

# Occupational Health and Safety Measures of Selected Manufacturing Industries in Mysuru

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## Abstract:

The purpose of the study on occupational health and safety measures of selected manufacturing industries in Mysuru. Occupational health and safety measures prevent workplace hazards, accidents, injuries, and diseases. Effective practices improve employees' physical and mental well-being, which enhances organizational performance. Creating a safe work culture can help a company run smoothly and effectively. The manufacturing sector can be considered one of the most dynamic areas of the economy. It plays a very vital role in the economic development of the country. The manufacturing companies cannot achieve long-term growth unless their employees are motivated, healthy and efficient. The employer must implement safety and health standards, regulatory requirements; management must also ensure that all employees have adequate knowledge and skill to develop their competencies to prevent workplace accidents or hazards and the implementation of safe working practices.

**Keywords:** Hazards, Occupational, Gross Domestic Product, Workforce, Domestic.

## Introduction:

Human resources are essential input for any industry. The success of the business depends on the sustainability of the workforce. Consequently, it becomes the employer's responsibility to develop a healthy working environment for their staff to increase their capacity to meet organizational and individual goals.

Occupational health and safety measures prevent workplace hazards, accidents, injuries, and diseases. Effective practices improve employees' physical and mental well-being, which enhances organizational performance. Creating a safe work culture can help a company run smoothly and effectively. The manufacturing sector can be considered one of the most dynamic areas of the economy. It plays a very vital role in the economic development of the country. They are considerable contributors to the Indian "Gross Domestic Product" (GDP) and 27.3 million people working in Indian manufacturing companies. Every day they are exposed to numerous hazards because of risks at work. Ensuring a safe and healthy environment to prevent the workforce from these risks is the responsibility of every industry.

## Concept

Human resources are essential input for any industry. The success of the industry depends on the sustainability of the workforce. Consequently, it becomes the employer's responsibility to develop a healthy working environment for their staff to increase their capacity to support industrial and personal goals. The manufacturing sector can be considered one of the most dynamic areas of the economy. It

plays a very vital role in the economic development of the country. They are considerable contributors to the Indian gross domestic product and 27.3 million people working in Indian Manufacturing industries. Every day they are exposed to numerous hazards because of risks at work. Ensuring a safe and healthy environment to prevent the workforce from these risks is the responsibility of every industry.

### Occupational Health and safety aspects



**Source:** Fundamentals of Occupational Safety and Health, Mark A. Friend and Khon. (2007)

### Review of Literature

**Kavouras. S et al. (2022)** Opined that emphasized a safe and healthy workplace is essential for overall sustainability. Because it affects possibilities for economic and social development, however, even with the 2030 Agenda “Sustainable Development Goals” (SDGs) and the global commitment to Occupational Health and Safety (OSH), employment accidents are still far too frequent, according to the International Labour Organization (ILO).

**Rantala. M et.al. (2022)** observed that despite recent improvements in occupational health and safety (OHS), the financial burden brought on by unsatisfactory workplace safety practices remains high. One method to enhance OHS standards is to conduct risk assessments. It seems to be a lack of necessary risk assessment expertise at the workplace.

**Bottino. B. (2021)** highlighted Ten tips for a safer return to the workplace: According to this author there are ten tips to protect workers from workplace hazards, mainly employers should identify the exposure that could occur, workspace examination should be assessed before workers return, Enhance communication among workers by group meetings and allow workers to ask questions without fear of reprisal, create a welcome wagon, monitor mental health, review of safety basics these are the important tips given by the author for safer return to the workplace.

**Khanal.A. (2021)** researcher examined that frontline waste management staff must be protected against infection with indicated personal protective equipment. This study sought to assess participants’

knowledge of and adherence to the use of personal protective equipment (PPE) for illness prevention. Concerning trash management, this study was carried out in Nepal. The majority of studies have identified urbanization, rapid population increase, and inadequate municipal management as the main obstacles to successful solid waste management.

### **Research Gap**

In spite of the increase in research on Occupational Health and Safety Measures in Mysuru, very few studies were found in the manufacturing companies of Mysuru.

It is revealed that there is a dearth of research on Occupational Health and Safety measures in Manufacturing Companies especially in Mysuru, Karnataka, India. Overall this research was consequently motivated by a common requirement to discuss the research gap and to suggest the measures of Occupational Health and Safety that are required for the employees in selected manufacturing companies in Mysuru.

### **Objectives**

- To study the workplace health and safety policies implemented in selected manufacturing companies.
- To identify the safety protocols used in selected companies of manufacturing companies.
- To examine the working conditions for employees and the precautionary measures by the employer to reduce workplace hazards.

### **Research Methodology**

The main aspect of research is the methodology accompanied by the researcher to conduct the study. It enables the researcher to carry out several tasks to gather the data needed for the study. They require different techniques, tools, and many sources of information to comprehensively work for the input data and the results outcome data. As a result, the research methodology serves as a framework for conducting the study. The research used descriptive method with a combination of both qualitative and quantitative data collection methods adopted to conduct research work.

A comprehensive health and safety management systems many components were given weights based on the observations. Data was gathered from many sources, including records, certificates, and pertinent documents. Discussions were undertaken with all relevant safety department officials, members of the safety committees of the various departments, as well as other managers and staff members in the departments, to obtain additional clarifications.

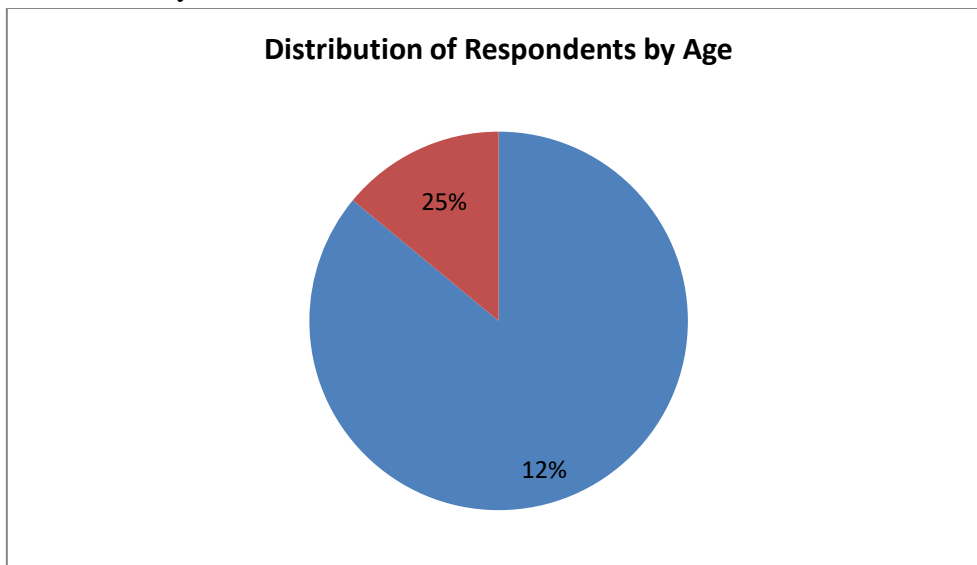
Qualitative data have been collected with the help of structures questionnaire and covered tyre, electronics, engineering and automotive companies" employees to collect their feedback as per research. To know the impact of independent variables on respondents feedback, ANOVA test have with SPSS software. Independent variables- age, gender, income, education qualification, would influence the responds feedback, hence to know the impact on other variables test have done. And to use the same application (SPSS) for frequency calculation, further to tabulate the data and to insert graphs MS-excel have been used.

**Analysis of Data and Interpretation**

**Table 1: Distribution of Respondents by Age**

| Age          | Frequency  | Percentage    |
|--------------|------------|---------------|
| 18-25        | 12         | 10.4          |
| 26-35        | 25         | 34            |
| 36-45        | 40         | 40.9          |
| 46-55        | 20         | 14            |
| Over 56      | 3          | 0.7           |
| <b>Total</b> | <b>100</b> | <b>100.00</b> |

Source: Field Survey



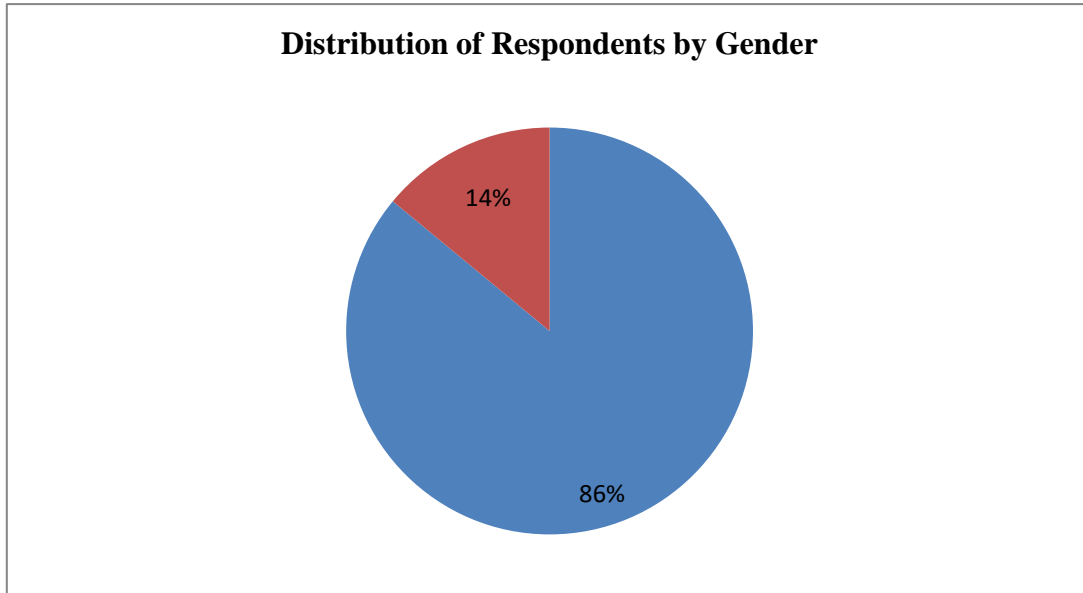
The distribution of respondents by age, it is noticed that the majority of employees are between 36-45 years age group (40.9%), 34 percent of employees are between 26-35 years age group, 14 percent of respondents are between 46-55 years age group, 10.4 of respondents are between 18-25 years age group and only 0.7 employees are more than 56 years. It is noticed that out of 100 respondents majority of employees are between 36-45 years age group in selected manufacturing companies.

**Table 2: Distribution of Respondents by Gender**

| Gender       | Frequency  | Percentage |
|--------------|------------|------------|
| Male         | 86         | 86         |
| Female       | 14         | 14         |
| <b>Total</b> | <b>100</b> | <b>100</b> |

Source: Field Survey

Table 2 indicates distribution of respondents by their gender is depicted in the table 2. It is found that the majority of respondents are male with 86 percent, and rests of the respondents are female with 14 percent. It derives that most of the employees are male in selected companies.

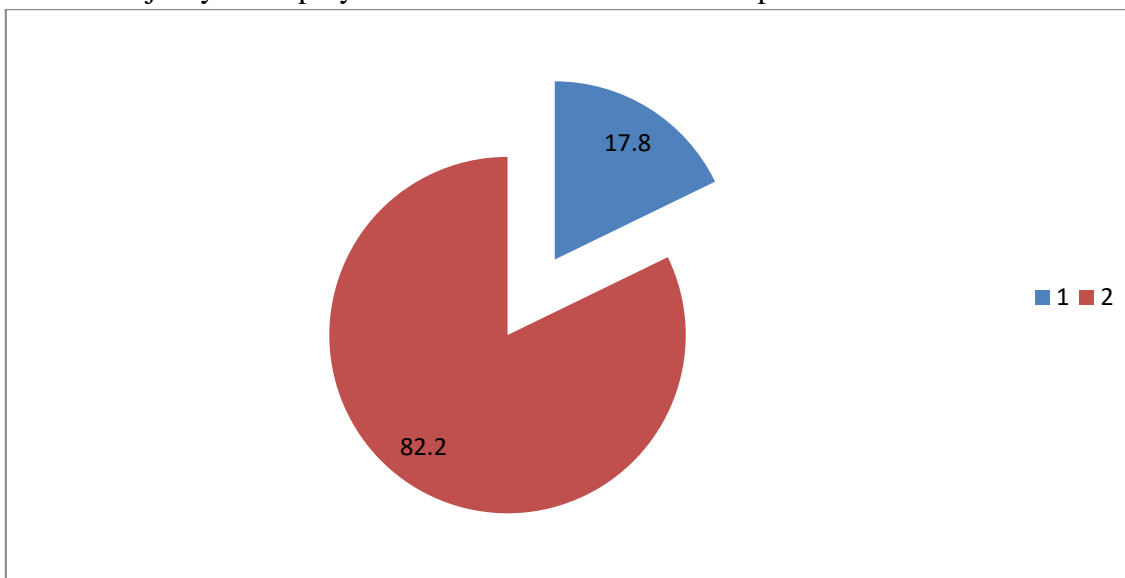


**Table 3: Marital Status of Respondent's**

| Gender       | Frequency | Percentage |
|--------------|-----------|------------|
| Single       | 17.8      | 17.8       |
| Married      | 82.2      | 82.2       |
| <b>Total</b> | 100       | 100        |

**Source:** Field Survey

Table 3 indicates the distribution of the marital status of respondents. It is observed that more than 80 percent of employees are married (82.2%), and the rest of the respondents (17.8%) are unmarried. Hence it is inferred the majority of employees are married in selected companies.

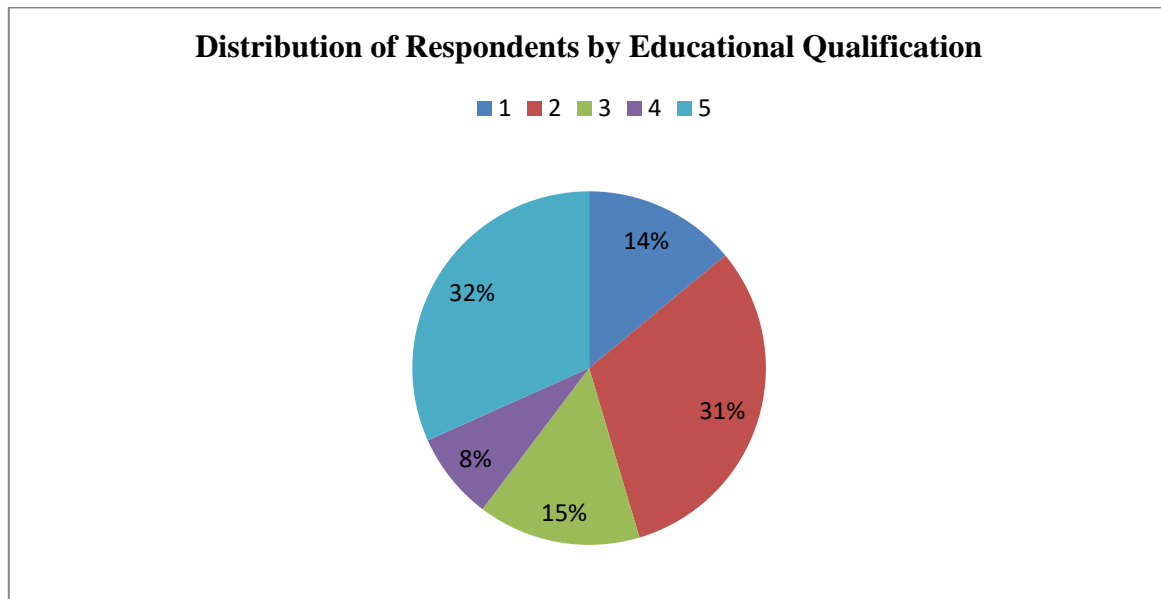


**Table 4: Distribution of Respondents by Educational Qualification.**

| Level of Education     | Frequency  | Percentage    |
|------------------------|------------|---------------|
| SSLC Level             | 14         | 14            |
| Below Graduates        | 31.4       | 31.4          |
| Graduates              | 14.9       | 14.9          |
| Post Graduates         | 8.0        | 8.0           |
| Others( ITI & Diploma) | 31.7       | 31.7          |
| <b>Total</b>           | <b>100</b> | <b>100.00</b> |

Source: Field Survey

Table 4 indicates the distribution of respondents by educational qualification is represented in table 4. It is found that out of 100 respondents, 31.7 percent have done ITI & Diploma categorized as others in this study, 31.4 percent of respondents are having below graduation, 14.9 percent of employees are graduates, 14 percent of respondents have done SSLC, and the rest of the respondents 8.0 percent are postgraduates. It is noticed the majority of employees are ITI & Diploma and below graduation in selected companies.



**Table 5: Distribution of Respondents by Occupational Status**

| Occupational Status       | Frequency  | Percentage    |
|---------------------------|------------|---------------|
| Technician                | 8          | 8             |
| Supervisor                | 14.7       | 14.7          |
| Engineers                 | 11.1       | 11.1          |
| Manager                   | 11.1       | 11.1          |
| Quality control Inspector | 4.4        | 4.4           |
| Others                    | 50.7       | 50.7          |
| <b>Total</b>              | <b>100</b> | <b>100.00</b> |

Table.5 indicates the distribution of respondents by occupational status in selected manufacturing companies. It is observed that out of 100 respondents 50.7 (50.7%) respondents working in different production processing departments categorized as others, 14.7 (14.7%) are supervisors, 11.1 (11.1%) are engineers, 11.1(11.1%) are managers, 5(5%) are technicians, and rest of the respondents 4.4 (4.4%) are quality control inspector. The ten Managers and Engineers are the respondents from each industry respectively.

### Findings

This study and data found that the employees may fall into a chronic disease for long-run, due to 8 hours working in the manufacturing unit and inhaling chemical breath, it would impact their respiratory systems, and they become deaf due to continuous sound and vibrations of the machines, and also some dermatitis diseases from chemical exposures are not fully evaluated, it would be harmful effect like skin burn and skin disease.

### Suggestions

Study suggested starting a counseling center at the workplace because psychological factors are more important in human beings, and if they start a separate counseling center at the company campus, it would be great help for the employees, if the employee faces any distress and it would be reflected in the production. If the counseling is provided at the right time for the distressed employee, the employee will motive to work and reduce the accident.

### Conclusion

The study concluded that the safe working conditions ensure the safety and well-being of all employees in order to achieve productivity and overall efficiency in manufacturing companies. The manufacturing companies cannot achieve long-term growth unless their employees are motivated, healthy, and efficient. The employer must implement safety and health standards, regulatory requirements; management must also ensure that all employees have adequate knowledge and skill to develop their competencies to prevent workplace accidents or hazards and the implementation of safe working practices. A safe workplace is one in which workers' physical, intellectual, and social well-being is encouraged and maintained to the greatest extent possible. As a result, creating a productive and secure work environment is critical.

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