



# A Study On Workplace Safety And Employee Well-Being

Ashwitha V<sup>1</sup>, Dr K. Suresh kumar<sup>2</sup>

Student<sup>1</sup>, Professor <sup>2</sup>

Master of Business Administration<sup>12</sup>

Panimalar Engineering college<sup>12</sup>

Ponnamallee, Chennai.

**Abstract:** This study investigates the critical relationship between workplace safety and employee well-being at Tube Products of India, a leading manufacturer in the industrial sector. In an era where organizational success is deeply linked to employee health and morale, understanding how safety measures influence well-being has become essential.

**Keywords:** Workplace Safety, Employee Well-being, Industrial Sector, Organizational Success.

## 1.INTRODUCTION

In today's competitive business environment, ensuring the safety and well-being of employees has become a critical focus for organizations. As the workplace evolves with new technologies, work structures, and employee expectations, the role of safety in maintaining a healthy work environment has gained increasing importance. Workplace safety goes beyond just physical protection; it encompasses psychological health, job satisfaction, and overall employee engagement.

### Features of the Industry:

- 1. Diverse Applications:** Steel tubes are integral to industries such as oil and gas, power plants, water pipelines, heavy engineering, and automotive.
- 2. Product Customization:** Manufacturers offer customized tube dimensions and grades to suit specific industrial applications.
- 3. Technology-Driven:** The industry is evolving with the use of advanced metallurgical technologies and high-precision machinery.
- 4. Compliance and Standards:** Strict adherence to national and international quality and safety standards is required.
- 5. Export Potential:** Indian steel tube manufacturers have a strong presence in global markets due to competitive pricing and quality products.

## 2.OBJECTIVES OF THE STUDY

- 1.To assess the impact of workplace safety measures on employee wellbeing and overall productivity.
2. To examine the effectiveness of current safety protocols and their influence on employee health and job satisfaction.
3. To identify potential hazards in the workplace and explore strategies to mitigate these risks for improved employee safety.
4. To analyse the relationship between employee wellbeing programs and their engagement, retention, and performance levels.

## 3.SCOPE OF THE STUDY

The scope of this study encompasses an analysis of employee perceptions focusing on various factors such as organizational culture, leadership styles, communication effectiveness, and employee satisfaction. It aims to identify areas for improvement in employee engagement and retention, evaluate the impact of training and development programs, and assess how work-life balance policies influence overall job satisfaction and performance, thereby contributing to organizational success.

## 4.REVIEW OF LITERATURE

**1. Glorian Sorensen, Jack T. Dennerlein, Susan E. Peters, Erika L. Sabbath, Erin L. Kelly, Gregory R. Wagner (2021)** The paper aims to develop an expanded conceptual model for understanding the determinants of worker safety, health, and wellbeing. It emphasizes the broader socio-political-economic context shaping work conditions and explores how structural forces like technology, globalization, and climate change impact worker experiences and health.

**2. Alex Olanrewaju Adekanmbi, Nwakamma Ninduwezuor-Ehiobu, Ayodeji Abatan, Uchenna Izuka, Emmanuel Chigozie Ani, Alexander Obaigbena (2024)** The paper explores the health and safety challenges faced in offshore wind farms, focusing on the harsh marine environment and remote locations. It examines the need for comprehensive risk assessments, safety protocols, and emergency response plans. The study finds that offshore wind farms face significant hazards, including rough seas and complex machinery. Continuous monitoring,

## 5.RESEARCH METHODOLOGY

The study uses descriptive research design to examine the relationship between the performance appraisal process. A sample size of 178 employees was selected using convenience sampling from a total population of 360. Data collection follows quantitative methods, and since the data is not normally distributed, non-parametric tools were applied for analysis

## 6.DATA ANALYSIS AND INTERPRETATION

Categories	Sub categories	No of respondents	Percentage (%)
<b>Gender</b>	Male	127	71.35
	Female	51	28.65
<b>Age</b>	18-25	38	21.35
	26-35	43	24.16
	36-45	51	28.65
	45 above	46	25.84
	<b>Work experience</b>	1-3	40
	3-6	31	17.42
	6-10	37	20.79
	Less than 1 year	31	17.42
	More than 10 years	39	21.91

<b>Salary</b>	10000-20000	35	19.66
	20000-30000	46	25.84
	30000-40000	42	23.6
	40000-50000	24	13.48
	50000 Above	31	17.42
<b>Education</b>	High school graduate	36	20.22
	Bachelor's degree	38	21.35
	Master's degree	35	19.66
	Professional certification	32	17.98
<b>Total</b>	Technical Diploma	27	20.79
	All categories	178	100

**Findings:**

It is found that 71.35% of respondents are male and 28.65% of respondents are female. It is found that 21.35% of respondents are 18-25 age, 26-35 are 24.16% of age, 36-45 are 28.65%, 45 above are 25.84% of age. It is found that 25.84% are 22.47% of experience, 3-6 are 17.42% of experience, 6-10 are 20.79% of experience, Less than 1 year are 17.42% of experience, More than 10 years are 21.91% of experience. It is found that 10000-20000 are 19.66%, 20000-30000 are 25.84%, 30000-40000 are 23.6%, 40000-50000 are 13.48%, 50000 Above are 17.42%. It is found that High school graduate are 20.22%, Bachelor's degree are 21.35%, Master's degree are 19.66%, Professional certification are 17.98%, Technical Diploma are 20.79%.

**Inference:**

It is inferred that majority of respondents (71.35%) are Male.

It is inferred that majority of respondents (28.65%) are 36-45

It is inferred that majority of respondents (25.84%) are having 20000-30000

It is inferred that majority of respondents (21.35%) are Bachelor's degree

It is inferred that majority of respondents (22.47%) are 1-3 years of experience



Figure 1: Demographic profile

## 6.2 STATISTICAL TOOLS

### MANN-WHITNEY U-TEST

**Null Hypothesis (H<sub>0</sub>):** No gender difference in employee perceptions

**Alternative Hypothesis (H<sub>1</sub>):** Gender difference exists in employee perceptions.

#### Test Statistics<sup>a</sup>

	Perceivanceof SandP	Ratingonhealth handsafety	Agreementlev elonHAF	Recommenda tionforIWP
Mann-Whitney U	192.000	76.500	142.500	408.000
Wilcoxon W	8320.000	8204.500	8270.500	8536.000
Z	-10.386	-10.528	-10.301	-10.852
Asymp. Sig. (2-tailed)	.000	.000	.000	.000

a. Grouping Variable: Gender

#### INTERPRETATION:

The Mann-Whitney U test revealed significant gender differences ( $p < 0.001$ ) in workplace safety and well-being perceptions. Female employees consistently had higher mean ranks across all variables. This indicates women perceive safety and health aspects more positively than men.

### KRUSKAL WALLIS H TEST

**Null Hypothesis (H<sub>0</sub>):** There is no significant difference in employee perceptions based on age groups.

**Alternative Hypothesis (H<sub>1</sub>):** There is a significant difference in employee perceptions based on age groups.

#### Test Statistics<sup>a,b</sup>

	Perceivanceof SandP	Ratingonhealth handsafety	Agreementlev elonHAF	Recommenda tionforIWP
Chi-Square	149.888	161.160	150.206	124.668
df	3	3	3	3
Asymp. Sig.	.000	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Age

## INTERPRETATION:

The Kruskal-Wallis H test showed significant differences ( $p < 0.001$ ) in safety and well-being perceptions across age groups. Older employees had higher mean ranks, indicating more favorable views. This suggests perceptions improve with age, possibly due to experience or varying expectations.

## 7.SUMMARY OF FINDINGS

- 1.The majority of respondents (28.65%) fall within the 36-45 age group.
- 2.The majority of respondents are male (71.35%).
- 3.The most respondents hold a Bachelor's Degree (21.35%).
- 4.The majority of respondents have 1 to 3 years of experience (22.47%).
- 5.The most respondents earn within the ₹20,000–₹30,000 range (25.84%).
- 6.The majority identified mental health support as the most prominent workplace safety measure (25.28%).
- 7.The majority (37.64%) perceive a very positive relationship between safety and productivity.
- 8.The most respondents (35.39%) believe safety occasionally improves performance.
- 9.The vast majority of respondents (98.31%) would recommend changes to improve productivity.
- 10.The majority of respondents (36.52%) rate the impact of overall well-being and productivity as good (4).

## 8.SUGGESTIONS

- Enhance mental health support initiatives by integrating regular counseling sessions and stress-relief programs to address the most identified workplace safety concern.
- Strengthen career growth and development opportunities through personalized learning paths and mentorship to retain talent and meet employee expectations.
- Conduct regular assessments of safety protocols and update them frequently to ensure alignment with employee satisfaction and effectiveness levels.
- Enhance participation in wellbeing programs by increasing awareness, incentives, and scheduling flexibility to boost engagement rates.

## 9.CONCLUSION

This study highlights the crucial link between workplace safety and employee well-being in the manufacturing sector, with specific focus on Tube Products of India. The findings indicate that while the company has established a solid foundation of safety measures, there remain critical areas for enhancement. Employees generally perceive the work environment as physically safe, and this perception positively correlates with higher levels of job satisfaction, motivation, and productivity.

## 10.BIBLIOGRAPHY

1. Adekanmbi, A. O., Ninduwezuor-Ehiobu, N., Abatan, A., Izuka, U., Ani, E. C., & Obaigbena, A. (2024). Implementing health and safety standards in offshore wind farms.
2. Bates, A. L., & Wu, S. F. (2023). Workplace safety, employee wellbeing, and organizational productivity: A systematic review.
3. Chang, X., & Zhang, Q. (2021). Workplace safety and employee wellbeing: A comprehensive literature review.
4. Edwards, A. S., & Parker, L. B. (2023). Workplace safety and wellbeing in the gig economy: A comprehensive review.
5. Garcia, S. M., & Kim, E. J. (2022). Impact of workplace safety protocols on employee wellbeing: A meta-analysis of recent studies.
6. Gomez, A., & Watanabe, H. (2023). Workplace safety, employee satisfaction, and mental health: A cross-cultural comparison.
7. Harris, L. M., & Garcia, V. E. (2022). A review of workplace safety and wellbeing measures for remote workers.
8. Jackson, T. H., & Turner, R. (2022). The role of leadership in enhancing workplace safety and employee wellbeing: A literature review.
9. Jung, Y., & Lim, H. (2023). Impact of remote work on workplace safety and employee wellbeing: A review of literature.
10. Khan, M. A., & Baig, S. (2024). A review on the impact of occupational health and safety measures on employee wellbeing in the healthcare industry.

### Websites Referred:

- <http://hdl.handle.net/10603/370175>
- [www.semanticscholar.org](http://www.semanticscholar.org)
- [shodhganga.inflibnet.ac.in](http://shodhganga.inflibnet.ac.in)