An Analysis of Employee Health And Safety Measures In The Workplace At Current Electro Mech Private Limited, Erode

V.Vishvini[1], Dr. S. Senthilkumar[2], Dr. S.Prakash[3]
[1] Dept of MBA
[2, 3]Assistant Professor, Dept of MBA
[1, 2]Vivekananda institute of information and management studies,
Tiruchengode, Namakkal district, Tamilnadu.

Abstract- *This study examines the employee health and safety measures implemented at Current Electro Mech Private Limited. The research aims to evaluate existing safety practices, employee awareness, workplace hazards, and areas for improvement. Both primary and secondary data were used for the study. Primary data were collected from 90 employees through a structured questionnaire using simple random sampling, while secondary data were obtained from company records and relevant literature. Statistical tools such as percentage analysis, chi-square test, correlation, weighted average method, and ANOVA were applied for analysis. The findings indicate that most employees are aware of safety policies, regularly use personal protective equipment (PPE), and are satisfied with the company's safety measures and training programs. The study concludes that the company maintains effective health and safety practices; however, continuous monitoring, regular training, and improved safety facilities are essential for sustaining a safe and healthy workplace.*

Keywords: Employee Health, Workplace Safety, PPE, Safety Training, Industrial Safety, Employee Welfare.

I. INTRODUCTION

Employee health and safety have become essential responsibilities of modern organizations due to rapid industrialization, technological advancement, and increasing workplace risks. Employees are exposed to hazards such as machinery accidents, chemical exposure, work stress, ergonomic issues, and environmental risks. Therefore, ensuring a safe and healthy workplace is not only a legal requirement but also a social and moral responsibility of employers.A safe working environment protects employees from injuries, occupational diseases, and mental stress while improving their confidence, efficiency, and job satisfaction. Workplace accidents can lead to physical injuries, financial losses, production interruptions, and damage to organizational reputation. Hence, effective health and safety measures help organizations reduce risks, control costs, and improve overall productivity.In India, labour laws such as the Occupational Safety, Health and Working Conditions Code, 2020 emphasize the importance of workplace safety, welfare facilities, and employee protection. Organizations that implement proper safety practices experience reduced absenteeism, improved employee morale, and stronger public trust.Employee participation, regular training programs, safety awareness, and the proper use of protective equipment are important for maintaining workplace safety.Continuous evaluation of health and safety measures helps organizations identify risks, adopt preventive strategies, and ensure sustainable growth. Therefore, analysing employee health and safety measures is essential for protecting employees and improving organizational performance.

Statement of the Problem:

Employee health and safety have become important concerns in modern organizations due to increasing industrial activities and workplace hazards. Employees are exposed to physical, chemical, mechanical, and psychological risks that may lead to accidents, injuries, occupational diseases, and stress-related problems. Although organizations implement safety policies and follow legal regulations such as the Occupational Safety, Health and Working Conditions Code, 2020, workplace safety issues still exist due to inadequate safety practices, lack of awareness, insufficient training, and negligence. Therefore, it is necessary to analyse the effectiveness of employee health and safety measures and identify areas for improvement.

Objectives:

- To examine the existing employee health and safety measures in the workplace.
- To identify the health and safety risks faced by employees.

- To evaluate the effectiveness of safety policies and preventive measures.
- To assess employees' awareness of workplace safety practices.
- To analyse the impact of health and safety measures on employee performance.
- To suggest measures for improving workplace health and safety standards.

Need for the Study:

- To identify workplace hazards and safety risks faced by employees.
- To evaluate the effectiveness of existing safety measures and training programs.
- To ensure compliance with workplace safety laws and regulations.
- To reduce workplace accidents, injuries, and occupational hazards.
- To improve employee productivity and work efficiency.
- To promote employee well-being, including physical and mental health.
- To strengthen safety awareness and workplace safety culture.

Scope of the Study:

- The study focuses on the implementation of employee health and safety measures, including safety policies, training, and accident prevention practices.
- It also examines employee compliance with safety procedures and the role of HR in maintaining workplace safety standards.

Limitations of the Study:

- The study is limited to Current Electro Mech Private Limited, Erode, and the findings may not be applicable to other organizations.
- The study is based on employees' personal responses and limited data collected within a short period, which may affect the accuracy of the analysis.

II. REVIEW OF LITERATURE

- Studies by Neal, Griffin, and Hart (2020), Zhang et al. (2021), and Choudhry (2022) highlighted that effective HR practices such as safety training, communication, performance appraisal, and safety audits help strengthen safety culture, improve employee compliance, and reduce workplace accidents.
- Recent studies by Hofmann and Morgeson (2023), Lee, Kim, and Park (2024), Sharma and Verma (2025), and Patel and Nair (2026) emphasized that safety leadership, employee well-being programs, reward systems, and digital safety practices enhance workplace safety, employee awareness, and overall organizational performance.

III. RESEARCH METHODOLOGY

Research methodology refers to the systematic process used to collect, analyse, and interpret data for the study. This chapter explains the research design, data sources, sampling method, data collection tools, and statistical techniques used to analyse the role of HRM in improving employee health and safety measures in the organization.

Research Design

The study adopts a Descriptive Research Design.This design is used to describe and analyse the existing health and safety practices of employees in the organization. It helps in understanding the current conditions without manipulating any variables.

Sources of Data

Primary Data

- Collected through questionnaires, interviews, observations, and surveys.
- Data gathered from employees and HR personnel.

Secondary Data

- Collected from company records and HR policy documents.
- Safety manuals and accident registers were also referred.

Sampling Method:

The study uses the Simple Random Sampling Method.This method ensures that every employee has an equal chance of being selected, reducing bias and improving reliability.

Sample Size:

- Sample Size is 90 employees.

- Respondents include workers, supervisors, and staff members.

Tools For Analyze:

- Percentage Analysis
- Weighted Average Method
- Correlation Analysis
- Chi-Square Test
- One Way ANOVA

IV. DATA ANALYSIS AND INTERPRETATION

Correlation:

		Management Action after Accident	Feeling of Safety
Management Action after Accident	Pearson Correlation	1	.792**
	Sig. (2-tailed)		.000
	N	90	90
Feeling of Safety	Pearson Correlation	.792**	1
	Sig. (2-tailed)	.000	
	N	90	90

**. Correlation is significant at the 0.01 level (2-tailed).

RESULT:

The Pearson Correlation shows a strong positive relationship (r = 0.792, p = 0.000, N = 90) between management action after accidents and feeling of safety, indicating statistical significance at the 0.01 level. Thus, better management action increases employees' sense of safety, and the null hypothesis is rejected.

CHI – SQUARE ANALYSIS

Null Hypothesis (H_0):

There is no significant relationship between experience and safety training attended.

Alternative Hypothesis (H_1):

There is a significant relationship between experience and safety training attended.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	85.867[a]	4	.000
Likelihood Ratio	110.252	4	.000
Linear-by-Linear Association	60.482	1	.000
N of Valid Cases	90		

a.5 cells (50.0%) have expected count less than 5. The minimum expected count is 2.27.

RESULT:

The Chi-square test results show a significant association between employees' experience and participation in safety training programs ($\chi^2 = 85.867$, $p < 0.05$). Hence, the null hypothesis is rejected, indicating that employee experience influences participation in safety training.

ONE WAY ANOVA

Null Hypothesis (H_0):

There is no significant difference in safety training quality across different levels of education.

Alternative Hypothesis (H_1):
There is a significant difference in safety training quality across different levels of education

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	149.321	4	37.330	**54.115**	.000
Within Groups	58.635	85	.690		
Total	**207.956**	**89**			

RESULT:

The one-way ANOVA results show a significant relationship between employees' educational qualification and their perception of safety training quality ($F = 54.115$, $p < 0.05$). The findings indicate that perceptions of safety training vary across educational levels, and therefore safety training programs should be designed according to employees' educational backgrounds.

V. SUGGESTIONS

The organization should conduct regular safety training programs, particularly for new and less experienced employees, to improve safety awareness and compliance. Proper PPE, first aid, and medical facilities must be provided in all departments, along with regular machine maintenance and safety inspections to reduce workplace hazards. Employees should be encouraged to report safety concerns, and emergency procedures should be explained through mock drills and awareness programs. The organization should also strengthen corrective actions and improve the quality of safety training programs to ensure a safer working environment.

VI. CONCLUSION

The study concludes that Current Electro Mech Private Limited has implemented effective employee health and safety measures, including safety training, PPE usage, first aid facilities, and regular safety inspections. Employees showed good awareness of safety policies, and management's immediate corrective actions helped improve workplace safety and employee confidence. The findings also revealed significant relationships between employee experience and safety training participation. Although the organization maintains a satisfactory safety environment, further improvements in training, PPE quality, ventilation, and health check-ups are recommended. Overall, effective health and safety measures contribute to employee well-being, reduced accidents, improved productivity, and better organizational performance.

REFERENCES

[1] Gowrishankkar, V. (n.d.). A study on employee stress management with special reference to manufacturing companies in Coimbatore.
[2] Jani, J. M. (n.d.). Stress management practices in Indian industry.
[3] Girija, K. (n.d.). A study on preventing workplace stress and emotional burnout among employees in the manufacturing sector in Chennai city.
[4] Hemalatha, S. (n.d.). A study on stress management among employees in manufacturing industries.
[5] A study on employee stress management with special reference to manufacturing companies. (2017). International Journal of Commerce and Management Research.