A STUDY ON LABOUR WELFARE FACILITIES IN NLC, NEYVELI, CUDDALORE-DISTRICT IN TAMIL NADU

Dr. T. MUTHUVIJAYAN
Assistant Professor, Department of Economics,
Vivekanandha College of Arts and Sciences For Women (Autonomous), Elayampalaiyam, Thiruchengode, Nammakal -District,TamilNadu, India-637205

Abstract

Labour welfare plays a vital role in the industrial economy of a nation. It promotes and improves the productivity and production besides enabling the workers to raise their standard of living. Labour welfare also builds the morale and loyalty and paves the way to reduce absenteeism and labour turnover. Knowing the importance of labour welfare the government of India had enacted many welfare and social security legislation and the employers are under statutory legal obligation to abide by the provisions of those legislations. Welfare may help retain the employee. Most welfare facilities are hygiene factors according to Frederick Herzberg, they create dissatisfaction if not provided. Replace dissatisfaction, place an employee in favourable mood, provide satisfiers, and then motivation will take place. Welfare facilities besides removing dissatisfaction, help develop loyalty in workers towards the organization.

Keywords: labour, welfare, productivity, employee, organization

INTRODUCTION

Introduction about the study

The evolution of man from tribal, to agricultural and now to industrial environment develops the need for safety. Each face of revolution brought with it new risk and hazards. The hazards potential prevailing in industry is very high and can cause disaster to human life, material, production and equipment. All these leads to man’s thinking to find out ways and means to eliminate hazards by total engineering revision and by adopting suitable safety systems for prevention of hazards to the maximum extent and by improving the area of housekeeping, by imparting necessary training and by improving work environment, etc.

The industrial safety is now considered as vital management function with a direct influence on attainment of the corporate objectives both social and economic also an integral part of quality and quantity of production. Safety can no longer be considered as a satellite function.
Industrialization has brought in its make several problems. One such problem is industrial accidents. Industrial revolution in India gives birth to many industries involving huge machine operations likely to endanger the life of the operators by accident. The life of industrial workers is full of risks and hazards. Mechanical, chemical, electrical and traditional hazard bring newer types of dangers to life, and health.

**Meaning of Safety**

Safety means freedom from the occurrence of risk or injury or loss. It can be defined as “industrial safety is that condition so enterprises operation in which by the control of hazards, accident free production is achieved”. Industrial safety to protect the most valuable human resources is a must in any industry.

**SAFETY**

According to training manual an industrial safety, the word ‘safety’ ha six letters and each of them is meaningful.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘S’</td>
<td>Skill</td>
</tr>
<tr>
<td>‘A’</td>
<td>Attitude</td>
</tr>
<tr>
<td>‘F’</td>
<td>Friendliness</td>
</tr>
<tr>
<td>‘E’</td>
<td>Efficiency</td>
</tr>
<tr>
<td>‘T’</td>
<td>Thoughtfulness</td>
</tr>
<tr>
<td>‘Y’</td>
<td>Your brother’s keeper</td>
</tr>
</tbody>
</table>

According to training manual on industrial safety, “Safety gives protection from risks and accidents injuries. In order to ensure that safety sorrow, it offers security and brings sufficiently, we need to be concerned with:

The desire to increase production as a means to a higher standard of living.

1. The desire to reduce cost, because of increasing experts and a spiral of rising prices.
2. The shortage of skilled labor and the need to conserve and make the best of manpower skills.
3. Humanitarian motives-the desire to reduce needless human sufferings.

The above four objectives are a clear pointer to the fact that if safety is not practiced and suffering are allowed to continue, it will;

1. **Reduce production**: By withdrawing injured workers from their productive function, delay the work of others, damage the machinery and plant, require untrained people to take over as substitutes for those injured etc.
2. **Injured cost**: Workmen’s compensation claims and employees state insurance payments cost of medical treatment, and cost of first aid attention, Supervisory time, extra overheads, wasted materials, damaged machinery and tools etc.
3. **Waste labor resources**: Besides, those temporarily diverted from their jobs, many people are killed or permanently handicapped so that their skills are lost to the society.
4. **Cause human suffering:** Fundamental motive in ensuring safety is humanitarian work. Accidents cause a great deal of needless pain and suffering.

**Scope of the study**

The present study aims to find out the level of workers safety. The study explores the views expressed by the respondents about the safety and providing solutions in an attempt to better the system. The study is conducted taking into consideration only the employees of NLC at thermal power station – II, Neyveli. Thus, the scope of the study is limited to this company only alone and generalization cannot be made.

**LIMITATIONS OF THE STUDY**

The study was subject to wide range of constraints and limitations. The salient ones are listed below:

- The employees have on light work schedules. Thus, scheduling period interviews and administering the questionnaire to them proved to be paramount tasks.

- The study is influenced by the integrity of the respondents in giving true and fair opinion.

- The scope of the study is limited to this company. So the organization where the study was conducted and no generalization can be evolved.

  Last but not least, time constraint proved to be a major hitch in the conduct of the study.

**REVIEW OF LITERATURE**

While there has been relatively extensive contribution related to the study on safety measures adopted in Mines, the results of several studies cop raise a necessary context for this study, in this chapter the researcher reviews the lecture of safety measures in mines into 2 directions namely 1. Unsafe act & 2. Unsafe practice for reference.

‘The Economic of Mining by Mr. Theodore Jesse Hoover, in his book in the chapter 26th he explains about the precautions, safety engineering in the hazardous mining occupations, cost of mining accidents, reduction of death & injury rate, the important of educating of workers, demonstrations of safety devices & methods, the exhibitions & contest & safety matters, use of safety devices & standard practices, the health & hygiene with that of welfare activities.

In the ‘Industrial sociology’ by Mr. Michael Argyle, in his book while considering about the social interaction page no.394 to 429 he has pointed out about “the training” for social competence. Much research on social interaction is carried out in the hope that it may be possible to make social interaction more effectively. One of the main applications of this research is in “training people” to interact for social competence.

He considers that, various techniques of training have been tried in the field to prove possible to bring them together/recommended the application of techniques found to be successful in one field in others.

Training for professional skills, social skills, supervisor & psychotherapy are one of the main areas of interest. Role playing techniques are also emphasized. Psychotherapy & behavior therapy have been used influence interpersonal skills.
He emphasized on this “loneliness, unhappiness, misunderstanding & conflicts while social behavior studies are carried. He considers 9 types of training. Such as enthusiasm, role play ratings, reliable tests, behavioral tests, measurements on attitude, performance & group control.

While explaining the effect of training, the motivation, perceptual, response pattern, self-confidence, self-presentations are the effect on the study of social competence. While discussing on personality & social interaction he emphasis bodily contact, proximity, posture, orientation, physical appearance, gesture movement, training of speech errors, emotional tone of speech, direction of gaze. He discusses human interaction in terms of the basic elements of behavior bodily & facial movements, gestures, eye movements, facial expressions, proximity & orientation the verbal & non-verbal aspects of communication.

“Debates on Science & Technology” in India subject of Shri.Nehru said “Future belongs to Science & Technology to those who make friends with Science” is discussed. The faith is based on the advancements already made & the future promises in Science & Technology ahead. Here both Nationalization and Modernity can be realized, as one finds the casual linkages between Modern Science & Technology, and socio economic transformation being articulated. Nehru fully realized that Modern Science & Technology were necessary for a highly developed agriculture as for as industry. Engineers, Planners, of the country like Mokshagundam Visveriya shared Shri Nehru’s vision and perspective & exercised their influence in shaping the science policy in post-colonial India.

In the journal of Social Sciences” inter disciplinary reflection of contemporary society” edited in Nov. 2005 vol 11 No.3, it is stated that the sociability scale PHSF (personal, home, self and formal relationship questionnaire, developed by humanities research council HSRC (1982) of South Africa was employed. The scale contributed rating points coefficient of internal consistency of this scale have been established at .84 (k-R 8).

Tenacity. The koala’s – (1979) hardness scale was the first test used to measure tenacity. This scale assesses the presence and degree of commitment, challenge & control. The behavior is rated on a 4-point scale. The grading ranges from 0 to 3. The Cranach’s alpha was established at 0.70.

As rightly said Mr.Hami basha a famous scientist that “the developed countries have and the underdeveloped countries lack, is modern science & economy based on modern technology.” So we need to import technology to avail benefits like properuse of underutilized resources, thereby reducing cost of production, replacing traditional methods with modern technology, to improve quality of production & making it internationality competitive & promoting exports. R&D to be developed.

METHODOLOGY
Research Design
Research design in the words of Thomas Kinnear, is the basic plan, which guides the data collection and analysis phases of the project. It is the framework that specifies the type of information to be collected, the sources of data and data collection procedures. At the stage of analysis and interpretation, too, the research design helps to providing direction to the computation and interpretation process to arrive at solutions and recommendations. Thus, research design is a logical and systematic plan prepared for concluding the research study. The research design furnishes a clear idea of the course of activities to be undertaken in order to achieve the research objectives.

STATEMENT OF THE PROBLEM
Any organization largely depends on its human resource to make great strides in its endeavor. Hence, maintaining of good work environment and proper safety is not only a critical management responsibility, but also on inevitable one. This study aims to find out the level of employees satisfaction about the safety and work environment.
OBJECTIVES OF THE STUDY

1. To study and analyze the safety measure of workers.
2. To study the awareness of safety among the workers.
3. To study the usage of Personal protective equipments.
4. To suggest measures to make the existing safety rules more comprehensive to minimize the accidents.

HYPOTHESIS

The employees do not differ in the case of opinion about the provision of labour welfare facilities.

METHOD OF DATA COLLECTION

Primary data are the first hand information collected by the researchers for the immediate purpose of the present study. Personal interview and structured questionnaire was used to elicit responses from the respondents because of the simplicity and reliability and also Secondary data was collected from company library, leading books from Indian and Foreign Authors and website.

Research Instrument

For the present study, the data was collected with the help of questionnaire. A structured questionnaire was used to elicit the primary data. The questionnaire contained close and questions with five point scaling technique.

SAMPLING DESIGN

Sampling is based on the law of statistical regularity and law of inertia of large numbers. A sample is a part or portion of the universe that resembles the total population and the sampling unit comprises of employees of NLC at thermal power station-II, Neyveli. But if the proposed in total sample size are 100 and also random sampling technique in adopted. To collect the necessary data, random sampling technique was adopted the statistical tools such as t-test, one way ANOVA, chi-square test, correlation, percentage analysis were worked out.

This chapter has been discussed from labour safety measures facilities in NLC employees on the basic of collected information. There are following Data interpretation under the briefly discussed.

TABLE 5:1

DISTRIBUTION OF RESPONDENTS ON THE BASIS OF AGE

<table>
<thead>
<tr>
<th>AGE</th>
<th>NO.OF RESPONDENTS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-40</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>40-50</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Above 50</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Computed

As seen from the obtained data 38% of the respondents are in the age group of below 40, 56% of the
respondents are in the age group of 40-50 and 6% of them are in the age group of above 50. Therefore most of them belong to the age group 40-50. Further it could be noted that whenever there is a research on labour welfare facilities it is necessary to interview the senior members because they can only give the right opinion about the facilities provided.

**TABLE 5:2**

**DISTRIBUTION OF RESPONDENTS ON THE BASIS OF EXPERIENCE**

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 5 years</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5-10 years</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>10-15 years</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>15-20 years</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Above 20 years</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Computed

It is seen from the above table that 4% of the respondents having below 5 years’ experience. 4% of them are 5-10 years, 36% of the respondents having 15-20 years of experience and 12% of them are having above 20 years’ experience. It shows that more respondents are having 20+ years of experience.

**TABLE 5:3**

**ONE WAY ANOVA FOR EMPLOYEE’S OPINION ABOUT PROBLEMS IN WORKPLACE ON THE BASIS OF DEPARTMENT**

<table>
<thead>
<tr>
<th>Department</th>
<th>No. of respondents</th>
<th>Mean</th>
<th>S.D</th>
<th>F-Ratio</th>
<th>N.S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop</td>
<td>10</td>
<td>40.30</td>
<td>24.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbine maintenance</td>
<td>10</td>
<td>41.20</td>
<td>23.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbine operation</td>
<td>10</td>
<td>37.70</td>
<td>9.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lignite handling system operation</td>
<td>10</td>
<td>41.40</td>
<td>40.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lignite handling system maintenance</td>
<td>10</td>
<td>39.00</td>
<td>15.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water chemical treatment operation &amp; maintenance</td>
<td>10</td>
<td>40.30</td>
<td>24.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiler operation</td>
<td>10</td>
<td>41.20</td>
<td>40.17</td>
<td>0.46</td>
<td>N.S</td>
</tr>
<tr>
<td>Boiler department</td>
<td>10</td>
<td>37.70</td>
<td>9.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety department</td>
<td>10</td>
<td>41.40</td>
<td>40.17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HY: Employees do not differ in their opinion about problem in workplace on the basis of department.

It is inferred from the table that all the employees scored nearly same mean values. This is also statistically proved by the obtained F-ratio (0.46), which is non-significant. So the stated hypothesis is accepted.

### TABLE 5:4

SHOWING CORRELATION BETWEEN DEMOGRAPHIC VARIABLES AND THEIR OPINION ABOUT SAFELY

<table>
<thead>
<tr>
<th>Variables</th>
<th>Safety general</th>
<th>Safely handling</th>
<th>Problems in workplace</th>
<th>Safely regulations</th>
<th>Safely Corrective measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.36</td>
<td>0.18</td>
<td>0.06</td>
<td>0.01</td>
<td>0.22</td>
</tr>
<tr>
<td>Experience</td>
<td>0.32</td>
<td>0.23</td>
<td>0.03</td>
<td>0.05</td>
<td>0.39</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.12</td>
<td>0.01</td>
<td>-0.02</td>
<td>-0.04</td>
<td>-0.07</td>
</tr>
<tr>
<td>Department</td>
<td>-0.03</td>
<td>-0.02</td>
<td>-0.09</td>
<td>-0.03</td>
<td>-0.95</td>
</tr>
<tr>
<td>Designation</td>
<td>-0.33</td>
<td>-0.11</td>
<td>-0.12</td>
<td>-0.15</td>
<td>-0.11</td>
</tr>
<tr>
<td>Marital status</td>
<td>-0.01</td>
<td>-0.02</td>
<td>0.13</td>
<td>0.23</td>
<td>0.21</td>
</tr>
<tr>
<td>Training attended</td>
<td>0.23</td>
<td>0.41</td>
<td>0.35</td>
<td>0.24</td>
<td>0.29</td>
</tr>
<tr>
<td>Monthly income</td>
<td>-0.25</td>
<td>-0.17</td>
<td>-0.41</td>
<td>0.27</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Source: computed

It is observed from the correlation table age, experience, training attended is positively correlated with the level of satisfaction about safety, whereas gender, department, designation and marital status are negatively correlated with opinion of safety. Monthly income is positively correlated with problems in workplace, safety regulation. Therefore, some of the employee’s demographic variables influence the opinion about safety measures.

### SUMMARY OF FINDINGS AND SUGGESTIONS FINDINGS

1. The result shows that the majority of them are in the age group of 40-50 years.
2. The result displays that majority of them have 15-20 years of experience.
3. Nearly 56% of respondents in the age group of 40-50 years are satisfied with the safety laws provide by the management.
4. On the basis of age, majority of respondents agree that they are satisfied with the safety equipments.
5. Majority of respondents are satisfied with the handling procedure of electrical equipments.
6. On the basis of experience majority of respondents agree that they are satisfied with the chemical treatment.
On the basis of experience majority of the respondents agree that they are satisfied with the handling of explosive devices.

8. On the basis of experience, majority of the respondents are satisfied with the water pollutants and trade effluents.

9. On the basis of experience majority of the respondents are satisfied regarding the celebration of safety week.

10. On the basis of experience majority of the respondents have 10-15 years of experience more affected by occupational diseases.

11. Result shows that 5-10 years experience groups of employees are more satisfied about first did not medical facilities.

12. The t-test proved that employees do not differ in their opinion about first did and medical services on the basis of marital status.

13. Result found that 48% the employees agreed and 10% of them strongly agreed that air pollutants are properly treated.

14. From the chi-square test, employees do not differ in their opinion about fencing of machines. All are satisfied about fencing of machines.

15. The result displays employees do not have any psychological problems in the work spot.

16. The research survey shows that superiors take steps immediately regarding accidents.

17. The result shows that the company occasionally faces fatal accidents.

18. Employees are satisfied about the periodical checking of fire extinguishers.

19. The result infers that functions of emergency safety management are good.

20. The result exhibits that employees satisfied about the safely provision while painting the cooling towers.

21. Employees differ in their satisfaction level about seminars related to work spot accidents.

22. Employees differ in their opinion about environmental safety handling.

23. Regarding safety training programs technician – II grade not satisfied.

24. Result displays that all employees satisfied about safely celebration week safety demonstration and posters and pamphlets.

SUGGESTIONS

The following suggestions arrived from the research survey. Safety is very important for any industries to safeguard the manpower and machines. So proper safety should be maintained. For that the organization conducts safety training programs frequently, because some of the employees are not aware of it. The organization appoints safety officer and inspects the employees regarding safety. The company also keeps safety slogans wherever necessary in the work spot. Fencing of machines should be properly maintained. Fire protecting equipments are kept wherever necessary. Seminars related to safety must be arranged for all employees. Lighting and ventilation to be provided properly. Employees are allowed to work freely and the company provides proper welfare measures to develop positive attitude to the employees. Thus employees free from mental worries and they concentrate their work with job environment. Thus accidents are prevented if the above suggestions are tried to implemented, then organization is free from accident, work force are also protected.

CONCLUSION

The study aimed to know the safety measures provided in the NLC and the employee’s attitude about safety measures. For that the researcher framed questionnaire and conducted a survey, randomly selected 100 employees and collected their responses. After collecting the responses, they were coded, and analyzed using standardized packaged. From that certain findings were drawn. The researcher fond that overall safety improvement is needed.
REFERENCES

1. The Economics of Mining” – 3rd edition 1954 Oxford University press page no.497 to 514.