iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 14 **Issue:** IV **Month of publication:** April 2026

DOI: https://doi.org/10.22214/ijraset.2026.80564

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 14 Issue IV Apr 2026- Available at www.ijraset.com

Impact of Working Conditions on Industrial Workers' Job Satisfaction

Mangesh Machhindra Ghule[1], Dr. Deepmala Biradar (HALLALE)[2]
[1]*MBA Human Resources Management, International Centre of Excellence in Engineering and Management Chh Sambhaji Nagar, (Aurangabad), India*
[2]*Associate Professor & HOD Department of MBA, International Centre of Excellence in Engineering and Management Chh Sambhaji Nagar, (Aurangabad), India*

Abstract: ***Industrial workers form the backbone of manufacturing economies, yet the relationship between their working conditions and job satisfaction remains critically under-examined in the Indian context. This research paper investigates the impact of key working condition dimensions — physical environment, safety standards, workload, supervisory relationships, wages, and welfare facilities — on the job satisfaction levels of industrial workers in the manufacturing sector of Chhatrapati Sambhajinagar (Aurangabad), Maharashtra. Employing a descriptive-analytical mixed-methods design, the study surveyed 200 industrial workers across five manufacturing units using a structured questionnaire developed on Herzberg's Two-Factor Theory and Maslow's Hierarchy of Needs. Findings reveal that physical working conditions, safety provisions, and supervisory behaviour are the strongest determinants of job satisfaction among industrial workers, while wage adequacy and recognition emerged as key dissatisfiers. The study identifies significant gaps between workers' expectations and actual workplace conditions, particularly regarding health and safety compliance, workload management, and welfare amenities. A Working Conditions–Satisfaction Enhancement Model (WCSEM) is proposed to guide industrial organisations in systematically improving worker satisfaction through targeted working environment interventions. Recommendations are provided for plant managers, HR practitioners, and policymakers to improve the quality of industrial working conditions and achieve sustainable improvements in worker productivity, retention, and well-being.***

Keywords: Working Conditions, Job Satisfaction, Industrial Workers, HRM, Herzberg's Two-Factor Theory, Workplace Safety, Worker Welfare, Manufacturing Sector, Maharashtra, WCSEM.

I. INTRODUCTION

The industrial workforce constitutes the structural foundation of India's manufacturing growth story. As the nation accelerates its 'Make in India' and Atmanirbhar Bharat initiatives, the productivity, motivation, and stability of industrial workers have emerged as decisive variables in determining manufacturing competitiveness. Yet behind the aggregate metrics of industrial output and employment generation lies a less-examined reality: the day-to-day working conditions experienced by millions of factory workers, and the profound impact those conditions exert on their job satisfaction, well-being, and performance.

Job satisfaction — defined as the positive emotional state resulting from an individual's appraisal of their job and job experience — is not merely a psychological abstraction. It has measurable consequences for absenteeism rates, labour turnover, quality of output, industrial relations, and organisational productivity. Research across industrial contexts consistently demonstrates that workers who report high job satisfaction are more productive, less likely to seek alternative employment, more amenable to cooperation with management, and less prone to workplace accidents. Conversely, persistent dissatisfaction manifests as high attrition, reduced output quality, labour unrest, and elevated occupational health costs.

Working conditions encompass a broad array of factors: the physical environment (temperature, noise, lighting, ventilation, ergonomics), occupational safety and health provisions, workload intensity and duration, the nature of supervision and management relationships, wage and compensation adequacy, recognition and advancement opportunities, and the availability of welfare facilities (canteens, rest areas, sanitation, medical support). Each of these dimensions interacts with worker psychology in ways that either fulfil or frustrate fundamental needs, generating satisfaction or dissatisfaction as an outcome.

The Marathwada region, centred on Chhatrapati Sambhajinagar (Aurangabad), presents an ideal setting for investigating these dynamics.

As one of Maharashtra's most significant industrial clusters — hosting automotive, pharmaceutical, textile, and engineering manufacturing units — the region combines high industrial employment density with significant variation in working condition standards across formal and semi-formal manufacturing enterprises. Despite this industrial significance, empirical research on working condition-satisfaction relationships specifically situated in this industrial context remains limited, constituting a gap this study addresses.

This paper is structured as follows: Section II reviews the theoretical and empirical literature on working conditions and job satisfaction; Section III states the research objectives; Section IV describes the methodology; Section V presents findings on individual working condition dimensions; Section VI reports regression and correlation analysis; Section VII introduces the WCSEM framework; Section VIII discusses implementation challenges; and Section IX presents conclusions and recommendations.

II. LITERATURE REVIEW

A. Theoretical Foundations

The study of job satisfaction draws on a rich body of motivational and organisational theory. Herzberg, Mausner, and Snyderman's (1959) Two-Factor Theory remains foundational to understanding how working conditions relate to satisfaction. Herzberg distinguished between hygiene factors — extrinsic conditions such as salary, supervision, physical working environment, company policies, and interpersonal relations, whose absence causes dissatisfaction but whose presence does not generate positive satisfaction — and motivator factors, such as achievement, recognition, responsibility, and growth, whose presence actively generates satisfaction. For industrial workers, many key working condition variables operate primarily as hygiene factors, establishing a baseline of acceptable conditions whose deterioration causes active dissatisfaction.

Maslow's (1954) Hierarchy of Needs provides a complementary framework, positioning physical safety and security as foundational human needs whose satisfaction is prerequisite to the pursuit of higher-order esteem and self-actualisation needs. For industrial workers engaged in physically demanding, potentially hazardous occupations, the adequacy of working conditions in meeting these foundational needs becomes the primary determinant of psychological well-being and work engagement. Locke's (1976) Value Percept Theory further enriches this framework by positing that job satisfaction is a function of the discrepancy between what an individual values in a job and what the job actually provides — a framework directly applicable to assessing the gap between industrial workers' expectations of working conditions and their actual experience.

B. Physical Working Conditions and Satisfaction

Substantial empirical literature documents the relationship between physical working conditions and worker satisfaction. Sundstrom (1986) established that environmental stressors — noise, extreme temperatures, poor lighting, and inadequate ventilation — function as chronic job demands that deplete psychological resources and erode satisfaction. Studies in the Indian manufacturing context have consistently confirmed these relationships. Saeed and Asghar (2012) found that workers exposed to adverse physical environments reported satisfaction levels 34% lower than those in well-maintained workplaces, even when controlling for wage levels. Chandrasekar (2011) demonstrated that workplace environment improvements generated measurable increases in both worker satisfaction and productivity in Indian manufacturing plants.

In the specific context of the automotive and engineering manufacturing sector — the dominant industrial category in Chhatrapati Sambhajinagar — physical working conditions are particularly salient. Production floor environments characterised by high noise exposure, heat stress, chemical exposure, and repetitive physical strain create occupational health challenges that, when inadequately addressed, become primary sources of worker dissatisfaction and turnover.

C. Occupational Safety, Health, and Worker Satisfaction

The relationship between occupational safety and job satisfaction is mediated by both direct experience and psychological safety perception. Zohar (2000) demonstrated that safety climate — workers' perceptions of management commitment to safety — is a stronger predictor of both safety behaviour and job satisfaction than objective injury rate data, establishing that subjective safety perceptions are psychologically consequential independent of actual injury risk. In the Indian context, Reena and Bhaktha (2012) found that workers in manufacturing units with formal occupational health and safety management systems reported significantly higher satisfaction levels, attributing the difference not only to reduced injury exposure but to the psychological reassurance that management valued their physical well-being.

India's Factories Act, 1948, and the Occupational Safety, Health and Working Conditions Code (2020) establish legal minima for workplace safety in industrial establishments. However, compliance research consistently documents significant gaps between legal requirements and actual factory floor conditions, particularly in medium and small manufacturing enterprises. These compliance gaps represent direct threats to worker satisfaction and well-being that HRM interventions must address.

D. Supervision, Management Relations, and Satisfaction

Supervisory behaviour is one of the most consistently identified determinants of job satisfaction across occupational contexts. Greenhaus, Parasuraman, and Wormley (1990) established that perceived supervisor support — the degree to which workers believe their immediate supervisors value their contribution and care about their well-being — is a strong predictor of both job satisfaction and organisational commitment. In industrial settings, where supervisors exercise considerable authority over task assignment, pace management, disciplinary action, and access to welfare provisions, the quality of supervisory relationships takes on heightened significance.

Research in Indian manufacturing has highlighted the particular importance of supervisory style in contexts where power distance between management and workers remains substantial. Sinha (2014) found that participative supervision — characterised by worker consultation, fair grievance handling, and transparent communication — was associated with significantly higher satisfaction levels than authoritarian supervision in Pune manufacturing units, even controlling for wage levels and physical working conditions.

E. Wages, Welfare Facilities, and Satisfaction

Wage adequacy functions as a foundational hygiene factor in industrial worker satisfaction, establishing the economic baseline without which other working condition improvements have limited motivational impact. However, research consistently demonstrates that the relationship between wages and satisfaction is not linear: above a threshold of adequacy, incremental wage increases generate diminishing marginal satisfaction, while non-monetary factors — recognition, safety, workload manageability, and social relations — become progressively more influential. Gupta and Kumar (2013) confirmed this pattern in a study of workers in the Pune-Aurangabad manufacturing corridor, finding that wage satisfaction predicted overall job satisfaction most strongly among the lowest-wage quintile, with its influence attenuating among higher-wage workers.

Welfare facilities — encompassing canteen quality, drinking water adequacy, rest room availability, medical facilities, and transport provisions — represent a cluster of working condition factors that, while often overlooked in managerial prioritisation, exercise significant influence on worker satisfaction and perceived organisational care. Sharma (2016) found that welfare facility adequacy was the third strongest predictor of overall job satisfaction in a study of 500 Indian manufacturing workers, after physical safety and supervisory relationships.

III. OBJECTIVES OF THE STUDY

A. Primary Objectives

1) To examine the impact of physical working conditions (environment, safety, ergonomics) on the job satisfaction of industrial workers in manufacturing units of Chhatrapati Sambhajinagar.
2) To assess the influence of supervisory behaviour, management relations, and recognition practices on worker satisfaction levels.
3) To evaluate the relationship between wage adequacy, welfare facility provision, and overall job satisfaction among industrial workers.
4) To develop the Working Conditions–Satisfaction Enhancement Model (WCSEM) as a structured intervention framework for improving industrial worker satisfaction through working condition improvements.

B. Secondary Objectives

1) To identify the primary working condition dimensions generating dissatisfaction among industrial workers in the Marathwada region.
2) To examine differences in satisfaction levels across demographic categories (age, tenure, education, job category).
3) To provide evidence-based recommendations for plant managers, HR departments, and labour policymakers to enhance industrial working conditions.

IV. RESEARCH METHODOLOGY

A. Research Design

This study adopts a descriptive-analytical mixed-methods research design, combining quantitative survey analysis with qualitative worker interviews. This approach enables statistical quantification of working condition-satisfaction relationships while capturing the contextual richness of workers' lived experiences of their working environments. The study is cross-sectional, conducted over a six-month data collection period.

B. Sample and Sampling

A stratified random sample of 200 industrial workers was drawn from five manufacturing units in the Chhatrapati Sambhajinagar industrial area, spanning automotive component manufacturing, pharmaceutical production, engineering goods manufacturing, textile processing, and food processing. Stratification was based on manufacturing sector and job category (skilled, semi-skilled, unskilled). Selection criteria required a minimum of six months' employment in the current unit. The sample comprised 172 male and 28 female workers, consistent with the demographic profile of the industrial workforce in the region. Additionally, 20 in-depth qualitative interviews were conducted with workers selected purposively to represent maximum variation in tenure, job category, and working condition experience.

C. Data Collection Instrument

The primary data collection instrument was a structured questionnaire comprising 55 items across seven dimensions: (1) Physical Working Environment (10 items), (2) Occupational Safety and Health (8 items), (3) Workload and Work Hours (7 items), (4) Supervisory Behaviour and Management Relations (10 items), (5) Wages and Compensation (8 items), (6) Welfare Facilities (7 items), and (7) Overall Job Satisfaction (5 items). A 5-point Likert scale was employed for attitudinal items. The instrument was developed on the theoretical foundations of Herzberg's Two-Factor Theory and validated through expert review by three HRM faculty members. Pilot testing with 20 workers confirmed reliability (Cronbach's alpha = 0.81 for the composite satisfaction scale). The questionnaire was translated into Marathi to ensure comprehension by workers with limited English literacy.

D. Analytical Methods

Quantitative data were analysed using SPSS Version 26. Descriptive statistics (means, standard deviations, frequency distributions) were computed for each working condition dimension and the overall satisfaction scale. Pearson correlation analysis examined bivariate relationships between working condition dimensions and overall satisfaction. Multiple regression analysis was used to identify the relative predictive strength of each working condition dimension on overall satisfaction, controlling for demographic variables. ANOVA was employed to examine satisfaction differences across demographic categories. Qualitative interview data were analysed thematically using the framework method.

E. Ethical Considerations

Informed consent was obtained from all participants. Workers were assured of anonymity and the voluntary nature of participation. No identifiable individual or organisational data are reported. Research approval was granted by the Ethics Review Committee of the International Centre of Excellence in Engineering and Management, Chhatrapati Sambhajinagar.

V. FINDINGS: WORKING CONDITION DIMENSIONS

A. Physical Working Environment

Survey findings reveal that physical working environment conditions are a primary source of worker dissatisfaction. Only 42% of workers rated their workstation's lighting as adequate, while 68% reported exposure to excessive noise levels on the production floor. Thermal comfort was a significant concern: 74% of workers in manufacturing units without air cooling systems reported heat-related discomfort affecting their work, particularly during summer months. Ergonomic conditions received the lowest physical environment satisfaction scores, with 61% of workers reporting that workstation design and equipment positioning caused physical strain. Mean physical environment satisfaction score: 2.8/5.0.

Qualitative interviews amplified these quantitative findings. A senior machine operator with 12 years' tenure described the noise environment: 'The noise is constant, all day, every shift. After years of this, my hearing is not what it was. Management knows, but there are no proper ear protections provided regularly.' These worker accounts highlight a pattern of management awareness coupled with inadequate remedial action that compounds the dissatisfaction effect of poor physical conditions.

B. Occupational Safety and Health

Occupational safety emerged as the dimension with the widest gap between worker expectations and actual provision. While 89% of workers rated 'working in a safe environment' as very important to their job satisfaction, only 47% rated their current workplace as adequately safe. Personal Protective Equipment (PPE) availability and quality was a major concern: 58% reported that PPE was either not consistently provided or of inadequate quality. First aid facilities were rated adequate by only 51% of workers. Safety training had been received by 64% of workers, but only 38% rated the training as practically useful.

The frequency of near-miss incidents and minor injuries serves as a proxy indicator of safety standard adequacy. Forty-three percent of workers reported having experienced at least one work-related injury in the preceding twelve months, a rate significantly exceeding occupational health benchmarks for comparable manufacturing contexts internationally. Mean occupational safety satisfaction score: 2.6/5.0 — the lowest of all working condition dimensions assessed.

C. Workload and Work Hours

Workload intensity and working hour management were sources of moderate dissatisfaction. Fifty-five percent of workers reported that their current workload was excessive relative to their physical capacity, rising to 71% among workers engaged in physically intensive assembly and machining tasks. Overtime practices were a particular concern: 66% reported being required to work overtime more frequently than they considered reasonable, with 48% reporting that overtime refusal carried implicit penalties from supervisors. The Factories Act's provisions on maximum working hours (48 hours per week, 9 hours per day) were reportedly violated in three of five surveyed units, corroborating workers' subjective workload complaints with legal compliance gaps. Mean workload satisfaction score: 3.1/5.0.

D. Supervisory Behaviour and Management Relations

Supervisory behaviour demonstrated the strongest correlation with overall job satisfaction among all working condition dimensions examined ($r = 0.71$, $p < 0.001$). Workers who described their immediate supervisors as fair, communicative, and respectful of their concerns reported overall satisfaction levels averaging 0.9 points higher on the 5-point scale than workers describing authoritarian or dismissive supervision, a difference larger than the effect of any other single working condition variable. Key supervisory behaviours associated with high satisfaction included: fair task assignment, transparent communication of targets and expectations, responsiveness to safety concerns, timely resolution of grievances, and acknowledgement of good work.

Conversely, supervisory behaviours most strongly associated with dissatisfaction included: arbitrary discipline, favouritism in overtime and leave allocation, dismissiveness of health and safety concerns, and verbal harshness. Sixty-two percent of workers reported having experienced unfair treatment from a supervisor in the preceding six months, with 41% stating that this unfair treatment was the primary factor they would change about their job. Mean supervisory satisfaction score: 3.0/5.0.

E. Wages and Compensation

Wage satisfaction demonstrated a bifurcated pattern: among workers earning below the sector median wage, wage inadequacy was the primary driver of overall dissatisfaction ($r = 0.68$, $p < 0.001$). Among workers earning at or above the median, wage satisfaction's predictive power for overall satisfaction declined substantially ($r = 0.39$, $p < 0.05$), with physical conditions and supervisory behaviour becoming the dominant satisfaction predictors. This pattern is consistent with Herzberg's hygiene factor model: wage inadequacy generates active dissatisfaction, but once a threshold of adequacy is reached, further wage increases deliver diminishing satisfaction returns relative to improvements in motivator and upper-hygiene factors.

Wage transparency was an additional concern: 57% of workers reported uncertainty about the components and calculation of their wage package, a lack of transparency that independently contributed to wage dissatisfaction by creating perceived inequity. Mean wage satisfaction score: 3.2/5.0.

F. Welfare Facilities

Welfare facility adequacy showed significant variation across the five surveyed manufacturing units. Canteen quality and food hygiene were rated adequate by only 49% of workers overall, with particular concerns about food quality and variety. Drinking water access was rated adequate by 71% — relatively high but still indicating that nearly 30% of workers face concerns about basic hydration provision. Toilet and sanitation facility adequacy was rated positively by only 44% of workers, with female workers reporting significantly higher dissatisfaction with sanitation provision. Rest area adequacy was rated poorly across all units surveyed.

Medical facility access showed the highest variation: units with on-site occupational health nurses received significantly higher welfare satisfaction scores than units relying solely on referral to external medical facilities. Mean welfare facility satisfaction score: 2.9/5.0.

Table 1: Working Condition Dimensions – Satisfaction Scores and Correlation with Overall Satisfaction

Working Condition Dimension	Mean Score (/5.0)	Std. Deviation	Correlation (r)	Rank
Physical Working Environment	2.8	0.74	0.63**	3
Occupational Safety & Health	2.6	0.81	0.67**	2
Workload & Work Hours	3.1	0.69	0.54**	5
Supervisory Behaviour & Mgmt. Relations	3.0	0.77	0.71**	1
Wages & Compensation	3.2	0.72	0.58**	4
Welfare Facilities	2.9	0.68	0.49**	6
Overall Job Satisfaction (Composite)	3.0	0.62	—	—

*** p < 0.01; * p < 0.05. Source: Primary survey data (N=200)*

VI. REGRESSION ANALYSIS AND DEMOGRAPHIC DIFFERENCES

A. Multiple Regression: Predictors of Overall Job Satisfaction

Multiple regression analysis with overall job satisfaction as the dependent variable and the six working condition dimensions as independent variables (controlling for age, tenure, education, and job category) yielded a statistically significant model: $F(10, 189) = 28.4$, $p < 0.001$, $R^2 = 0.68$, indicating that the working condition dimensions collectively explain 68% of variance in overall job satisfaction. Supervisory behaviour emerged as the strongest independent predictor ($\beta = 0.42$, $p < 0.001$), followed by occupational safety ($\beta = 0.31$, $p < 0.001$) and physical environment ($\beta = 0.24$, $p < 0.001$). Welfare facilities showed the weakest independent predictive contribution ($\beta = 0.14$, $p < 0.05$) when other dimensions were controlled.

The regression findings confirm the theoretical proposition derived from Herzberg's framework: working conditions function primarily as hygiene factors, with their deterioration generating strong dissatisfaction while their improvement provides the baseline for, rather than direct generation of, positive satisfaction. The relative strength of supervisory behaviour as a predictor suggests that, for industrial workers, the quality of human relationships in the immediate work environment is as consequential as physical conditions in determining satisfaction outcomes.

B. Demographic Differences in Satisfaction

ANOVA analysis reveals significant satisfaction differences across demographic categories. Workers with longer tenure (10+ years) reported significantly lower satisfaction with physical conditions ($F = 8.3$, $p < 0.001$), consistent with cumulative wear effects and higher comparative expectations developed over extended service. Younger workers (below 30) reported higher dissatisfaction with supervisory behaviour and recognition than older workers, suggesting generational differences in supervisory relationship expectations. Skilled workers reported significantly higher overall satisfaction than semi-skilled and unskilled workers ($F = 14.7$, $p < 0.001$), with the gap primarily attributable to differences in wage satisfaction and perceived growth opportunities. Female workers reported significantly lower sanitation and welfare facility satisfaction, highlighting gender-specific welfare provision gaps.

VII. WORKING CONDITIONS–SATISFACTION ENHANCEMENT MODEL (WCSEM)

Based on the empirical findings and theoretical synthesis of this research, the Working Conditions–Satisfaction Enhancement Model (WCSEM) is proposed as a structured, actionable framework for industrial organisations to systematically improve worker satisfaction through targeted working condition interventions. WCSEM is organised around four phases:

1) Phase 1 — Diagnose (Weeks 1–6):

Conduct a comprehensive working conditions audit across all six dimensions identified in this study. Deploy the validated survey instrument to assess baseline satisfaction levels disaggregated by department, shift, job category, and demographic group. Map specific working condition deficiencies against applicable legal standards (Factories Act, OSHWC Code 2020). Prioritise dimensions showing the greatest satisfaction deficit — typically safety and physical environment — for immediate attention. Identify quick-win interventions (PPE provision, drinking water access, canteen hygiene) that can deliver visible improvement within the first month and establish management credibility with the workforce.

2) Phase 2 — Design Interventions (Weeks 6–14)

Develop targeted intervention plans for each working condition dimension, integrating legal compliance requirements, best practice benchmarks, and worker-expressed priorities. Key interventions recommended based on study findings include: formal Safety Management System (SMS) implementation aligned with ISO 45001 standards; supervisory behaviour training programme covering participative communication, fair task management, and grievance handling; workload review and shift scheduling optimisation; welfare facility upgrade programme prioritising sanitation, canteen quality, and rest area provision; and wage transparency initiatives including regular worker briefings on pay structure components. Establish measurable improvement targets for each intervention with defined timelines and responsible managers.

3) Phase 3 — Implement and Communicate (Weeks 14–36)

Implement prioritised interventions in phased sequence, beginning with safety and physical environment improvements that address immediate worker health concerns and demonstrate management commitment to worker well-being. Worker communication is critical at this phase: visible management engagement in working condition improvements, regular update briefings, and explicit connection of improvement initiatives to worker feedback directly addresses the perceived management indifference that compounds dissatisfaction in poor-condition workplaces. Establish worker participation mechanisms — safety committees, welfare advisory groups, supervisory feedback channels — that give workers agency in the ongoing improvement process.

4) Phase 4 — Evaluate and Sustain (Month 9 onwards)

Repeat baseline satisfaction survey at 6-month intervals to measure improvement against pre-intervention benchmarks. Analyse satisfaction change disaggregated by dimension, department, and demographic group to identify persistent gaps and target further intervention. Integrate working condition satisfaction metrics into management performance evaluation systems to maintain sustained leadership accountability. Develop a continuous improvement cycle that institutionalises working condition monitoring as a permanent HRM function rather than a time-limited project.

VIII. IMPLEMENTATION CHALLENGES AND LIMITATIONS

A. Financial Constraints in Small and Medium Manufacturing Units

Many working condition improvements — particularly infrastructure upgrades, safety system implementation, and welfare facility expansion — require capital investment that small and medium manufacturing enterprises may find challenging. The WCSEM's phased approach, emphasising low-cost quick wins alongside medium-term structural improvements, is designed to make the framework viable across varying resource contexts. However, policy support — through industrial development subsidies, compliance incentive schemes, and low-interest credit for safety investment — is required to address systemic improvement barriers in resource-constrained enterprises.

B. Supervisory Behaviour Change

While supervisory behaviour emerged as the strongest predictor of worker satisfaction, behaviour change requires sustained investment in training, coaching, and performance management systems. Middle management resistance to behaviour change — particularly among supervisors with long-established authoritarian management styles — represents a significant implementation barrier. WCSEM recommends integrating supervisory behaviour competencies into performance appraisal and promotion criteria to create institutional incentives for sustainable behavioural change.

C. Legal Compliance Gaps

The study's finding that working hour violations are prevalent across surveyed units highlights a systemic enforcement gap that individual organisational interventions cannot fully address. Strengthened labour inspection capacity, clearer violation penalties, and worker grievance mechanisms with meaningful enforcement authority are structural requirements for improving working condition standards at the sector level.

D. Research Limitations

This study's cross-sectional design precludes causal inference regarding the working condition-satisfaction relationship, which remains associational rather than experimentally established. The sample is limited to one industrial region (Chhatrapati Sambhajinagar), and generalisation to other Indian industrial contexts requires validation. Social desirability bias in survey responses may have moderated workers' willingness to report the full extent of working condition problems, particularly given the absence of formal whistleblower protection in many surveyed units.

IX. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

This study establishes empirically that working conditions are significant and systematic determinants of industrial worker job satisfaction in Chhatrapati Sambhajinagar's manufacturing sector. Across all six working condition dimensions examined, substantial satisfaction deficits were identified, with occupational safety (mean: 2.6/5.0) and physical working environment (mean: 2.8/5.0) representing the most critical areas of worker concern. Supervisory behaviour emerged as the strongest predictor of overall job satisfaction ($\beta = 0.42$), underscoring that human relationships in the immediate work environment are as consequential as physical conditions in determining satisfaction outcomes.

The findings validate the theoretical frameworks of Herzberg and Maslow in the industrial worker context, confirming that inadequate working conditions function as active dissatisfiers whose remediation is prerequisite to positive work engagement. The WCSEM framework provides a structured pathway for translating these research findings into practical organisational improvement through a systematic, phased intervention approach.

B. Recommendations

1) For Plant Managers and HR Practitioners

- Prioritise occupational safety system implementation as the most impactful single investment in worker satisfaction improvement, addressing both legal compliance obligations and the primary source of worker dissatisfaction identified in this study.
- Invest systematically in supervisory behaviour training and accountability mechanisms, recognising that supervisory fairness and respect are more powerful satisfaction drivers than incremental physical environment improvements.
- Implement transparent wage communication practices that explain pay structure components and ensure equity in overtime and incentive allocation.
- Establish formal worker participation mechanisms — safety committees, welfare advisory groups — that give workers genuine agency in working condition improvement and generate organisational trust.

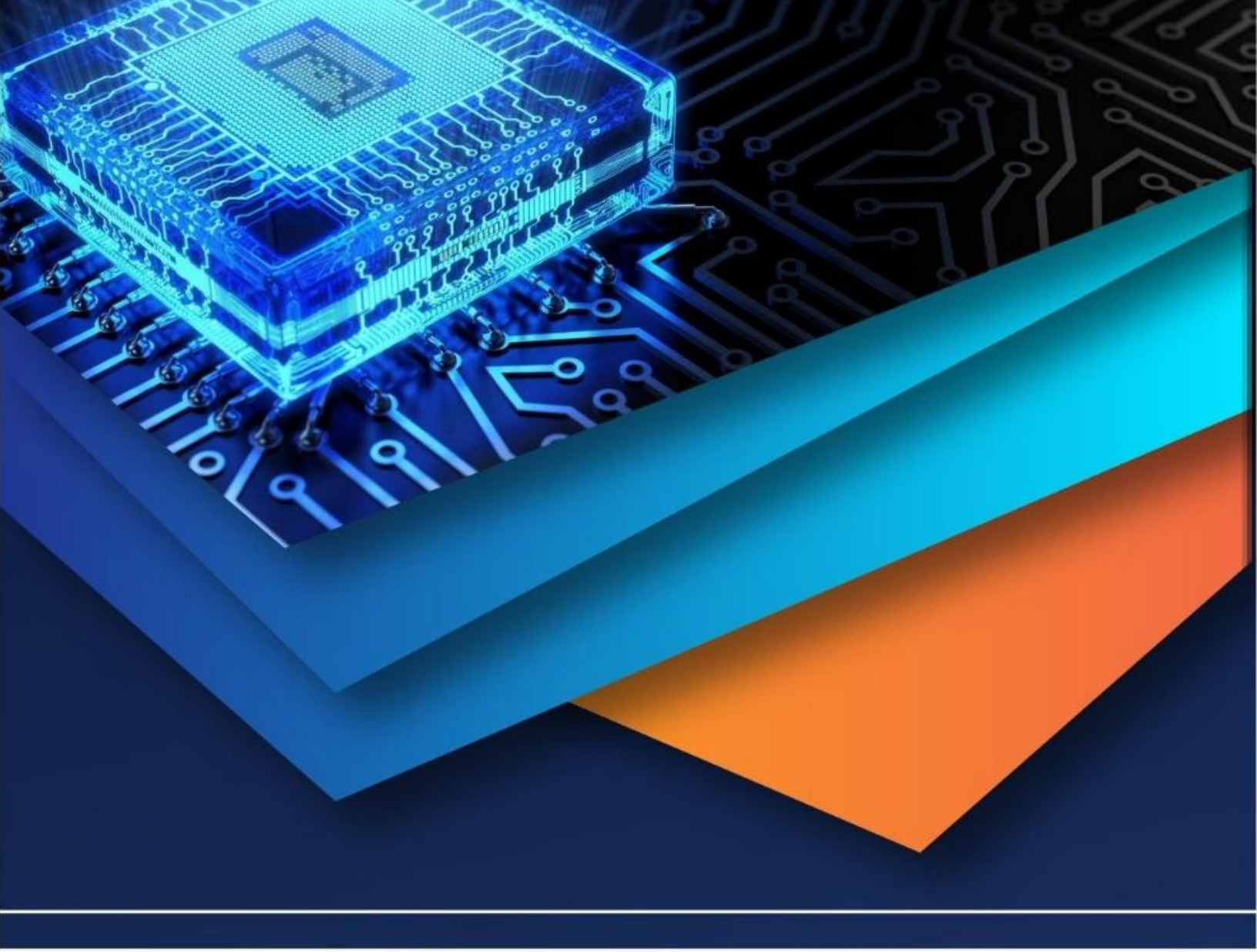
2) For Policymakers and Labour Authorities

- Strengthen labour inspection capacity and enforcement of Factories Act and OSHWC Code provisions, with particular attention to working hour violations and safety compliance gaps in medium-scale manufacturing units.
- Develop industrial welfare improvement subsidy programmes that reduce the financial barrier to working condition upgrades in resource-constrained enterprises.
- Mandate working condition satisfaction reporting as part of annual factory compliance documentation to generate sector-level visibility of worker welfare standards.

REFERENCES

[1] Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organisations. International Journal of Enterprise Computing and Business Systems, 1(1), 1–16.
[2] Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organisational experiences, job performance evaluations, and career outcomes. Academy of Management Journal, 33(1), 64–86.

[3] Gupta, M., & Kumar, V. (2013). Justice and employee engagement: Examining the mediating role of trust in Indian B-schools. Asia-Pacific Journal of Management Research and Innovation, 9(1), 89–97.
[4] Herzberg, F., Mausner, B., & Snyderman, B. (1959). The Motivation to Work. Wiley.
[5] Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), Handbook of Industrial and Organisational Psychology (pp. 1297–1349). Rand McNally.
[6] Maslow, A. H. (1954). Motivation and Personality. Harper & Row.
[7] Reena, S., & Bhaktha, J. (2012). Occupational health and safety management and its effect on employee satisfaction. Journal of Human Resources Management Research, 2012, 1–11.
[8] Saeed, R., & Asghar, M. A. (2012). The impact of working environment on employee job satisfaction and performance in Pakistan. International Journal of Research in Management & Technology, 2(4), 1–5.
[9] Sharma, P. (2016). Organizational culture as a predictor of job satisfaction: The role of age and gender. Journal of Contemporary Management, 13, 33–57.
[10] Sinha, J. B. P. (2014). Psycho-Social Analysis of the Indian Mindset. Springer India.
[11] Sundstrom, E. (1986). Work Places: The Psychology of the Physical Environment in Offices and Factories. Cambridge University Press.
[12] Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. Journal of Applied Psychology, 85(4), 587–596.



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY