

# A STUDY ON HEALTH AND SAFETY MEASURES PROVIDED BY ELEVATOR INDUSTRIES IN CHENNAI

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## ABSTRACT

"A STUDY ON HEALTH AND SAFETY MEASURES PROVIDED BY ELEVATOR INDUSTRIES IN CHENNAI." The goal of this project is to investigate the company's health and safety policies, as well as employees' awareness and satisfaction with management practises and work procedures. In order to improve workplace health and safety, suggestions and recommendations are also made. The sample is made up of 100 Elevator India Private Limited employees. It's a descriptive study. The participants are the company's employees, with contractors excluded. RANDOM SAMPLING is used to accomplish this. QUESTIONNAIRE is used to obtain primary data for the study. The participants were given a standardised questionnaire that was aligned with the study's aims. A careful examination of the acquired data was performed in this study.

## INTRODUCTION

"Safety and health are not merely good business policy; they are also basic human rights," says the author (Kofi Annan, Former UN Secretary General). Workplace health and safety should be a top priority for both employees and employers, as failing to do so could result in a loss of staff. Workplace health and safety (WHS) is another term for occupational health and safety (OHS) (WHS). Workplace health and safety entails making all reasonable measures to guarantee that each employee leaves the office each day as healthy and physically fit as when he or she came. Management is responsible for providing workers with the tools, training, and protective equipment they need to execute their jobs safely, as well as the required time and guidance.

## The employee Elevator Installers and Repairers

Elevator installers and repairers, often known as elevator constructors or elevator mechanics, are professionals who install and repair elevators. They were by far the most affected occupation, accounting for 36 percent of deaths while working on or near elevators, according to the US Bureau of Labor Statistics and the Consumer Product Safety Commission. Getting caught in/between elevators and elevator shafts or other elevators was the leading cause of death for elevator installers and repairers, followed by falls, being stuck by objects (mainly elevators), and collapses.

## OBJECTIVES OF THE STUDY

- To study the effectiveness of health and safety measures adopted by elevator industries in chennai
- To assess knowledge of employee of health and safety programmes in elevator industries in chennai
- To assess the satisfaction level of employees in workplace health and safety provided by elevator industries in chennai
- To find out the ways and methods of improving the workplace health and safety.

## LITERATURE REVIEW ON HEALTH AND SAFETY OF EMPLOYEES

Any research project should include a brief summary of relevant literature. It is concerned with a review of the available literature on similar or related topics. Because effective research is built on prior knowledge, a review of previous material can help to prevent duplication of effort while also giving relevant hypotheses.

This study was designed to conduct a thorough assessment and analysis of important research publications about piece rate wages and their implications on health and safety, according to Johansson B; Rask K; Stenberg M (2010). A total of 75 research publications were thoroughly reviewed, with 31 of them deemed relevant and of adequate quality to meet the study's objectives. The findings of these publications are summarised and discussed.

## RESEARCH DESIGN

A research design is purely and simply the frame work of plan for a study that guides the collection and analysis of data. It is a blue print for a complete study. It resembles the architects blue print map for constructing a house.

## SAMPLE UNIT AND SAMPLE SIZE

The sample population was random group of employees working in Mitsubishi Elevator India Private Limited.

The sample size is 100.

## STATISTICAL TOOLS

The statistical tools involved in this project are as follows;

- Percentage analysis
- Chi-square analysis.

## DATA ANALYSIS

### 1.Age group of employees

Age group of employees										
A	g	e	F	r	e	q				
			u		e					
			e		n					
			c		c					
			y		y					
			P		e					
			e		r					
			c		c					
			e		n					
			t		t					
			a		a					
			g		g					
			e		e					
1	8	t	o	2	5	2	0	2	0	%
2	6	t	o	3	5	4	7	4	7	%
3	6	t	o	4	5	2	7	2	7	%
4	6	t	o	5	5	0	6	0	6	%
			<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>%</b>

From the above table it could be interpreted that the majority of the respondents, 47 of them comes under age group of 26-35 years under the age group, 27 of them comes under 36-45 years, 6% of the respondents comes under the 46-55 years age group and 20% of the respondents belong to the 18-25 years

### 2. The right to refuse to unsafe work environment

All employees have the right to refuse work they believe may be dangerous to their health and safety, or to that of others. Employees who are not issued nor have proper and adequate personal productive equipment, on-the-job training, clear understanding of their job procedures or are placed in a hazardous workplace situation can exercise their legal right to refuse the task at hand.

Employees satisfaction towards the right to refuse to unsafe work environment										
P	a	r	t	i	c	u				
			l		l					
			a		r					
			s		s					
			e		e					
			d		d					
			e		e					
			d		d					
			e		e					
			n		n					
			c		c					
			e		e					
			n		n					
			c		c					
			y		y					
			P		e					
			e		r					
			c		c					
			e		n					
			t		t					
			a		a					
			g		g					
			e		e					
Highly	s	a	t	1	0	1	0	%		
S	a	t	i	6	5	6	5	%		
D	i	s	s	1	9	1	9	%		
Highly	d	i	s	6	6			%		
<b>T</b>	<b>o</b>	<b>t</b>	<b>a</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>%</b>

Out of the 100 respondents 10% of the respondents are highly satisfied, 65% of the respondents are just satisfied, 19% of the respondents are dissatisfied and 6% of the respondents are highly dissatisfied with use of right to refuse at hand.

## STATISTICAL ANALYSIS

### CHI-SQUARE TEST

CHI-Square test between the Employees educational qualification and the Satisfaction on right to refuse at dangerous work.

**Hypothesis:**

$H_0$  : There is no significant association between the Educational qualification and the Satisfaction on right to refuse at dangerous work.

$H_a$  : There is significant association between the Educational qualification and the Satisfaction on right to refuse at dangerous work

**Observed Frequency of the Satisfaction on right to refuse at dangerous work**

O b s e r v e d F r e q u e n c i e s					
	Highly satisfied	Satisfied	Dissatisfied	Highly Dissatisfied	Row Total
S S L C	1	4	1	0	0 6
I T I	6	4 7	1 1	4	6 8
D I P L O M O	2	1 2	6	1	2 1
U G	1	2	1	1	0 5
T o t a l	1 0	6 5	1 9	0 6	1 0 0

**Expected Frequency of the Satisfaction on right to refuse at dangerous work**

E x p e c t e d F r e q u e n c i e s					
	Highly satisfied	Satisfied	Dissatisfied	Highly Dissatisfied	Row Total
S S L C	0 . 6	3 . 9	1 . 1	0 . 4	0 6
I T I	6 . 8	4 4 . 2	1 2 . 9	4 . 1	6 8
D I P L O M O	2 . 1	1 3 . 7	4	1 . 3	2 1
U G	0 . 5	3 . 3	1	0 . 3	0 5
T o t a l	1 0	6 5	1 9	0 6	1 0 0

**CHI-Square of the Satisfaction on right to refuse at dangerous work**

S . N o	Observed Frequency	Expected Frequency	(O - E)	(O - E) <sup>2</sup>	(O - E) <sup>2</sup> /E
1	1	0 . 6	0 . 4	0 . 1 6	0 . 3
2	6	6 . 8	- 0 . 8	0 . 6 4	0 . 1
3	2	2 . 1	0 . 1	0 . 0 1	0 . 0 0 5
4	1	0 . 5	0 . 5	0 . 2 5	0 . 5
5	4	3 . 9	0 . 1	0 . 0 1	0 . 0 0 3
6	4 7	4 4 . 2	2 . 8	7 . 8 4	0 . 1 8
7	1 2	1 3 . 7	- 1 . 7	2 . 8 9	0 . 2
8	2	3 . 3	- 1 . 3	1 . 6 9	0 . 5
9	1	1 . 1	- 0 . 1	0 . 0 1	0 . 0 1
1 0	1 1	1 2 . 9	- 1 . 9	3 . 6 1	0 . 3
1 1	6	4	2	4	1
1 2	1	1	0	0 . 0 0	0
1 3	0	0 . 4	- 0 . 4	0 . 1 6	0 . 4
1 4	4	4 . 1	- 0 . 1	0 . 0 1	0 . 0 0 2
1 5	1	1 . 3	- 0 . 3	0 . 0 9	0 . 0 7
1 6	1	0 . 3	0 . 7	0 . 4 9	1 . 6
X <sup>2</sup>		V a l u e			5 . 8 7

Level of Significance	0 . 0 5
Number of Rows	4
Number of Columns	4

Degrees of freedom = (r-1) x (c-1)

$$= (4-1) \times (4-1) = 9$$

Tabulated value of degrees of freedom (9) @ 5% level of significance = **16.919**

Calculated value < Tabulated value

Therefore **H<sub>0</sub>** (Null hypothesis) is accepted.

## FINDINGS

- It was found that 47% of the employees are comes under 26 -35 age group and 20% of the employees are comes under 18 -25 age group. This study reveals clearly that Elevator is youngster dominated one.
- It was founded that 68% of the employees are ITI holders and 21% of the employees are Diploma holder, because of the technical nature of industry
- This study reveals that 31% of the employees are still not married.
- This study reveals that 25% of the employees are having experience of 1 -5 years and 13% of the employees are having an experience of above 20 years in this field.
- From the study, 95% of the employees are agreed as wearing PPE are mandatory at workplace and they always wearing PPEs while their working.
- 58% of the employees are said that training is conducted my management always, and 5% of the employees are said that training of health and safety is never conducted throughout the years.

## SUGGESTIOS AND RECOMMENDATIONS

As regards to the findings listed above the researcher makes the following suggestions and recommendations.

- The research reveals that training is conducted by management throughout the year and all safety and health messages have not incorporated with training. For example, electric shock first aid rescue procedures was not practically trained to them.
- Some employees opinion was like that, safety audit was conducted properly when new job site come to service. At the same time it was conducted by management after few years passed. So, it is less chance to correct the installation or construction mistakes which affect the employee's health and safe.
- Investigation reports of incidents should re-circulate when employees was absent to work to aware of incidents and avoid like this incidents in future.
- Elevator and escalator industry is one of the high risks rated industry. Some new employees are fresher and they have no or enough experience in this field. It is suggested to conduct orientation session all new employees of installation and maintenance department.
- It is suggested to management to make well awareness about JHSC. Because of some employees were not awareness of existence of JHSC and its role and responsibility in the organization.

## CONCLUSION

Health and Safety principles are universal, but how much action is needed will depend on the size of the organization, the hazards presented by its activities, the physical characteristics of the organization, products or services, and adequacy of its existing arrangement. In the elevator/escalator trade, the safety of the persons engaged in elevator/escalator work is the responsibility of the employers, supervisors and the persons working on this elevator/escalator. All persons working on elevator/escalators are expected to take due care and pay attention to potential hazards, make proper use of safeguards provided and follow defined working procedures such that accidents and ill health can be avoided. The study aimed at finding out the health and safety measures provided by Elevator in chennai. This research reveals that there is no significant association between the Educational qualification and the Satisfaction on right to refuse to unsafe work environment.

## REFERENCES

1. Archer, R., Borthwick, K. and Tape, S. (2009). OH&S: A Management Guide. 2<sup>nd</sup> Edition. South Melbourne: C engage Learning.
2. Divyaa.H and Pannerselvam.S, Analysis of cash flow management in Wipro companies with reference to IT sector, ISSN 0974-8946, Volume 48, Issue 02, Shodha-Prabha, 2022.
3. ASME 17.3 Safety Code for Existing Elevators and Escalators. New York, NY: ASME.
4. Divyaa.H and Pannerselvam.S, Analysis of Measuring the budgetary control in tech Mahindra, NIU International Journal of Human Rights, ISSN: 2394-0298, Volume 9(II), 2022.

5. Ilamathi.M and Uma Raman.M, “Emotional Intelligence and its impact on Employee Productivity and Workplace stress” NIU International Journal of Human Rights, ISSN: 2394-0298, Volume 9(II) 2022.
6. Ilamathi.M and Uma Raman.M, The Impact of demographic variable on employee retention- its influencing factors and strategies for retaining employees, ISSN 0974-8946, Volume 48, Issue 02, No: 2, Shodha-Prabha, 2022.
7. Burke, R., Clark, S. And Cooper, C. (2011) Occupational Health and Safety. Aldershot: Gower.