**RESEARCH PAPER** Commerce Volume : 3 | Issue : 3 | March 2013 | ISSN - 2249-555X A Study on Employee's Satisfaction and Safety Measures (With Special Reference to two Wheeler Spare Parts Manufacturing Industry in Chennai) **KEYWORDS** cancer, MDM2 protein, GOLD Docking. Dr. J. Sulaiman Mr. M. Alaguthankamani Assistant Professor & Research Supervisor, PG and Assistant Professor, Dept of Business Administration Research Department of Commerce, The New College Faculty of Science and Humanities SRM University (Autonomous). ABSTRACT Safety means freedom from the occurrence of risk of injury. Now a day's many organization are adopting

advance technology. Today employers are obligated to give their employees a safe and secured work environment. The aim of effective safety program in organizations is to prevent work related injuries and accidents. The study is to know the overall welfare of an employee with special preference to Safety and Health programs, at two wheeler spare parts manufacturing industry in Chennai. Surveys are conducted to know how the Safety, Health and Environmental Improvements measures are taken by the industry. The result of this study shows that majority of the employees perceive the present efforts taken by the two wheeler spare parts manufacturing industry in Chennai, on safety measures and work environment is satisfactory.

# Introduction

Safety in simple terms means freedom from the occurrence or risk of injury or loss. Industrial safety or employee safety refers to the protection of workers from the danger of industrial accidents. In today's competitive world many organization are adopting advance technology. It has both merits and demerits. Increasing technologies involves high risk, where the question of safety arises. The life of industrial worker is full of risk. Every year lakhs of employees are injured in factories, mines etc. The main reasons for such activities are due to either unsafe act or unsafe condition. Today employers are obligated to give their employees a safe and secured work environment. The main purpose of effective safety program in organizations is to prevent work related injuries and accidents. The modern safety movement started around 1912 with the first cooperative Safety Congress and the organization of the National Safety Council in U.S.A.Safety is prior to security. According to this concept, the present Factories Act ensures several safety measures.

The importance of industrial safety was realized because every year millions of industrial accidents occur which result in either death or temporary and permanent disablement of the employees and involve a good amount of cost such as resulting from waste man-hours, machine hours, etc. Safety is primarily the responsibility of the management. This responsibility should rest on the shoulder of all cadres of management: such as production manager, personnel manager, maintenance engineer, safety officer. Every organization should formulate and implement a safety procedure. Safety in industry helps to Increase the rate of production, Reduce the production cost, Reduce the damage to equipment and machinery, Prevent the premature death of talented workers who are an asset to the society, Prevent the needless pain and suffering to the employees. Industrial safety saves costs, improves productivity, develops morale, Safety is a legal reauirement

# Statement of the Problem

Unsatisfactory or non-existent of health and safety systems (Lin & Mills, 2001). Vassie and Lucas (Even previous researches have shown that high rates of injury and accidents are due to 2001) investigated health and safety management in the manufacturing sectors and the results indicated that empowered workers who played active health and safety role could result in health and safety performance improvements although the empowerment was limited. Although employee participation and involvement are crucial, the accountability and responsibility in the safety and health must come from senior management as required by the occupational health

and safety legislation (Vassie & Lucas, 2001). The study is to know the overall welfare of an employee with special preference to Safety and Health programs, at Two wheeler spare parts manufacturing industry in Chennai. Surveys are conducted to know how the Safety, Health and Environmental Improvements measures are taken by the manufacturing industry.

## **Objectives of the Study**

- To Study the Employees perception on effectiveness of safety measures and work environment.
- To find out the awareness of safety measures and safety
- provisions among the employees. To study how far the employees are satisfied with the safety measures and work environment.
- To find the impact of industrial safety and work environment on productivity.
- To identify the employees attitude towards safety measures and work environment.
- Based on the study to make recommendation on safety measures and work environment that would reward both the employee as well as the employer.

# Limitations of the Study

- More numbers of samples could not be included owing to time and cost constraints
- Another important constraint is the hesitation from the side of employees and workers as they are unwilling to answer questions in the questionnaire.

# Literature Review

C. S. Ramanigopal (2012) conclude the company has given maximum effort and dedication to implement the labour laws and regulations and it has succeeded in implementing effective safety and health management considering the type of safety and health problems, accidents, employees and technology in its organizational settings and also good level of satisfaction among employees regarding healthy and safety has been achieved.

Abdullah, Spickett, Rumchev & Dhaliwal (2007) study on organizational factors on safety in Taiwan and Japan reported that the influence of organizational factors in both countries were different due to dissimilar culture. For example, they discovered that Taiwanese leadership style was "Top-Down Directive" where top management communicated safety policies and involved in safety activities while Japanese safety leadership was more focused on "Bottom-Up Participative" where top management promoted employees' participation in any safety activities.

# **RESEARCH PAPER**

## Methodology

In order to study the safety measures and work environment of employee's in Two wheeler spare parts manufacturing industry in Chennai, both primary and secondary data has been collected random of 157 samples who are working in Two wheeler spare parts manufacturing industry in Chennai. Primary data was collected by the method of survey by using structured questionnaire. Secondary data pertaining to this study are collected from company manuals, books, journals, magazines and web sites.

### Tools used for analysis

1) Chi-square test,2) Weighted average method

### DATA ANALYSIS AND INTERPRETATION Table-1

Relationship between the satisfaction level of employees regarding the safety measures with respect to the experience of the respondents CHI- SQUARE:

Years	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Total
Below 5	-	-	-	-	-	0
5-10	1	2	-	-	-	3
11-20	5	47	13	-	1	66
21 & Above	11	68	8	-	1	88
TOTAL	16	117	21	0	2	157

H.: There is no significant difference between the satisfaction level of employees regarding the safety measures with respect to the experience.

 $\mathbf{H}_{\mathbf{1}}\mathbf{:}$  There is a significant difference between the satisfaction level of employees regarding the safety measures with respect to the experience of the respondents.

# **Expected Frequencies**

YEARS	Highly satisfied	Highly Dissatisfied	Total
Below 20	55	14	69
21 & Above	79	9	88
Total	134	23	157

## Chi - Square Test

0	E	(O – E) <sup>2</sup>	(O - E) <sup>2</sup> /E
55	58.89	15.13	0.26
14	10.11	15.13	1.50
79	75.11	15.13	0.20
9	12.89	15.13	1.17
		Total	3.13

The calculated value is 3.13. The table value with 1 d.o.f at 5 % level of significance is 3.841.The calculated value < Table value. Hence Null Hypothesis is accepted

#### Table-2

# Relationship between employees opinion regarding the conditions of machines with respect to the experience of the respondents

Chi – Square Test

Years	Excellent	Good	Fair	Poor	Total
Below 5	-	-	-	-	0
5-10	-	3	-	-	3
11-20	15	43	8	-	66
21 & Above	16	60	12	-	88
TOTAL	31	106	20	0	157

H\_: There is no significant difference between the employees opinion regarding the conditions of machines with respect to the experience of the respondents.

H<sub>1</sub>: There is a significant difference between employees opinion regarding the conditions of machines with respect to the experience of the respondents.

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# **Expected Frequencies**

YEARS	Excellent	Fair	Total
Below 20	61	8	69
21 & Above	76	12	88
Total	137	20	157

### **Chi Square Test**

0	E	(O – E) <sup>2</sup>	(O - E) <sup>2</sup> /E
61	60.21	0.62	0.01
8	8.79	0.62	0.07
76 12	76.79	0.62	0.008
12	11.21	0.62	0.06
		Total	0.148

The calculated value is 0.148. The table value with 1 d.o.f at 5 % level of significance is 3.841. The calculated value < Table value. Hence Null Hypothesis is accepted

# Table-3.

#### Relationship between employees opinion regarding the work environment with respect to their experience CHI- SQUARE:

Years	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied	Total
Below 5	-	-	-	-	-	0
5-10	-	2	-	1	-	3
11-20	7	40	14	5	-	66
21 & Above	11	56	20	1	-	88
TOTAL	18	98	34	7	-	157

H: There is no significant difference between employees opinion regarding the work environment with respect to their experience.

 $\mathbf{H}_1$ : There is a significant difference between employees opinion regarding the work environment with respect to their experience.

# **Expected Frequencies**

YEARS	Satisfied	Dissatisfied	Total
Below 20	49	20	69
21 & Above	67	21	88
Total	116	41	157

0	E	(O – E) <sup>2</sup>	(O - E) <sup>2</sup> /E	
49	50.98	3.92	0.08	
20	18.02	3.92	0.22	
67	65.02	3.92	0.06	
21	22.98	3.92	0.17	
		Total	0.53	

The calculated value is 0.53.The table value with 1 d.o.f at 5 % level of significance is 3.841.The calculated value < Table value. Hence Null Hypothesis is accepted

### Table-4

## Satisfaction level of EMPLOYEES with respect to the work environment

# WEIGHTED AVERAGE METHOD

S.no	Factors	Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied
1	Cleanliness	48	84	22	2	1

# **RESEARCH PAPER**

2	Ventilation	33	78	37	8	1	
3	Drinking Water	31	73	49	3	1	
4	Lighting	30	93	30	3	1	

## **Calculated Value**

Cleanliness = 4.12, Ventilation = 3.84, Drinking Water = 3.83, Lighting = 3.94

Majority of the respondents give more importance to cleanliness when compared to the other factors of work environment.

# Table-5

### EMPLOYEES OPINION ON IMPORTANCE OF SAFETY EQUIPMENTS WEIGHTED AVERAGE METHOD

Safety Equipments	Highly Important	Important	Not Important	Total
Shoes	65	88	4	157
Goggles	93	63	1	157
Nose mask	90	65	2	157
Ear Muff	66	87	4	157
Helmet	53	87	17	157
Safety belt	40	92	25	157

# **Calculated Value :**

Shoes = 2.39, Goggles = 2.59, Nose mask = 2.56, Ear Muff = 2.39, Helmet = 2.23, Safety belt = 2.10

Majority of the respondents give more importance to goggles when compared with other safety equipments provided to them by the organization.

### Findings

- There is no significant difference between the satisfaction levels of employees regarding the safety measures with respect to the experience.
- There is no significant difference between the employees opinion regarding the conditions of machines with respect to the experience of the respondents.
- There is no significant difference between employees opinion regarding the work environment with respect to their experience.
- Majority of the respondents give more importance to cleanliness when compared to the other factors of work environment.
- Majority of the respondents give more importance to goggles when compared with other safety equipments provided to them by the organization.

## Suggestions and Recommendations

- The safety, health and environmental policy can be displayed widely at conspicuous locations (mounted on walls of the factory). The safety policies can be made known to all employees, contractors and contract employees by circulating the policies in both English and regional language.
- To motivate the employees every year competitions can be conducted on national safety day. Safety events can be conducted frequently to make awareness among the employees on safety.
- Steps have to be taken to identify the employees those who have not undergone any formal safety programme through verification of records and train them. This will ensure some safety awareness among them. Training can be given through unit wise, team wise like kaizen or work team.
- Attention should be focused on minor accidents so that major accidents can be prevented, for which analysis of accidents is necessary. To reduce the accidents, supervisory staff and management should be more pro-active in the shop floor, so that all the employees use the safety equipment's provided to them.
- Safety issues like accidents, problems, achievements etc, which are discussed in the safety committee have to be communicated to the employees by the middle level management.
- Employer should ensure that the employee who works about 2m heights is wearing the safety belt.
- Every 100 sq m portable fire extinguishers can be provided so that at the time of accidents it can be used.
- Drinking water should be provided in appropriate locations

# Conclusions

Industrial progress of the country depends on its committed labor force. Efficiency in work is possible only when the employees are safe in their working environment and also provided with some safety measures. The study has revealed the perception of employees with regard to safety measures and work environment. The result of this study shows that majority of the employees perceive the present efforts taken by the Two wheeler spare parts manufacturing industry in Chennai, on safety measures and work environment is satisfactory yet there are some factors which need to be concentrated by the company which is suggested by the researcher to ensure hundred percentage safety and congenial work environment which in turn in improve the efficiency and confidence of the employees. Hence, in designing safety programmes and good working environment the management should not compromise even with the smallest safety concept which may be costly to both management and the employees.

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