVE) for each latent construct equals or exceeds 0.50 (Kundu & Lata, 2017). Discriminant validity will be evaluated through both the traditional Fornell-Larcker criterion, ensuring the square root of each construct's AVE is greater than its highest correlation with any other variable, and the Heterotrait-Monotrait Ratio (HTMT), requiring all correlation values to stay safely below the conservative threshold of 0.85.

Once the measurement model is fully validated, stage two will assess the structural (inner) model to test the proposed hypotheses and calculate the path coefficients (β), which denote the strength and directional nature of the paths. The statistical significance of these relationships

(t-statistics and p-values) will be generated through a non-parametric bootstrapping procedure utilizing 5,000 resamples. To evaluate the mediation hypothesis (H4), the Preacher and Hayes (2008) bootstrapping approach for indirect effects will be performed, measuring the exact path coefficients and the Variance Accounted For (VAF) index to differentiate between full, partial, or non-existent mediation (Putra & Surya, 2024). Finally, the predictive capacity of the structural framework will be quantified by computing the Coefficient of Determination (R^2) to reflect explained variance, Cohen's effect size (f^2) to observe individual path contributions, and the inner Variance Inflation Factor (VIF), which must fall below a threshold of 3.3 to definitively rule out multicollinearity concerns.

Results

1. Confirmatory factor analysis

Initially, exploratory factor analysis (EFA) was conducted, producing a six-factor solution that explained 63.918% of the variance. The constructs evaluated included perceived climate, supervisory relationship, peer group interaction, perceived organizational support, organizational engagement, and employee retention.

To assess the reliability and internal consistency of the scales, both composite reliability (CR) and Cronbach's alpha were examined. As shown in Table 1, the composite reliability ranged from 0.65 to 0.88, which exceeds the required threshold of ≥ 0.61 , indicating good internal consistency. Additionally, the Cronbach's alpha values for the subscales ranged from 0.66 to 0.87, meeting the threshold of ≥ 0.61 and providing acceptable reliability.

Construct validity was established by evaluating both convergent and discriminant validity. To verify convergent validity, the average variance extracted (AVE) for each construct was calculated; the values fell between 0.52 and 0.70, exceeding the recommended threshold of ≥ 0.51 , thereby establishing convergent validity. Furthermore, discriminant validity was confirmed as the squared correlation of the variables was found to be less than the average variance extracted for each construct (Fornell and Larcker, 1981).

Table 1

Measure	Range	Threshold	Interpretation
Cronbach's Alpha	0.66 – 0.88	≥ 0.61	Acceptable reliability
Composite Reliability (CR)	0.65 – 0.88	≥ 0.61	Good internal consistency
Average Variance Extracted (AVE)	0.52 – 0.70	≥ 0.51	Convergent validity established

Table 2 presents the confirmatory factor analysis (CFA) results against standard thresholds: $\chi^2/df < 3.0$ (permissible up to 5.0), $TLI \geq 0.90$, $CFI \geq 0.90$, and $RMSEA \leq 0.08$ (Hair et al., 2006). The proposed Six-Factor Model (Baseline) demonstrated the best fit for the study, yielding $\chi^2/df = 192.1$, $df = 122$, $\chi^2/df = 1.60$, $TLI = 0.95$, $CFI = 0.96$, and $RMSEA = 0.06$.

Three alternative models were tested to validate these results. Both the One-Factor Model ($\chi^2 = 672.4$, $df = 138$, $\chi^2/df = 4.95$, $TLI = 0.65$, $CFI = 0.69$, $RMSEA = 0.14$) and the Two-Factor Model ($\chi^2/df = 464.8$, $df = 136$, $\chi^2/df = 3.47$, $TLI = 0.78$, $CFI = 0.81$, $RMSEA = 0.11$) exhibited poor fits. A Five-Factor Model, merging highly correlated organizational support and engagement items, showed an acceptable fit ($\chi^2 = 207.3$, $df = 127$, $\chi^2/df = 1.66$, $TLI = 0.95$, $CFI = 0.96$, $RMSEA = 0.06$) but remained structurally inferior to the baseline. Because the baseline model outperformed all alternatives, discriminant validity was confirmed (Kashyap and Rangnekar, 2014).

Table 2

Model	χ^2	df	χ^2/df	TLI	CFI	RMSEA
Six-Factor Model (Baseline)	192.1	122	1.60	0.95	0.96	0.06
One-Factor Model	672.4	138	4.95	0.65	0.69	0.14
Two-Factor Model	464.8	136	3.47	0.78	0.81	0.11
Five-Factor Model	207.3	127	1.66	0.95	0.96	0.06

2. Overall measurement model

To test empirically whether a supportive work environment (SWE)—encompassing perceived climate, supervisory relationship, peer group interaction, and perceived organizational support—could produce a higher-order construct, a second-order factor model was estimated. The second-order CFA results ($\chi^2/df = 1.84$, $CFI = 0.95$, $TLI = 0.94$, $RMSEA = 0.06$) successfully confirmed the convergence of these practices into a single higher-order factor. Consequently, the previous six-factor measurement model was revised into a more parsimonious Three-Factor Model consisting of the SWE index, organizational engagement, and employee retention. This three-factor structure revealed an excellent model fit, yielding $\chi^2/df = 196.0$, $df = 126$, $\chi^2/df = 1.55$, $TLI = 0.94$, $CFI = 0.95$, and $RMSEA = 0.05$. Based on these robust results, we proceeded with the three-factor model for subsequent analysis.

3. Common Method Variance

To assess the potential extent of common method variance, Harman's single-factor test was conducted using confirmatory factor analysis (CFA). The results of this single-factor measurement model revealed a poor fit to the data, yielding $\chi^2/df = 672.4$, $df = 138$, $\chi^2/df = 4.95$, $TLI = 0.65$, $CFI = 0.69$, and $RMSEA = 0.14$. Because the single-factor structure exhibited an inadequate fit compared to the baseline measurement model, it can be confidently concluded that common method variance was not a major concern in this study (Podsakoff et al., 2003).

4. Descriptive statistics

The intercorrelations of the scales as well as the means and standard deviations indicate that the correlations supported the hypothesised linkages between supportive work environment, organizational engagement, and employee retention. As high correlations have been found among some independent variables, a multicollinearity problem might exist (Malhotra, 2010). In this context, variance inflation factors (VIFs) and tolerance statistics are known indicators. VIF statistics were found within the range of 1.076 - 2.111, far less than the acceptable criteria of below 10 (Kennedy, 1992). Also, the

tolerance values associated with the predictors were found within the range of 0.474 - 0.929. A value of 0.10 is recommended as the minimum level of tolerance (Tabachnick and Fidell, 2001). Hence, the concerned study did not create a multicollinearity problem, or it can be stated that the regression model did not produce biased results.

5. Regression analysis

For empirical evidences, we used the mediation conditions (Baron and Kenny, 1986) as 1: the causal variable (i.e. supportive work environment) is related with the outcome variable (i.e. employee retention), 2: the causal variable (i.e. supportive work environment) is correlated with the mediator (i.e. organizational engagement), 3: the mediator variable (i.e. organizational engagement) must exercise an effect on the outcome variable (i.e. employee retention), and 4: the relationship of the causal variable with outcome variable is reduced significantly (partial mediation) or remains no longer significant (full mediation), if both casual and outcome variables entered in regression equation simultaneously.

Table 3

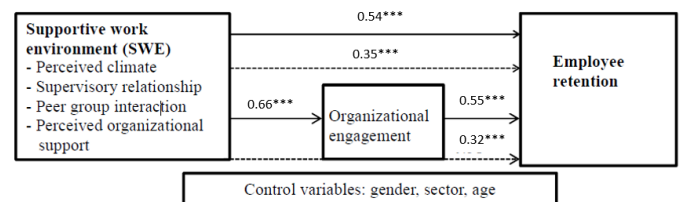
Model	Dependent Variable	Predictors	β	Significance
Model 1	Employee Retention	Control Variables	0.14	$p \leq 0.01$
Model 2	Organizational Engagement	Supportive Work Environment	0.66	$p \leq 0.001$
Model 3	Employee Retention	Supportive Work Environment	0.54	$p \leq 0.001$
Model 4	Employee Retention	Organizational Engagement	0.55	$p \leq 0.001$
Model 5	Employee Retention	Supportive Work Environment Organizational Engagement	0.35 0.32	$p \leq 0.001$ $p \leq 0.001$

The current study infers that all the conditions suggested by Baron and Kenny (1986) were satisfied. The multiple regression analysis results disclosed a statistically significant positive relationship between supportive work environment and employee retention (see Table 3). Model 1 was taken as the base model, which included the

control variables. Model 2, 3, 4, and 5 highlighted the effects of the independent variable along with the mediating variable on the dependent variable.

In Model 2, organizational engagement was regressed on supportive work environment and was found to be significant and positive ($\beta = 0.66$, $p \leq 0.001$), thus supporting hypothesis H2. In Model 3, employee retention was regressed on supportive work environment, and the relationship was significant and positive ($\beta = 0.54$, $p \leq 0.001$), supporting hypothesis H1. In Model 4, employee retention was regressed on organizational engagement (mediator), and the relationship was also significant and positive ($\beta = 0.55$, $p \leq 0.001$), thereby supporting hypothesis H3.

In Model 5, employee retention was regressed on supportive work environment and organizational engagement simultaneously. The results show that organizational engagement was a significant predictor of employee retention ($\beta = 0.32$, $p \leq 0.001$), while the effect of supportive work environment on employee retention was reduced (from $\beta = 0.54$, $p \leq 0.001$ to $\beta = 0.35$, $p \leq 0.001$), but remained statistically significant. Hence, it can be concluded that organizational engagement partially mediates the relationship between supportive work environment and employee retention. Thus, hypothesis H4 was supported.



6. Results of Regression Analysis for the Derived Model

The standardized β coefficients are illustrated in Figure 2. Statistical significance is denoted as *** $p \leq .001$, ** $p \leq .01$, and * $p \leq .05$. Solid lines represent the direct relationships between the predictor and dependent variables, while dashed lines indicate the mediating effect of organizational engagement. The direction of relationships is represented by positive signs.

The results indicate that a supportive work environment has a significant direct effect on employee retention, as well as an indirect effect

through organizational engagement. The relationship between supportive work environment and organizational engagement is positive and significant, and organizational engagement, in turn, significantly influences employee retention. When organizational engagement is included in the model, the direct effect of supportive work environment on employee retention is reduced but remains significant, indicating partial mediation.

Furthermore, Sobel's (1982) Z-test was conducted to validate the indirect effect. The results confirm that the mediating role of organizational engagement is statistically significant ($z = 4.257$, $p \leq .05$). This demonstrates that organizational engagement significantly mediates the relationship between supportive work environment and employee retention.

Discussion

In a knowledge-based economy, retaining a talented workforce is critical for sustaining organizational success and competitive advantage (Pfeffer, 1994). The present study examined the relationship between a supportive work environment and employee retention. The findings of this study provide strong empirical evidence that a supportive work environment significantly and positively influences employee retention. This result aligns with previous research suggesting that organizational practices fostering a supportive climate contribute to employees' intention to remain with the organization (Ramlall, 2003; Guchait and Cho, 2010).

Consistent with social exchange theory (Blau, 1964), the results indicate that when organizations invest in creating a supportive work environment, employees reciprocate through increased loyalty and retention. A supportive work environment—comprising perceived climate, supervisory relationships, peer interaction, and perceived organizational support—emerged as a strong predictor of employee retention. This supports earlier findings that a favorable work environment enhances employee attitudes and reduces turnover intentions (Gilbreath, 2004; Allen et al., 2003).

Furthermore, the findings suggest that the overall index of a supportive work environment is a more effective predictor of employee retention

than individual components in isolation. This reinforces the argument that integrated HR practices yield stronger organizational outcomes compared to fragmented initiatives (Becker and Huselid, 1999). Similar findings by Cromwell and Kolb (2004) indicate that supportive environments facilitate knowledge transfer and skill development, which further strengthens employees' attachment to the organization. Additionally, a supportive work environment helps mitigate employee burnout, thereby improving retention (Lingard and Francis, 2006).

Another important contribution of this study is the identification of organizational engagement as a mediating variable. The results reveal that a supportive work environment positively influences organizational engagement, which in turn enhances employee retention. Moreover, organizational engagement was found to partially mediate this relationship, indicating that while supportive work environments directly impact retention, they also do so indirectly through increased engagement. This finding is consistent with prior research highlighting engagement as a critical mechanism linking organizational practices and employee outcomes (Saks, 2006; Malinen et al., 2013).

The study also highlights the importance of supervisory relationships in predicting employee retention. Strong and supportive supervision fosters trust and reduces employee turnover intentions, which is consistent with findings by van Dierendonck et al. (2002). Similarly, peer group interaction was found to positively influence retention, supporting earlier research that emphasizes the role of collegial relationships in enhancing employee commitment (Ghosh and Sahney, 2011).

Additionally, perceived organizational support plays a crucial role in shaping employee retention. Employees who perceive higher levels of support in terms of recognition, respect, and involvement are more likely to remain with the organization (Wayne et al., 1997). These findings are consistent with the broader literature, which suggests that supportive HR practices such as participation in decision-making, career development opportunities, and fair reward systems significantly improve retention outcomes (Gbrevbie, 2010; Presbitero et al., 2016).

The results further suggest that balancing both the social subsystem (peer relationships and supervisory support) and the technical subsystem (organizational policies and support mechanisms) enhances organizational effectiveness and employee retention (Ghosh and Sahney, 2011). Organizations that foster open communication, provide growth opportunities, and maintain a healthy work climate are more likely to retain skilled employees and enhance overall organizational performance (Earle, 2003; Ramlall, 2003).

Overall, this study reinforces the notion that a supportive work environment is a key determinant of employee retention. By fostering a culture of support, engagement, and collaboration, organizations can not only retain talented employees but also enhance their performance and commitment. These findings contribute to the growing body of literature emphasizing the strategic importance of human resource practices in achieving long-term organizational success (Agarwal, 2016).

Implications of the Study

The findings of this study offer several important implications for human resource practitioners, managers, and organizations seeking to enhance employee retention. First, the study emphasizes that organizations should adopt a holistic approach toward developing a supportive work environment (SWE) rather than relying on isolated HR practices. The results indicate that a comprehensive supportive work environment has a stronger impact on employee retention compared to individual practices such as supervisory support or peer interaction alone. This aligns with prior research suggesting that integrated HR systems produce more effective organizational outcomes (Becker and Huselid, 1999).

Second, the study highlights the critical role of organizational engagement as a strategic mechanism for improving employee retention. Since organizational engagement partially mediates the relationship between supportive work environment and retention, HR managers should design policies that not only create supportive conditions but also actively foster employee engagement (Saks, 2006; Nutov and Hazzan, 2014). For instance, practices such as employee

involvement, recognition, and career development can enhance engagement and strengthen employees' emotional attachment to the organization.

Additionally, the findings suggest that supervisory support, peer relationships, and perceived organizational support are key drivers of employee retention. Organizations should therefore focus on building strong interpersonal relationships and promoting a positive organizational culture. Supportive leadership, open communication, and collaborative work environments can significantly improve employee satisfaction and reduce turnover intentions (Wayne et al., 1997; Ghosh and Sahney, 2011).

Another important implication is the need for customized HR practices that address individual employee needs rather than adopting a one-size-fits-all approach. Tailoring HR strategies to align with employees' expectations can enhance both organizational and individual outcomes (Agarwala, 2003). Furthermore, organizations should incorporate flexible policies, fair reward systems, and opportunities for professional growth to strengthen retention (Presbitero et al., 2016). Finally, the study suggests that fostering a supportive work environment contributes not only to retention but also to broader organizational performance. By investing in supportive HR practices, organizations can build a committed and motivated workforce, thereby achieving sustainable competitive advantage (Pfeffer, 1994).

Limitations and Future Research

Despite its contributions, this study has several limitations that open avenues for future research. First, the study used limited control variables such as age, gender, and sector. Future research could include additional variables such as organizational tenure, firm size, ownership structure, and employee experience to provide a more comprehensive understanding of employee retention dynamics.

Second, the study found partial mediation of organizational engagement, suggesting that other mediating variables may also influence the relationship between supportive work environment and employee retention. Future studies can explore additional mediators such as person–organization fit, organizational commitment, or job satisfaction

to further explain this relationship (Presbitero et al., 2016; Mathieu et al., 2016).

Another limitation is the reliance on self-reported data collected through a single source, which may introduce common method bias. Although procedural and statistical remedies were applied to minimize this issue, future research should consider using multiple data sources or longitudinal designs to enhance validity (Podsakoff et al., 2003).

Furthermore, the study adopted a cross-sectional research design, which limits the ability to establish causal relationships between variables. Future research should employ longitudinal or experimental designs to better understand the directionality and causality of the relationships examined.

Additionally, the sample size and context may limit the generalizability of the findings. Future studies could expand the sample across different industries, regions, and cultural settings to validate and extend the results. Cross-cultural research, in particular, would provide valuable insights into how supportive work environments influence employee retention in diverse organizational contexts.

Finally, future research may examine serial or multiple mediation models, incorporating variables such as procedural justice or psychological capital, to provide a more nuanced understanding of employee retention mechanisms (Saks, 2006).

Conclusion

In conclusion, this study provides strong empirical evidence that a supportive work environment is a key determinant of employee retention. The findings demonstrate that supportive organizational practices not only directly influence retention but also indirectly affect it through organizational engagement. These results are consistent with social exchange theory, which posits that employees reciprocate organizational support with positive attitudes and behaviors (Blau, 1964).

The study further highlights the importance of integrating various components of the work

environment—such as supervisory support, peer interaction, and organizational support—to create a cohesive and engaging workplace. By fostering such an environment, organizations can enhance employee commitment, reduce turnover, and improve overall performance.

Overall, this research contributes to the growing body of literature on employee retention by emphasizing the strategic role of supportive work environments and organizational engagement. It underscores the need for organizations to adopt comprehensive and employee-centered HR practices to retain talent and achieve long-term success.

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