www.ijarp.com ISSN 2456-9992 Page: 01-07

International Journal Advanced Research Publications

Research Article

Volume: 02
Issue: 09

AN EMPIRICAL STUDY ON EMPLOYEE SATISFACTION AND OPERATIONAL ERGONOMICS IN A TERTIARY HEALTHCARE SETTING

Madheswari M.*[1], Dr. T.N. Seenivasan[2]

[1]*Research Scholar, Department of Management Studies, Gnanamani College of Technology, Anna University, Chennai, India.*

[2]*Associate Professor, Department of Management Studies, Gnanamani College of Technology, Anna University, Chennai, India.*

Article Received: 12 August 2026, Article Revised: 02 September 2026, Published on: 22 September 2026

***Corresponding Author: Madheswari M.**

Research Scholar, Department of Management Studies, Gnanamani College of Technology, Anna University, Chennai, India.

Doi: https://doi-doi.org/101555/ijrpa.1499

ABSTRACT

Employee satisfaction represents a foundational metric determining organizational health, operational efficacy, and service quality in modern healthcare institutions. This study evaluates the multi-dimensional facets of employee satisfaction among medical, nursing, paramedical, and administrative personnel at Krishnagiri Super Speciality Hospital Limited (Royal Hospital), Tamil Nadu. Employing a descriptive, cross-sectional research design, primary data was gathered from a stratified sample of 150 healthcare professionals utilizing a structured 5-point Likert scale instrument. Quantitative analysis was executed through percentage metrics and the weighted average method, with an operational benchmark set at a score of 3.50 to isolate systemic friction points. The empirical findings reveal exemplary benchmark-level performance in biosecurity compliance (90.7% positive rating) and absolute workplace hygiene (81.3%). However, critical institutional stress zones were identified within operational ergonomics, specifically regarding roster design equity (only 54.6% satisfaction) and suboptimal overnight rest lounge/cafeteria infrastructures (31.4% active dissatisfaction). Despite these operational friction points, internal brand equity remains extraordinarily high, with 84.7% of the workforce expressing strong professional pride and 75.4% acting as active brand ambassadors. This paper formulates actionable short- and long-term strategic interventions to mitigate healthcare burnout, optimize retention pipelines, and

safeguard clinical quality.

KEYWORDS: Employee Satisfaction, Healthcare Administration, Operational Ergonomics, Workforce Burnout, Stratified Random Sampling, Retention Strategies.

1. INTRODUCTION

In a high-stakes, 24/7 multi-speciality hospital environment, employee satisfaction encompasses complex psychological, physical, and environmental variables. It serves as a primary metric determining operational resilience, service consistency, and clinical safety. High workforce satisfaction levels directly correlate with a reduction in clinical and administrative errors, lower employee turnover rates, and elevated patient care experiences. Conversely, systematic oversights in human resource management within corporate healthcare structures can induce workplace stressors, severe cognitive fatigue, and professional burnout.

The healthcare industry in India forms the backbone of secondary and tertiary medical infrastructure and is highly labor-intensive, requiring absolute synergy between highly specialized clinical personnel and administrative wings. Modern healthcare management must therefore focus on mitigating systemic burnout, optimizing nurse-to-patient workloads, and establishing human resource practices that foster structural empowerment and psychological safety. This study presents a structured, empirical investigation into the workforce dynamics of Krishnagiri Super Speciality Hospitals Private Limited (operating under the brand name Royal Hospital), registered at Coimbatore and located in Krishnagiri, Tamil Nadu. The investigation aims to capture an authentic diagnostic view of internal workforce sentiments, pinpointing operational vulnerabilities and recommending concrete strategic rectifications.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Herzberg's Motivation-Hygiene Framework in Clinical Environments

This study adapts Frederick Herzberg's (1966) Two-Factor Motivation-Hygiene Model to the healthcare setting to differentiate between variables that prevent job dissatisfaction and those that actively drive internal dedication. In a traditional corporate office, variances in hygiene factors might result in reduced administrative speed; however, inside a high-stakes medical facility, a failure in hygiene factors leads directly to operational gridlock, clinical compromise, or severe safety lapses. Hygiene factors represent the structural floor below

which employee morale drops sharply. For instance, if a staff nurse experiences a needle-stick injury due to substandard hazard disposal bins, or if essential diagnostic kits are unavailable in the Intensive Care Unit (ICU) during a trauma emergency, the professional experiences profound dissatisfaction. Conversely, motivators serve as the catalyst for exceptional clinical devotion, achieved by providing clear career ladders, training sponsorships, and independent ward autonomy.

2.2 The Impact of Workload Ratios and Frontline Leadership

A landmark empirical study by Aiken et al. (2002) established that high patient-to-staff ratios generate immense cognitive fatigue, proving that each additional patient added to a nurse's standard workload elevates the likelihood of job dissatisfaction by 23% and increases burnout risks by 15%. Chronically overworked clinical personnel exhibit reduced processing capacities for complex diagnostic data, escalating preventable medical errors. Furthermore, research by Laschinger and Finegan (2005) demonstrated that the management style of immediate shift supervisors and ward sisters functions as a critical emotional buffer between systemic hospital stress and employee resignation intent. Transparent communication and active frontline support enhance psychological resilience and sustain team cohesion under demanding operational pressures.

3. RESEARCH METHODOLOGY

3.1 Research Design and Stratified Sampling Framework

This study utilizes a descriptive, cross-sectional research design to document the contemporary state of employee satisfaction across various hospital wings without variable manipulation. Given that a super-speciality hospital functions through specialized, interdependent cadres with entirely different salary architectures, educational backgrounds, and daily operational stresses, simple random sampling could induce disproportionate representation. To eliminate this bias, a Stratified Random Sampling framework was deployed. The localized target population was stratified into four distinct operational wings to construct a total sample size of $N = 150$ respondents:

- **The Nursing Wing:** Consisting of 68 respondents (45% of the total sample), capturing frontline perspective across staff nurses, critical care nurses, and ward sisters.
- **The Paramedical Wing:** Consisting of 37 respondents (25% of the total sample), gathering data from lab technicians, radiographers, and pharmacists.
- **The Administrative and Support Wing:** Consisting of 23 respondents (15% of the total sample), tracking views from billing units, human resource teams, and front-office staff.

• **The Medical Wing:** Consisting of 22 respondents (15% of the total sample), evaluating senior and junior medical consultants, registrars, and resident medical officers.

3.2 Instrumentation and Evaluation Metrics

The primary data collection tool comprised a customized, structured diagnostic survey containing 30 analytical statements. Section A focused on demographic profiling (including age, gender, cadre, and overall tenure), while Section B evaluated core satisfaction metrics utilizing a standard 5-point Likert scale: Strongly Agree (5 points), Agree (4 points), Neutral (3 points), Disagree (2 points), and Strongly Disagree (1 point). Statistical processing was performed via Percentage Analysis to standardize demographic layouts and the Weighted Average Method to rank institutional performance. In alignment with strict operational research standards, any metric yielding a final weighted average score below **3.50** was classified as an operational friction point demanding structural human resource intervention.

4. EMPIRICAL RESULTS AND DISCUSSION

Data collected from the 150 active participants was systematically aggregated. Table 1 details the exact frequency distribution and percentage representation across a curated subset of vital survey evaluation statements representing key operational pillars.

Table 1: Frequency Distribution of Key Satisfaction Evaluation Metrics. (N = 150)

Q#	SURVEY EVALUATION STATEMENT	SD (%)	D (%)	N (%)	A (%)	SA (%)
Q1	Safe, comfortable, and well-ventilated physical environment	4 (2.7)	12 (8.0)	17 (11.3)	63(42.0)	54 (36.0)
Q2	Highly competitive total compensation package	6 (4.0)	10 (6.7)	24 (16.0)	72(48.0)	38 (25.3)
Q3	Salary components, overtime dues, credited on time	12 (8.0)	12 (8.0)	14 (9.3)	64(42.7)	48 (32.0)
Q6	Shift rotation schedule allows adequate recovery time	18 (12.0)	28 (18.7)	22 (14.7)	56(37.3)	26 (17.3)
Q8	Overtime hours allocation handled fairly and transparently	16 (10.7)	21 (14.0)	31 (20.7)	65(43.3)	17 (11.3)
Q13	Immediate supervisor supports me and values my input	16 (10.7)	17 (11.3)	13 (8.7)	68(45.3)	36 (24.0)
Q18	Strict protocols for bio-hazard control and safety	1 (0.7)	4 (2.7)	9 (6.0)	69(46.0)	67 (44.7)
Q24	Clean, comfortable staff cafeteria and rest lounges	25 (16.7)	22 (14.7)	29 (19.3)	54(36.0)	20 (13.3)
Q25	Deep professional pride associating with the brand name	3 (2.0)	3 (2.0)	17 (11.3)	75(50.0)	52 (34.7)
Q26	Intention to continue professional career here for 3-5 years	7 (4.7)	20 (13.3)	15 (10.0)	64(42.7)	44 (29.3)

4.1 Analytical Discussion of Operational Pillars

Biosecurity and Hygiene Excellence: Statement Q18 emerged as the highest-performing index in the study, securing an elite 90.7% total approval rating. Frontline workers confirmed meticulous enforcement of sharp item disposal, personal protective equipment (PPE) deployment, and needle-stick prevention protocols. This is strongly reinforced by statement Q23 (81.3% combined satisfaction), showing that the clinical disinfection workflows successfully minimize healthcare-acquired infections and establish a baseline of physical safety.

Financial Architecture Alignment: Statement Q2 indicates that the hospital's market benchmarking strategy is well-received, yielding 73.3% positive feedback. Total compensation structures align with regional averages. Payroll integrity (Q3) also registers a strong compliance rate of 74.7%, confirming that basic monthly structures are efficiently processed. However, a significant 16.0% negative response pocket highlight localized calculation delays regarding the authorization and sign-off of overtime variables.

The Roster and Ergonomic Crisis: In stark contrast to safety and compensation, acute institutional friction resides within statement Q6 (Shift Rotation Recovery), which scored a low 54.6% positive rating. A combined 30.7% negative response indicates that back-to-back shift assignments and quick-turnaround rosters generate systematic sleep deprivation and deep physical exhaustion. This is worsened by statement Q24 (Staff Cafeteria and Rest Lounges), where nearly one-third of the entire workforce (31.4%) actively registered dissatisfaction with available food options and overnight sleep amenities, transforming night-duty configurations into severe operational burnout hazards.

Brand Advocacy and Retentive Capacity: Remarkably, despite clear ergonomic bottlenecks, statement Q25 reveals immense internal brand equity, with 84.7% of employees expressing intense professional pride. This organizational commitment is substantiated by statement Q26, with 72.0% intending a long-term retention window of 3 to 5 years, and statement Q30, where 75.4% act as active brand advocates. The core workforce remains highly dedicated to the institution, meaning that rapid corrections of the identified ergonomic constraints will effectively turn neutral pockets into high-performing talent anchors.

5. STRATEGIC RECOMMENDATIONS AND ACTION PLAN

To bridge the critical gaps revealed by the weighted average indicators, a structured strategic matrix must be integrated into the hospital’s operational blueprint:

1. **Immediate Infrastructure Refurbishment (0 - 30 Days):** Prioritize the absolute overhaul

of night-duty on-call quarters (Q24). Convert existing spaces into soundproofed rest lounges utilizing dimmable illumination and ergonomic recliners. Concurrently, launch automated departmental Overtime Audit Dashboards (Q8) to display open, electronic ledgers of real-time extra-duty allocation, eradicating any perception of managerial favoritism.

2. Restorative Scheduling Reinforcement (30 - 90 Days): Enforce a mandatory, uninterrupted 11-hour rest window between consecutive shifts across all clinical rosters to resolve the fatigue crisis (Q6). Limit consecutive overnight block duties to a maximum of three per individual. Redesign the new-hire pipeline by substituting the document-heavy orientation with a structured 90-day peer-mentorship program to alleviate early culture shock (Q27).

3. Shift-Integrated Resiliency Windows (90+ Days): Move away from off-duty wellness initiatives that encroach upon personal time. Instead, institutionalize paid 15-minute "resiliency breaks" during active shift

cycles (Q19). Mandate structured leadership coaching workshops for all frontline ward sisters and department heads (Q13) to transition middle management from an authoritarian compliance stance to a supportive coaching model.

6. CONCLUSION

This empirical evaluation demonstrates that Krishnagiri Super Speciality Hospital possesses an exceptionally robust professional brand, an elite biosecurity infrastructure, and a deeply loyal, proud workforce. The primary threat to institutional stability is not competitive pricing or career stagnation, but rather daily operational ergonomics and physical fatigue. Structural friction points—such as erratic roster rotations, inadequate rest amenities, and opaque overtime tracking—pose a systematic threat of localized talent depletion. By implementing the data-driven short- and long-term recommendations outlined in this study, healthcare leadership can mitigate employee burnout, protect clinical delivery standards, and solidify the institution's position as a regional benchmark of healthcare workplace excellence.

REFERENCES

1. Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J., & Silber, J. H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association (JAMA)*, 288(16), 1987–1993.
2. Al-Hamdan, Z., Fowler, C., & Watson, R. (2019). The relationship between health care work environments, safety culture, and job satisfaction. *Journal of Nursing Management*,

27(4), 745–754.

3. Dall'Ora, C., Ball, J., Recio-Saucedo, A., & Griffiths, P. (2016). Characteristics of shift work and their impact on employee performance and wellbeing: A literature review. *International Journal of Nursing Studies*, 57, 12–27.
4. De Cordova, P. B., Phibbs, C. S., Stone, P. W., & Poghosyan, L. (2019). The organizational work environment and its association with staff retention in acute care hospitals. *Policy, Politics, & Nursing Practice*, 20(3), 132–141.
5. Hayes, B., Bonner, A., & Pryor, J. (2010). Factors contributing to poor retention of acute care clinical staff: A systematic review. *American Journal of Medical Quality*, 25(4), 304–312.
6. Laschinger, H. K. S., Finegan, J., & Wilk, P. (2011). Context matters: The impact of hospital workplace environments on nurse retention, operational safety, and quality of patient care. *Journal of Nursing Administration*, 41(7), 322–329.
7. Lu, H., Barriball, K. L., Zhang, X., & While, A. E. (2012). Job satisfaction among hospital clinical employees: A systematic review. *International Journal of Nursing Studies*, 49(8), 1017–1038.
8. Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for the assessment of work design and the nature of work. *Journal of Applied Psychology*, 91(6), 1321–1339.
9. Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey.
10. *American Journal of Community Psychology*, 13(6), 693–713.
11. Ulrich, B., Buerhaus, P. I., Donelan, K., Norman, L., & Dittus, R. (2005). How clinical professionals view their work environments and the factors influencing recruitment and retention. *The Journal of Nursing Administration*, 35(7), 325–337.