



Enhancing Workplace Hygiene: A Study Of Industry Practices In Kurnool District

D.Moulali ¹,Dr. N. Ganesh Naik²

¹Ph.D Scholar, Department of Economics, Yogi Vemana University, Kadapa.

² Assistant Professor, Department of Economics, Yogi Vemana University, Kadapa.

Abstract: The paper titled "Enhancing Workplace Hygiene: A Study of Industry Practices in Kurnool District" examines the relationship between workplace hygiene and employee satisfaction across various industries in Kurnool District. Through a descriptive-analytical approach utilizing primary and secondary data, the research explores the hygiene conditions in industries like Cement, Alkaline, and Agro-Processing. The study reveals that the Cement Industry consistently ranks higher in employee satisfaction with workplace cleanliness, sanitation facilities, and access to clean drinking water, while the Alkaline and Agro-Processing industries report lower satisfaction levels. The findings highlight significant disparities in labour welfare practices and suggest the need for targeted improvements in hygiene, sanitation, and water facilities. Additionally, the study recommends implementing awareness programs to educate workers about their rights and the welfare measures available to them, ensuring periodic assessments to align welfare facilities with workers' needs.

Keywords: Workplace Hygiene, Employee Satisfaction, Labour Welfare

1. Introduction: Background

The economic growth of a nation fundamentally relies on the productivity of its workforce. Labour, as a cornerstone of production, plays a critical role in industrial success (Chauhan, 1993). The importance of labour productivity has been a focal point in the fields of economics and management, a focus that has only intensified with the advent of industrialization and mechanization. A content and satisfied workforce is a crucial asset for any nation's industrial success (Joshi, 1968). Labour efficiency directly

impacts production output. "Even one discontented employee or an employee nursing a grievance can eventually infect an entire organization with the germ of discontent which, in turn, will result in lower efficiency, poor morale and reduction in overall production." (Pylee & George, 1996). Thus well-being and productivity of employees are critical indicators of an industry's overall success.

Labour welfare is also understood to mean "such services, facilities and amenities, which may be established in, or in the vicinity of, undertakings to enable persons employed therein to perform their work in healthy and congenial surroundings and to provide them with amenities conducive to good health and good morals." ILO, 1947

2. The Rationale of the Study

The importance of labour in economic development extends beyond economic growth; it includes the achievement of distributive justice. Fair distribution of income between labour and capital is essential for sustainable economic development (Mukherjee, 2022). While the state enacts laws and regulations to ensure labour welfare, the real impact depends on the implementation of these laws across industries. This study aims to address the gaps in existing research, focusing on localized regions like Kurnool.

3. Objectives

1. To examine the demographic characteristics of the industrial workforce in selected industries of Kurnool District.
2. To assess the workplace hygiene profile of selected industrial units in the Kurnool District.

4. Research Design and Methodology

The study adopts a descriptive-analytical approach, utilizing both primary and secondary data. Data collection methods include surveys, structured questionnaires, and statistical techniques such as Chi-Square tests and ANOVA. A snowball sampling method was employed, with industrial units categorized by their operations. Workers were selected based on stratified sampling, considering gender, age, education, and experience. The final sample consisted of 300 respondents from various industrial sectors, including Metallic, Non-Metallic, Power, Alkaline, Hypo-Chemicals, and Agro-Processing industries. Data collection took place between 2022 and mid-2023.

5. Key Findings of The Study

5.1 Demographic Characteristics of the Industrial Workforce

The workforce in the selected industries of Kurnool District is predominantly male, with 92.3% of respondents being male and only 7.7% female. The Cement and Agro-Processing industries have a small percentage of female employees, with the highest proportion in the Agro-Processing industry (18% female). The majority of the workforce falls within the 30-40 years age group, accounting for 38% of the total respondents. Educational qualifications vary, with 26% of respondents having Intermediate qualifications, followed closely by SSC/10th (25.7%) and graduates (24.3%). The workforce's experience levels also vary, with most having 5-10 years of experience (59.3%). The table.1 depicts Chi-Square test results show a Pearson Chi-Square value of 194.876 with a significant p-value of 0.000, indicating a statistically significant association between industry type and the experience level of employees. This implies that the distribution of experience among respondents is not random but is significantly related to the industry they work in.

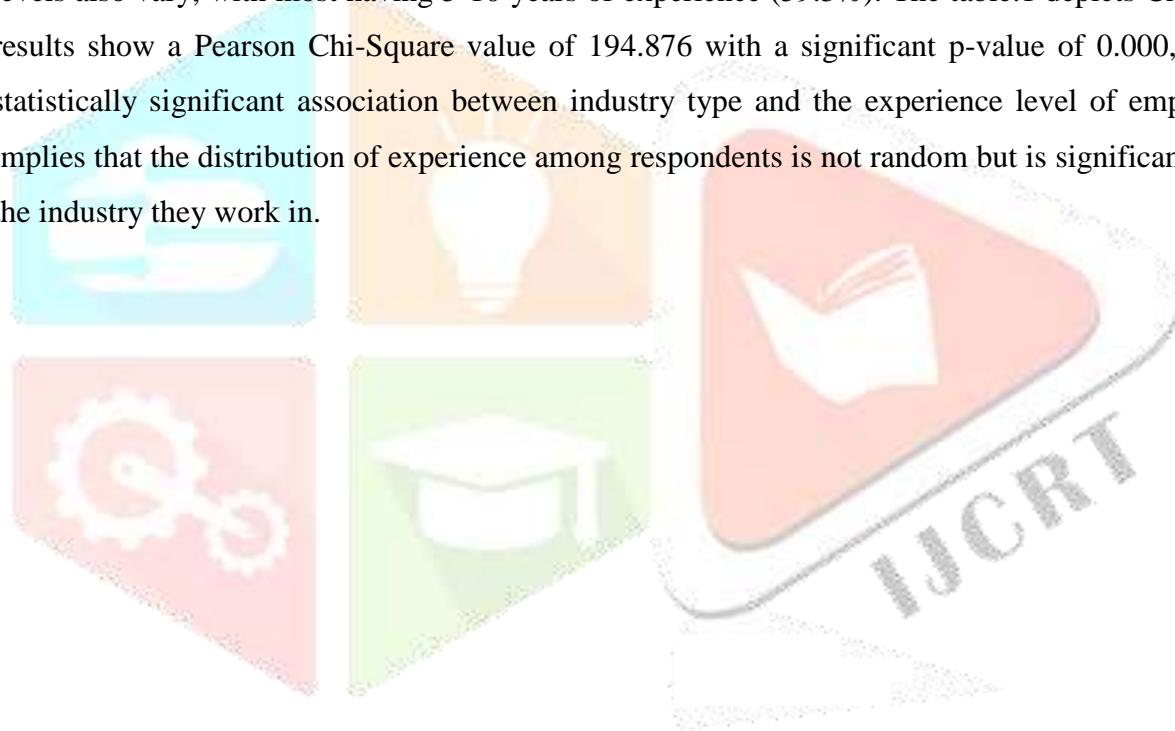


Table .1

Source: Primary Data: **Note:** Figures in parenthesis are percentage

Selected Industries	Work Experience of the Sample Respondents				Total
	0-5 Years	5- 10 Years	10- 15 Years	15- 20 Years	
Alkaline Industry	0 (0.0)	42 (84.0)	4 (8.0)	4 (8.0)	50 (100.0)
Cement Industry	36 (72.0)	11 (22.0)	2 (4.0)	1 (2.0)	50 (100.0)
Agro-Processing Industry	0 (0.0)	24 (48.0)	19 (38.0)	7 (14.0)	50 (100.0)
Power Generation	0 (0.0)	34 (68.0)	4 (8.0)	12 (24.0)	50 (100.0)
Steel Industry	5 (10.0)	28 (56.0)	11 (22.0)	6 (12.0)	50 (100.0)
Hypo Chemical Industry	5 (10.0)	39 (78.0)	4 (8.0)	2 (4.0)	50 (100.0)
Total	46 (15.3)	178 (59.3)	44 (14.7)	32 (10.7)	300 (100.0)

Chi-Square Tests- Gender

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	194.876 ^a	15	.000
Likelihood Ratio	167.841	15	.000
N of Valid Cases	300		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.33.

5.2 Workplace Hygiene Profile

- Cleanliness Perceptions:** The Cement Industry has the highest satisfaction levels, with 86% of respondents strongly satisfied with workplace cleanliness. In contrast, the Alkaline and Agro-Processing industries show mixed satisfaction levels, indicating areas for improvement. Table 2 depicts Post Hoc Test (LSD) tests that confirm significant differences in cleanliness perceptions across sectors. The Cement Industry scored much higher than others, such as the Alkaline and Agro-Processing Industries.

Table .2

Post Hoc Tests (LSD)- Multiple Comparisons on Cleanliness Perceptions of Industrial Workers

(J) Category	Cement Industry	Agro- Processing Industry	Power Generation	Steel Industry	Hypo Chemical Industry
(I) Category	Mean Difference (I-J)	Mean Difference (I-J)	Mean Difference (I-J)	Mean Difference (I-J)	Mean Difference (I-J)
	Std. Error	Std. Error	Std. Error	Std. Error	Std. Error
	Sig.	Sig.	Sig.	Sig.	Sig.
Alkaline Industry	-.700*	.120	.020	-.180	-.040
	.156	.156	.156	.156	.156
	.000	.444	.898	.251	.798
Cement Industry		.820*	.720*	.520*	.660*
		.156	.156	.156	.156
		.000	.000	.001	.000
Agro- Processing Industry			-.100	-.300	-.160
			.156	.156	.156
			.523	.056	.307
Power Generation				-.200	-.060
				.156	.156
				.202	.702
Steel Industry					.140
					.156
					.372

*. The mean difference is significant at the 0.05 level.

Source: Primary Survey

- Clean Drinking Water:** Satisfaction with access to clean drinking water also varies across industries. The Cement and Hypo Chemical Industries report the highest satisfaction levels, with most respondents being "Strongly Satisfied." In contrast, the Alkaline and Power Generation Industries show lower satisfaction levels, with a notable proportion of respondents expressing dissatisfaction or partial satisfaction. This suggests potential challenges in water access that need to be addressed.
- Sanitation Facilities:** The cleanliness of latrines and urinals varies significantly across industries. The Cement Industry leads in satisfaction, with 78% of respondents "Strongly Satisfied," followed by the Steel and Hypo Chemical Industries. In contrast, the Alkaline and Power Generation Industries report lower satisfaction, indicating challenges in maintaining sanitation.
- Spittoons Maintenance:** The study examines worker satisfaction with spittoon maintenance across six industries in the Kurnool district, revealing significant differences. The Cement Industry has the highest satisfaction, reflecting effective maintenance practices, while the Power Generation and Alkaline Industries show lower satisfaction levels, indicating areas for improvement. Table 2 depicts The ANOVA test for spittoon maintenance reveals a Between Groups sum of squares of 27.307 with 5 degrees of freedom, resulting in a mean square of 5.461 and an F-value of 7.710 with a significance level

(p-value) of .000. This indicates that there are statistically significant differences in satisfaction levels regarding spittoon maintenance among different industries. The between-groups variability is significantly greater than the within-groups variability, highlighting that the industry-specific factors contribute substantially to differences in satisfaction levels.

Table 3 : ANOVA Spittoons are maintained at your workplace.

	Sum Squares	of	df	Mean Square	F	Sig.
Between Groups	27.307		5	5.461	7.7	.00
Within Groups	208.240		294	.708	10	0
Total	235.547		299			

Source: Primary Survey

5. **Washing and Bathing Facilities:** The Cement Industry shows significantly higher satisfaction levels with washing and bathing facilities compared to other industries. The Alkaline Industry, in particular, exhibits lower satisfaction levels, highlighting the need for targeted improvements in these facilities.

5.3 Conclusion

The study highlights the disparities in labour welfare practices across different industries in the Kurnool District. The Cement Industry consistently ranks higher in terms of employee satisfaction with workplace hygiene, clean drinking water, and sanitation facilities. In contrast, industries such as Alkaline and Agro-Processing show lower satisfaction levels, indicating areas that require significant improvements.

Demographic factors such as gender, age, education, and experience also play a role in shaping the effectiveness of labour welfare practices. For example, industries with younger or less experienced workforces, like the Cement Industry, tend to have better overall satisfaction levels, possibly due to more modern infrastructure and better implementation of welfare practices.

5.4 Recommendations

1. **Improvement in Hygiene and Sanitation:** Industries, particularly the Alkaline and Power Generation sectors, should invest in improving workplace cleanliness and sanitation facilities to enhance employee satisfaction and well-being.
2. **Access to Clean Drinking Water:** The Alkaline and Power Generation Industries need to address the challenges in providing clean drinking water by upgrading their water infrastructure and ensuring regular maintenance.
3. **Targeted Welfare Policies:** Policymakers should consider implementing targeted welfare policies for industries with lower satisfaction levels. Regular inspections and assessments should be conducted to ensure that welfare facilities meet required standards.
4. **Employee Awareness Programs:** To bridge the gap between policy formulation and implementation, awareness programs should be conducted to educate workers about their rights and the welfare measures available to them. This can empower the workforce and ensure better utilization of welfare facilities.
5. **Periodic Assessments:** Industries should conduct periodic assessments of labour welfare practices to identify areas for improvement and ensure that the facilities provided align with workers' needs and expectations.

By addressing these recommendations, industries in the Kurnool District can enhance labour welfare, leading to a more satisfied and productive workforce, which in turn contributes to overall industrial success and economic development in the region.

References

1. Chakraborty, A. (2015). Reforming Labour Markets in States. *Economic and Political Weekly*, 50(20), 52–57.
2. Chauhan, S. S. (1993). *Labour Welfare Administration in India*. Kanishka Publishers.
3. International Labour Organisation. (1947). *Asian Regional Conference Report II*. Geneva, Switzerland: International Labour Organisation.
4. Joshi, N. K. (1968). *Labour Welfare: Concept, Meaning, and Scope*. *Indian Labour Journal*, 9(10), 280.
5. Mukherjee, S. P. (2022). *Labour: Lever for Development*. In *Role of Labour in India's Development*. V. V. Giri National Labour Institute.
6. Pylee, M. V., & George, A. (1996). *Industrial Relations and Personnel Management*. Vikas Publishing House.