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A Study on Employee's Safety Measures with Special Reference to Sail-Steel Plant in Salem.

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ABSTRACT

This investigates work aim to study the safety measures provide for the employees of the organization. Welfare facilities play a vital role in the achieving prohibitive and job satisfaction in any organization. Absence of the expected safety facilities may lead to a high turn over of the employees and this loss affect the productivity. Satisfying or to fulfilling the needs of the workers. Would give them a better opportunity and more time to concentrate on job performance. The study was conducted in general with a special reference to the study purpose the sample of size 150 was taken at random. The sample random probability sampling method was used to decide the sample. A questionnaire was used to interview the 150 respondents. Percentage analyses and statistical tools like chi- square and percentage analyses ware used for data analyses and interpretation. The employees feel that safety training should be conducted regularly and it should include all the employees .the researcher is of the opinion that the safety awareness among the employees is quite low.As fund the study, the safety measures that disappointed the employees the most in the canteen facilities. Since statistical analyses shows that category of worker and level of satisfaction of safety measures.



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Chapter-I

1. INTRODUCTION

Welfare measures are inevitable to any organization where workers are involved. An organization's responsibility to its employees extends beyond the payment of wages for their services. The employee's safety on and off the job within the organization is a vital concern of the employer. Providing a safe and healthy environment is a pre-requisite for any productive effort. This research deals with the study on the welfare measures provided to the employees at sail-steel plant in salem. Unlike other industries, the employees of the Port are often exposed to different and new cargo which they may not have been familiar with earlier. The employees have to deal with huge machinery and handle heavy cargo and containers. The unfamiliarity in the nature of cargo they handle and the danger involved in handling them makes the employees prone to higher degree of risk. Satisfying or fulfilling the safety and security needs of the workers, would give them a better motivation and more time to concentrate on job performance. A voluntary approach on the part of the management to offer welfare programmes which are over and above what is laid down by the law would boost the morale of the employees and motivate them to perform better. A preliminary study conducted by the researcher with respect to welfare showed that there was scope for improvement in certain areas. This formed the basis of the research problem.

1.2. OBJECTIVE OF THE STUDY

- To study the level of satisfaction of employees regarding safety measures at Salem steel plant
- To study the perception of the employees regarding safety measures provided to them.
- To analyze, the level of satisfaction among the various categories of employees and departments.



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- To suggest the welfare measures to improve the performance of the employees.
- To suggest the way to improve the safety measures of the employees.

1.3. SCOPE OF THE STUDY

This study would give an overview of the safety measures existing at steel plant. Since safety measures are two important elements essential for improving the productivity of an organization, a study on the existing safety measures would help the organization perform better. This study would throw light on the perception of the employees regarding Employee safety measures. This study would also help to analyze if there is dependence between departments and categories and the level of satisfaction of safety and safety measures and suggest provisions of more safety and safety measures.

1.4. LIMITATIONS OF THE STUDY

- The data was collected only in the particular area.
- Applicable only Salem steel plant.
- The respondents have replied to the queries recalling from their memory. Therefore recall bias and personal bias are possible.
- The respondents were unable or unwilling to give a complete and accurate response to certain questions.

Chapter-II

2.1. RESEARCH METHODOLOGY

Research methodology is a way of systematically solving the research problem. Research methodology deals with the research design used and methods used to present the study.



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RESEARCH DESIGN:

A research design is a detailed blue print used to guide a research study toward its objective. The process of designing a research study involves many interrelated decisions. The most significant decision is the choice of research approach, because it determines how the information will be obtained. The choice of the research approach depends on the nature of the research that one wants to do.

The research design adopted for this study is Descriptive Research. Descriptive method was adopted because it deals with description of the state of affairs as it exist at present .The next step in research study after collecting data is the sampling process. When a decision is made to use the sample, a number of factors must be taken into consideration. The various steps involved in the sampling process are:

- Identifying target population.
- Determining sample frame.
- Selecting sampling procedure.
- Determine sample size.
- Execute sampling
- Obtaining information from respondents.
- Generating information for decision making.

The sampling technique had to be selected. There are two types of sampling techniques:

- Probability sampling
- Non-probability sampling

Among the probability sampling, the sampling used in this study was Stratified sampling.

STRATIFIED SAMPLING;



If the population from which a sample is to be drawn does not constitute a homogenous group, then stratified sampling technique is applied so as to obtain a representative sample. In this technique, the population is stratified into number of non-overlapping sub populations or strata and sample items are selected from each stratum. If the items selected from each stratum is based on simple random sampling, the entire procedure, first stratification and then simple random sampling is known as stratified sampling. The stratified sampling results in a more reliable and detailed information. The researcher uses simple random sampling for selection of items from each stratum

SAMPLE SIZE

The sample size is restricted to **150** employees.

SAMPLE AREA

The sample area is “sail – steel plant in salem”.

TOOLS FOR DATA COLLECTION

There are several ways of collecting the appropriate data. While deciding about the method of data collection to be used for the study, the researcher should keep in mind, that there are 2 types of data

1. Primary data
2. Secondary Data

STATISTICAL TECHNIQUES

This phase consists of the data analysis of the data collected based on the stratified simple random probabilistic sampling technique. The data collected were analyzed using the following methods



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PERCENTAGE ANALYSIS:

The number of responses of each category is summarized to percentage format for the convenience to use other statistical tools namely pie chart and bar diagrams.

STATISTICAL TOOLS

CHI-SQUARE TEST

This test allows us to determine whether two attributes are independent of each other. In this study chi-square has been used to test if there is an association between various variables and the overall level of satisfaction of safety and welfare measures.

$$\chi^2 = \sum \{(O_i - E_i)^2 / E_i\}$$

2.2.REVIEW OF LITERATURE

According to **N.G. Nair and Latha Nair** ‘‘ the protection which society provides for its members through a series of public measure , against & social distress that otherwise would be caused by the stoppage of sustained reduction of earnings resulting form sickness , maternity, employment injury , invalidity, old age and death, provision of medical care and provision of subsided for familiar with children ‘’.

According to **Garry Dessier** , social security ‘‘ federal program that provides three types of benefits ; retirements income at the age of 62 and there after , survivors or death benefits payable to the employee’s dependents regardless of age at time of death , and disability benefits payable only if the employees in insured under the social security act’’.

According to **H.K. Saharay and N.K.Saha in** commercial and industrial law. it is said that the following are the provisions relating to welfare of workers , sec 42 to 50 facilities for storing and drying , facilities for sitting , shelter, restrooms.



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Chapter-III

DATA ANALYSAS AND INTERPRETATION

STATISTICAL ANALYSIS

CHI-SQUARE TEST-I

CATEGORY OF WORKERS HAPPY WITH THE SAFETY MEASURES AND UNIFORM PROVIDED TO THE EMPLOYEES.

H₀: There is no significant association between the category of workers happy with the safety measures and uniform provided to the employees.

H₁: There is a significant association between the category of workers happy with the safety measures and uniform provided to the employees.

OBSERVED FREQUENCIES:

| PARTICULARS | YES | NO | TOTAL |
|---------------------|------------|-----------|------------|
| Highly satisfactory | 40 | 22 | 62 |
| satisfactory | 85 | 3 | 88 |
| TOTAL | 125 | 25 | 150 |

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EXPECTED FREQUENCIES

| PARTICULARS | YES | NO | TOTAL |
|---------------------|--------------------------|-------------------------|-------|
| Highly Satisfactory | $62 * 125 / 150 = 51.66$ | $62 * 25 / 150 = 10.33$ | 61.99 |
| satisfactory | $88 * 125 / 150 = 73.33$ | $88 * 25 / 150 = 14.66$ | 87.99 |
| TOTAL | 124.99 | 24.99 | 150 |

| O | E | O-E | (O-E)² | (O-E)²/E |
|-----|-------|--------|--------------|----------|
| 40 | 51.66 | -11.66 | 135.955 | 2.631 |
| 22 | 10.33 | 11.67 | 136.188 | 13.185 |
| 85 | 73.33 | 11.67 | 136.188 | 1.85 |
| 3 | 14.66 | -11.66 | 135.955 | 9.27 |
| 150 | | 0 | TOTAL | 26.94 |

$$\begin{aligned}
 \text{Number of degree of freedom} &= (c-1)*(R-1) \\
 &= (2-1)*(2-1) \\
 &= 1*1 \\
 &= 1
 \end{aligned}$$

Table value for 1 df at 5% level=**3.841**



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RESULT: H_1 is accepted since the calculated value $>$ the table value. There is a significant association between the category of workers happy with the welfare measures and uniform provided to the employees.

CHI-SQUARE TEST-II

ATTENDED SAFETY TRAINING PROGRAMMES AND EXISTING SAFETY MEASURES.

H₀: There is no significant association between the fact that the employees have attended safety training programmes and the existing safety measures.

H₁: There is a significant association between the fact that the employees have attended safety training programmes and the existing safety measures.

OBSERVED FREQUENCIES:

| SAFETY MEASURE | ATTENDED SAFETY TRAINING PROGRAMMES | | TOTAL |
|-----------------|-------------------------------------|-----------|------------|
| | YES | NO | |
| Satisfactory | 70 | 60 | 130 |
| Dissatisfactory | 15 | 5 | 20 |
| TOTAL | 85 | 65 | 150 |

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EXPECTED FREQUENCIES

| SAFETY MEASURE | ATTENDED SAFETY TRAINING PROGRAMMES | | TOTAL |
|-----------------|-------------------------------------|-------------------------------|------------|
| | YES | NO | |
| Satisfactory | $130 \times 85 / 150 = 73.66$ | $130 \times 65 / 150 = 56.33$ | 129.99 |
| Dissatisfactory | $20 \times 85 / 150 = 11.33$ | $20 \times 65 / 150 = 8.66$ | 19.99 |
| TOTAL | 84.99 | 64.99 | 150 |

| O | E | O-E | (O-E) ² | (O-E) ² /E |
|-----|-------|-------|--------------------|-----------------------|
| 70 | 73.66 | -3.66 | 13.37 | 0.81 |
| 60 | 56.33 | 3.67 | 13.46 | 0.23 |
| 15 | 11.33 | 3.67 | 13.46 | 2.187 |
| 5 | 8.66 | -3.66 | 13.39 | 1.546 |
| 150 | | 0 | TOTAL | 4.143 |

$$\begin{aligned}
 \text{Number of degree of freedom} &= (c-1) \times (R-1) \\
 &= (2-1) \times (2-1) \\
 &= 1 \times 1 \\
 &= 1
 \end{aligned}$$

Table value for 1 DF at 5% level=3.841

RESULT: H_1 is accepted since the calculated value > the table value. There is a significant association between the fact that the employees have attended safety training programmes and the existing safety measures.



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Chapter-IV

4.1.FINDINGS

- The study shows that 83 % of the respondents opined that they are happy with the safety measures and 17% opined they are not.
- The study shows that 37% of the respondents strongly agree to the fact that welfare measures help in creating better industrial relations, 57% agree, 6% disagree and 57% of the respondents strongly agree that welfare measures help in creating greater loyalty, 27% agree and 17% disagree. 37% of the respondents strongly agree that safety measures help to foster team spirit, 60% agree, 3% disagree.
- The study shows that the responses of the employees are clustered in the satisfactory region. This shows that a majority of the respondents are satisfied with the safety measures. The safety measure that most of the employees are dissatisfied with rest room facilities and housing facilities.
- The study shows that 57% of the respondents feel that the safety measures always help to satisfy their needs, 30% feels that it helps sometimes and 13% believe that it never helps.
- The study shows that 70% of the respondents say that they are disappointed by certain welfare measure but 30% of them say that they are not.
- The study shows that among the 30 respondents who were disappointed by certain safety measures, 10% were disappointed by medical facilities, 7% by the canteen food, 2% by the rest room facilities, 1% by the educational facilities.
- The study shows that 70% of the respondents feel that the leather gloves provided are inadequate and 15% feel that the safety boots provided are inadequate.
- The study shows that 60% of the respondents say that they always make use of the safety measures provided to them, 35% uses them sometimes and 5% never uses it.



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- The study shows that 40% of the respondents say that highly satisfied with the drinking water facility, 58% of the respondents say that satisfied with drinking water facility, 2% of the respondents say that dissatisfactory with drinking water facility.
- The study shows that 57% of the respondents say they have sufficient ventilation, 40% of the respondents say that they have reasonable ventilation, 3% of the respondents say ventilation and lighting facilities as not at all adequate.
- The study shows that 37% of the respondents say that have highly satisfied with uniform facility, 59% of the respondents say that Satisfied with uniform facility, 4% of the respondents say that dissatisfied with uniform facility.
- The study shows that 57% of the respondents have attended safety training programs and 43% of them have not attended the safety training programs

4.2.SUGGESTIONS

- The responses of the employees regarding the level of satisfaction of safety measures are clustered in the satisfactory region. The management may take steps to convert these into highly satisfactory.
- Since 10% of the employees are not satisfied with the canteen facilities, the management may take steps to into satisfactory level.
- The conditions of the rest rooms and shelters may be improved. They may be provided with adequate fans and facilities to rest.
- Medical personnel should always be available at the first aid service.
- The company may increase the salary for all the employees
- The company should provide leave with salary to the employees. The company must provide financial assistance for their employees children's education.



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4.3.CONCLUSION

The industry has provided many benefits and facilities, to their employees. And this report would surely be useful to the management to know about the opinion of the employees on those benefits. Through this report, the management can also take any remedial measures to necessarily motivate the employees by providing adequate welfare facilities and other fringe benefits. Based on employees only an organization can increase its productivity, earn profit and reach its objectives. Therefore, any concern can succeed only through the employees who are the main assets of an organization and not through the technology, experts and specialists alone.

References

- Memoria C.B, “personnel management”, Bombay, Himalaya publishing house, 1988.
- Tripathi P.C “personnel management”, Bombay, Asra publishing house, 1967.
- Kothari C.R “Research Methodology”, New Delhi V.S johri for Vishnuvaprakasha, A division of Wiley Eastem limited, 1990.
- Edwin B.Flippo, “personnel management”, New Yark MC Graw Hill Book and company, 1984.
- Business Statistics, Bharat Jhunjunwala, 2008
- P. ASWATHAPPA, human resource management

WEBSITE

- 1) <http://churn.volosta.edu/coi/>
- 2) [Http://www.India.In](http://www.India.In)
- 3) www.ssp.in