

# International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

# A Study on Employees Welfare, Health and Safety Measures with reference to THERMOX POLYMERS LTD

# P.S. Yugesh Raja<sup>1</sup>, Balaganapathy Perambur Sambandan<sup>2</sup>

- <sup>1</sup> Student, Aarupadai Veedu Institute of Technology
- <sup>2</sup> Professor & Deputy Director, Department of Management , Vinayaka Missions Research Foundation

#### ABSTRACT

The project conducted was titled "A Study on Employee Welfare, Health, and Safety Measures in Thermox Polymers Ltd." The study aimed to examine the welfare, health, and safety measures provided to employees at Thermox Polymers Ltd. It also sought to determine employee satisfaction with the existing welfare facilities, identify reasons for the non-utilization of Personal Protective Equipment (PPE), and analyze health-related issues and the healthcare provisions available to the employees. For the study, a sample size of 150 employees was selected using a stratified random sampling method. Primary data was collected through structured questionnaires administered to the employees. The analysis employed tools such as percentage analysis, weighted average method, and chi-square test within the framework of stratification. The results of the analysis, along with the findings and recommendations, were derived from these methods.

### INTRODUCTION

Thermox Polymers Ltd has emerged as a pioneering force among major Indian ports, consistently surmounting challenges and steadily gaining prominence. Even after 126 years, the port continues to provide exceptional service without showing any signs of aging. The employees have played an integral role in achieving these remarkable milestones. The study sheds light on the welfare, health, and safety measures implemented by Thermox Polymers Ltd for its employees. Employee welfare encompasses a wide range of services, facilities, and amenities aimed at enhancing employees' wellbeing. It is an essential component of social welfare, focusing on harmonizing an employee's work-life balance and their integration into the broader community. In port settings, occupational health services serve extensive functions that extend beyond mere medical supervision of personnel. These services place equal emphasis on treatment, making it advantageous for port authorities of any size to establish their own medical services, employing medical and nursing professionals on either a part-time or full-time basis, depending on the workforce size. Accidents and injuries in ports and docks can be attributed to various environmental factors such as adverse weather conditions, confined spaces, inadequate lighting, and the pressure to work quickly. Neglecting the use of Personal Protective Equipment (PPE) has been found to contribute to a significant number of accidents. The nature of cargo and working conditions influences the type and severity of hazards in dock work. Thus, the fundamental purpose of employee welfare is to elevate the well-being of the working class, transforming them into valued employees and contented citizens. Likewise, employee health and safety initiatives aim to demonstrate an organization's commitment to prioritizing employees' lives and providing them with exceptional facilities beyond comparison.

# **OBJECTIVES OF THE STUDY**

- To study about employees Welfare, health and safety measures in Thermox Polymers Ltd .
- To identify whether the employees are satisfied with the welfare facilities provided to them.
- To create awareness in the use of Personnel Protective Equipment (PPES).
- To analyze the health related issues and health facilities provided to employees

# REVIEW OF LITERATURES

Each employer depending on his priorities gives varying degrees of importance to welfare, health and safety, it is because the government is not sure that all the employers will provide basic measure that it introduces statutory legislation from time to time to bring about some measures of uniformity in the basic amenities available to industrial workers. DOCK WORKERS (SAFETY, HEALTH AND WELFARE) SCHEME 1961. A comprehensive dock workers (safety, health and welfare) scheme 1961 has been formed under the dock workers (Regulation of Employment Act,

1948).

#### 1. Human resource safety practices and employee injuries.

By Kristy J'LynLauver | Journal of Managerial Issues - Fall, 2007 This study begins the important integration of the human resource and safety literatures, as well as providing findings that HR practices are associated with employee injuries. This provides organizations with some potential steps they can take to improve employee safety. However, this study only begins to touch on issues that may make a significant difference in organizational safety, calling for future studies to continue defining what and how HR practices may be associated with reducing employee injuries.

# 2. THE EFFECTS OF JOB INSECURITY ON EMPLOYEE SAFETY OUTCOMES JOURNAL OF OCCUPATIONAL HEALTH PSHYCOLOGY

**VOLUME 6 ISSUE2** Job insecurity research has focused primarily on attitudinal (eg., job satisfaction), behavioral (eg., employee turnover), and health outcomes. Moreover, research in the area of workplace safety has largely focused on ergonomic factors and personnel selection and training as primary antecedents of safety. Two cross-sectional structural equational modeling analyses and 1 longitudinal regression analysis of 237 food-processing plant employees unite these 2 disparate areas of research by exploring the relatively uncharted relationship between job insecurity and safety outcomes. Results indicate that employees who report high perceptions of job insecurity exhibit decreased safety motivation and compliance, which in turn are related to higher levels of workplace injuries and accidents.

#### 3. Designing Employee Welfare Provision

Ann Davis, Lucy Gibson, (1994) "Designing Employee Welfare Provision", Personnel Review, Vol. 23 Iss: 7, pp.33 45Describes a process through which organizations might seek to implement interventions relating to employee wellbeing. Emphasizes the importance of a comprehensive needs assessment both in obtaining the breadth of information needed to design appropriate interventions and also in providing baseline information against which to evaluate programme effectiveness. Discusses factors which influence the type of intervention appropriate for a particular situation and highlights their design implications. Finally, provides guidance on programme implementation and evaluation, and discusses some of the advantages and disadvantages of different approaches to tertiary welfare provision.

#### RESEARCH METHODOLOGY

Research methodology serves as a systematic approach to addressing research problems, providing a scientific framework for conducting research. It encompasses a series of distinct steps that researchers typically follow to investigate their research questions, supported by underlying logical principles. The research methodology can be viewed as a comprehensive process comprising multiple stages and activities, which, when combined, lead to the resolution of the problem at hand.

#### RESEARCH DESIGN

A research design serves as the framework or blueprint for a study, outlining the structure and methodology for data collection and analysis. It establishes the conditions and arrangements necessary for gathering and examining data, striving to achieve a balance between relevance to the research objectives and efficiency in procedures. The research design provides the conceptual structure that governs the entire research process, serving as a blueprint for data collection, measurement, and analysis.

# DESCRIPTIVE RESEARCH

In the realm of social sciences and business research, the term "Ex Post Facto" research is often utilized to describe descriptive research studies. The primary feature of this method is that the researcher lacks control over the variables being studied; their role is limited to reporting on past and current occurrences. Descriptive research focuses on providing a simple description of a phenomenon, such as the demographic characteristics of consumers who have utilized a specific product or service. This type of study examines the occurrence of events or the relationship between two variables. Typically, this form of research involves formulating hypotheses.

#### ANALYTICAL TOOLS

# ANALYSIS USING KARL PEARSONS CORRELATION:

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Null hypothesis (H0): There is positive relationship between uncomfortable working environment and unsatisfied organizational climate.

Alternate hypothesis (H1): There is negative relationship between uncomfortable working environment and unsatisfied organizational climate.

		UNCOMFORTABL E WORKING ENVIRONMENT	UNSATISFIED ORGANISATIONA L CLIMATE
UNCOMFORTABLE WORKING ENVIRONMENT	Pearson Correlation Sig. (2-tailed)	1	.834**
	N	150	150
VINCATIVEDIED	Pearson Correlation	.834**	1
UNSATISFIED	Sig. (2-tailed)	.000	
ORGANISATIONAL CLIMATE	N	150	150

# = .834

INFERENCE: Since r is positive, there is positive relationship between uncomfortable working environment and unsatisfied organizational climate

# CHI- SQUARE TEST $I - (\Psi 2)$

It is calculated using:  $\chi^2 = \Sigma \left[ \left( \mathbf{O}_i - \mathbf{E}_i \mathbf{O}_i - \mathbf{E}_i \right)^2 / \mathbf{E}_i \mathbf{E}_i \right]$  with (n - 1) degrees of

# CHI- SQUARE TEST Ι (ψ2)

Chi-square is the sum of the squared difference observed (o) and the expected (e) data (or the deviation, d), divided by the expected data in all possible categories.

# Null hypothesis (Ho):

There is no relationship between the age and the experience.

# Alternate hypothesis (H1):

There is relationship between the age and the experience.

### **Case Processing Summary**

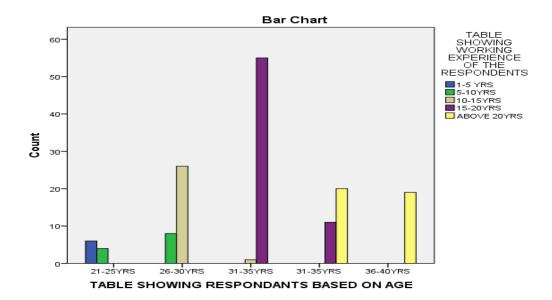
	Cases		1		1	
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
TABLE SHOWING						
RESPONDANTS BASED ON						
AGE * TABLE SHOWING	150	100.0%	0	0.0%	150	100.0%
WORKING EXPERIENCE OF						
THE RESPONDENTS						

Crosstabulation			l _					
					WORKING	EXPERIEN	CE OF THE	Tota
			RESPON		1	T		1
			1-5	5-	10-	15-	ABOVE	
			YRS	10YRS	15YRS	20YRS	20YRS	10
		Count	6	4	0	0	0	10
		% within TABLE SHOWING						100.
			60.0%	40.0%	0.0%	0.0%	0.0%	%
		RESPONDANTS BASED ON AGE						70
		% within TABLE						
	21-25YRS	SHOWING						
		WORKING						
		EXPERIENCE OF	100.0%	33.3%	0.0%	0.0%	0.0%	6.7%
	THE							
	RESPONDENTS							
	% of Total	4.0%	2.7%	0.0%	0.0%	0.0%	6.7%	
	Count	0	8	26	0	0	34	
	% within TABLE							
		SHOWING	0.0%	23.5%		0.0%	0.0%	100.
		RESPONDANTS			76.5%			%
TABLE		BASED ON AGE						
SHOWING		% within TABLE						
RESPONDA	26-30YRS	SHOWING						
NTS BASED		WORKING						22.7
ON AGE		EXPERIENCE OF	0.0%	66.7%	96.3%	0.0%	0.0%	%
		THE						
		RESPONDENTS						
			0.004		47.00	0.004	0.004	22.7
		% of Total	0.0%	5.3%	17.3%	0.0%	0.0%	%
		Count	0	0	1	55	0	56
		% within TABLE						
		SHOWING	0.00/	0.00/	1.00/	00.20	0.00/	100.
31-35YRS		RESPONDANTS	0.0%	0.0%	1.8%	98.2%	0.0%	%
	BASED ON AGE							
	31-35YRS	% within TABLE						
		SHOWING						
		WORKING	0.0%	0.0%	3.7%	83.3%	0.0%	37.3
		EXPERIENCE OF	0.070	0.070	3.170	03.370	0.070	%
		THE						
		RESPONDENTS	1					1

Г		I	ı	1		1	ı	
		% of Total	0.0%	0.0%	0.7%	36.7%	0.0%	37.3 %
		Count	0	0	0	11	20	31
31-35YRS		% within TABLE SHOWING RESPONDANTS BASED ON AGE	0.0%	0.0%	0.0%	35.5%	64.5%	100.0
	% within TABLE SHOWING WORKING EXPERIENCE OF THE RESPONDENTS	0.0%	0.0%	0.0%	16.7%	51.3%	20.7	
		% of Total	0.0%	0.0%	0.0%	7.3%	13.3%	20.7
36-40YRS	Count	0	0	0	0	19	19	
	% within TABLE SHOWING RESPONDANTS BASED ON AGE	0.0%	0.0%	0.0%	0.0%	100.0%	100.0	
	36-40YRS	% within TABLE SHOWING WORKING EXPERIENCE OF THE RESPONDENTS	0.0%	0.0%	0.0%	0.0%	48.7%	12.7
		% of Total	0.0%	0.0%	0.0%	0.0%	12.7%	12.7 %
		Count	6	12	27	66	39	150
Total		% within TABLE SHOWING RESPONDANTS BASED ON AGE	4.0%	8.0%	18.0%	44.0%	26.0%	100.0
		% within TABLE SHOWING WORKING EXPERIENCE OF THE RESPONDENTS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0
		% of Total	4.0%	8.0%	18.0%	44.0%	26.0%	100.0

Chi-Square Tests

Cin-Square rests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	348.430 <sup>a</sup>	16	.000
Likelihood Ratio	304.367	16	.000
Linear-by-Linear Association	123.103	1	.000
N of Valid Cases	150		



a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .40.

Degree of Freedom= (r-1)\*(c-1) = 4\*4= 16

Calculated value = 348.430

Tabulated value = 26.296

Z = Z cal > Z tab

Z= 348.430>26.296

Hence, the Alternate hypothesis [H1] is accepted

**INFERENCE:**Since the calculated value is greater than the tabulated value, we accept the alternate hypothesis and hence there is a relationship between the age and the experience.

# ONE-WAY ANOVA CLASSIFICATION

Null hypothesis (Ho): There is a significance difference between opinion on visiting Thermox Polymers Ltd hospital regularly for health related issues and level of respondents visited pl hospital.

Alternate hypothesis (H1): There is no significance difference between opinion on visiting Thermox Polymers Ltd hospital regularly for health related issues and level of respondents visited pl hospital.

# Descriptives

TABLE SHOWING RESPONDENT'S OPINION ON VISITING THERMOX POLYMERS LTD HOSPITAL REGULARLY FOR HEALTH RELATED ISSUES

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximu m
					Lower Bound	Upper Bound		
HIGHLY SATISFIED	13	1.00	.000	.000	1.00	1.00	1	1
SATISFIED	35	1.77	.426	.072	1.63	1.92	1	2
NEUTRAL	49	2.67	.474	.068	2.54	2.81	2	3
DISSATISFIED	34	3.26	.448	.077	3.11	3.42	3	4
HIGHLY DISSATISFIED	19	4.58	.507	.116	4.33	4.82	4	5
Total	150	2.69	1.080	.088	2.52	2.87	1	5

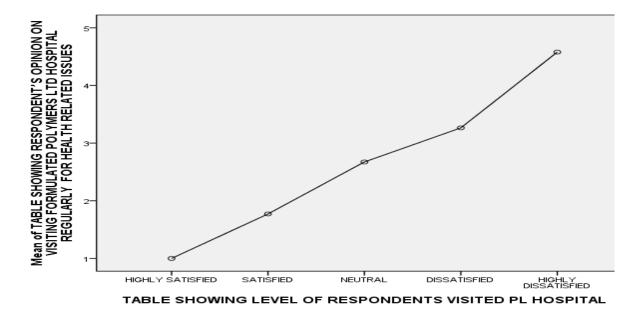


TABLE SHOWING RESPONDENT'S OPINION ON VISITING THERMOX POLYMERS LTD HOSPITAL REGULARLY FOR HEALTH RELATED ISSUES

Levene Statistic	df1	df2	Sig.
17.743	4	145	.000

### ANOVA

TABLE SHOWING RESPONDENT'S OPINION ON VISITING THERMOX POLYMERS LTD HOSPITAL

### REGULARLY FOR HEALTH RELATED ISSUES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	145.697	4	36.424	187.314	.000
Within Groups	28.196	145	.194		
Total	173.893	149			

Tabulated value = 2.46 Calculated value= 187.314

F = F cal > F tab F = 187.314 > 2.46

Hence, the null hypothesis [H1] is accepted.

#### INFERENCE:

Since the calculated value is greater than the tabulated value, we accept the alternate hypothesis and hence there is a relationship between opinions on visiting Thermox Polymers Ltd hospital regularly for health related issues and level of respondents visited pl hospital.

### FINDINGS OF THE STUDY

- From the study it reveals that 7% of respondents has under the age of 21-25 yrs 22% of the respondents under 26-30 yrs of age, 37% of respondents under 31-35 yrs of age & 21% of respondents under 36-46yrs & 13% of respondents are under the age of above 40yrs.
- From the study it has reveals that, 52% of respondents are male and 48% of the respondents are female.
- From the study reveals that, 3% of respondents are unmarried and 97% or respondents are married.
- From the study it has reveals that, 96% of respondents are permanent and 4% of respondents are temporary in their job.
- From the study it has reveals that, 4% of respondents have 1-5 yrs of experience, 8% has 6-10 yrs of experience, 18% has 11-15 yrs of experience, 44% has 16-20 yrs of experience and 26% of respondents have above 20 yrs of experience.
- From the study it has reveals that, education qualification up to SSLC 6%, +2 11%, ITI/Diploma 13%, UG degree 43% and PG degree 27%. Most of the respondents have been up to UG degree.
- From the study it has reveals that, respondents earning monthly income below Rs 10000 are 4%, Rs10000-20000 are 29%, Rs 20000-30000 are 49% and above Rs 30000 are 18%. Most of them come under the income group of Rs 20000 to 30000.

### CONCLUSION

In today's competitive world, the success of an organization relies heavily on the motivation, satisfaction, and contentment of its employees within their respective fields of expertise. Retaining employees within an organization requires dedicated efforts, including fair treatment, competitive compensation, and social standing.

Welfare measures and conducive working environment are akin to empowering employees to excel in their roles; hence, it is crucial to effectively implement such measures.

Furthermore, maintaining optimal fitness within the workplace greatly contributes to productivity and the seamless functioning of an organization. Employees are invaluable assets to any organization, and prioritizing their well-being becomes paramount. Therefore, the health and safety of employees must be given utmost importance to enhance overall productivity within the organization.

# REFERENCE

- 1. Berry A. ITD Global Conference on Taxation of Small and Medium Enterprises; Argentina: 2007. The importance of SMEs in the economy.
- 2. Keskìn H., Sentürk C., Sungur O., Kìrìs H.M. Bosnia and Herzegovina; Sarajevo: 2010. The importance of SMEs in developing economies.2nd

International Symposium on Sustainable Development.

- 3. Europe–India SME Business Council [Internet] 2014. Definition of Indian SMEs. <a href="http://www.eisbc.org/Definition">http://www.eisbc.org/Definition</a> of Indian SMEs. <a href="https://www.eisbc.org/Definition">https://www.eisbc.org/Definition</a> of Indian SMEs. <a href="https://www.eisbc.org/Definition">http
- 4. Ministry of Micro Small and Medium Enterprises of India. (a) Growth and performance of MSMEs and (b) 4th Census of MSMEs. Annual Report, 2010–2011; Chapter II: pp. 11–26.
- 5. Ministry of Micro, Small and Medium Enterprises, Govt. of India. Growth and performance of MSME sector and (b) Census. Annual Report, 2012–2013; Chapter II: pp. 11–36.
- 6. Dağdeviren M., Yüksel İ Developing a fuzzy analytic hierarchy process (AHP) model for behavior-based safety management. *Inform Sci.* 2008;178:1717–1733.
- 7. European Agency for Safety and Health at Work . 2001. Preventing accidents at work. <a href="https://osha.europa.eu/en/publications/magazine/4/">https://osha.europa.eu/en/publications/magazine/4/</a> [Internet] [cited 2014 August 25].
- 8. Beriha G.S., Patnaik B., Mahapatra S.S., Padhee S. Assessment of safety performance in Indian industries using fuzzy approach. *Expert Syst Appl.* 2012;39:3311–3323.
- 9. Didonet S.R., Díaz G. Supply chain management practices as a support to innovation in SMEs. J TechnolManagInnov. 2012;7:91–108