EMPLOYEE WELFARE MEASURES & INDUSTRIAL HYGIENE IN CIVIL CONSTRUCTION COMPANY - A STUDY

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ABSTRACT

Labour welfare facilities are an important tool to increase the productivity of the employees in any organization. Salary alone will not motivate the employees, so in addition to the company must provide some welfare benefits to their employees. The researcher felt welfare facilities are not properly provided in civil construction companies and it is untouched by the researcher. This article will focus on the employees opinion on some important issues of welfare measures.

Key words: Job interest, lighting facilities, recreation facilities & Maternity facilities

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1. INTRODUCTION

Employee welfare is a comprehensive term including various services, facilities and amenities provided to employees for their betterment. The basic purpose in to improve the working class. Employee welfare is a dynamic concept. Employee welfare measures are also known as fringe benefits and services. Welfare measures may be both voluntary and statutory. Welfare is a broad concept referring to a state of living of an individual or a group, in a desirable relationship with the total environment – ecological economic and social. It aims at social development by such means as social legislation, social reform social service, social work, social action. The object of economics welfare is to promote economic production and
Dr. S. Poongavanam, Dr. Rengamani, Dr. R. Srinivasan and Rajendra Prasad

productivity and through development by increasing equitable distribution. Labour welfare is an area of social welfare conceptually and operationally. It covers a broad field and connotes a state of well being, happiness, satisfaction, conservation and development of human resources. Employee welfare is an area of social welfare conceptually and operationally. It covers a broad field and connotes a state of well being, happiness, satisfaction, conservation and development of human resources and also helps to motivation of employee. The basic propose of employee welfare is to enrich the life of employees and to keep them happy and conducted. Welfare measures may be both Statutory and Non statutory laws require the employer to extend certain benefits to employees in addition to wages or salaries. The purpose of labor welfare is to bring about the development of the whole personality of the workers to make a better workforce. The very logic behind providing welfare schemes is to create efficient, healthy, loyal and satisfied labor force for the organization. The purpose of providing such facilities is to make their work life better and also to raise their standard of living.

2. OBJECTIVES OF THE STUDY
To study the allowances and canteen facilities provided to the employees
To study the urinals facilities given to the employees
To analyse the recreation and maternity facilities provided to the employees
To study the overall interest towards job
To study the relationship between age and job interest; experience and regular increment

3. SCOPE OF THE STUDY
• To identify the employee’s level of satisfaction upon that job & welfare measures.
• This study is helpful to that organization for conducting further research.
• It is helpful to identify the employer’s level of satisfaction towards welfare measure.
• It is helpful to the organization in identifying the area of dissatisfaction of job & welfare of the employees and to make a managerial decision.

4. LIMITATIONS OF THE STUDY
• Due to time constraint the research could not be made more detailed.
• Due to confidentiality of some information accurate response was not revealed by some of the respondents.
• Some of the replies of the respondents may be biased.
• Respondents had marked the answers in questionnaires which may be socially incorrect irrespective of their actual feelings.
• Reliability and validity of data were to some extent lacking in the survey procedures.

5. REVIEWS

5.1. Article 1
Title: Welfare Schemes in ONGC with special emphasis on the Medical facilities
Date of Publication: Oct, 2012
Author(s): Bahuguna, Smita
Source: Golden Research Thoughts Oct 2012, Vol.2 Issue 4, p1
**Summary**

Welfare helps in keeping the morale and motivation of the employees high so as to retain the employees for longer duration. The welfare measures need not be in monetary terms only but in any kind/forms. Employee welfare includes monitoring of working conditions, creation of industrial harmony through infrastructure for health, industrial relations and insurance against disease, accident and unemployment for the workers and their families. ONGC has been providing various facilities along with the best rated medical facilities to its employees.

### 5.2. Article 2

**Title:** A study on various welfare measures and their impact on QWL provided by the Textile Mills with reference to Salem District, Tamil Nadu, India.

**Date of Publication:** June, 2010

**Author(s):** Sabarirajan.A, Meharajan.T, Arun.B

**Source:** Asian Journal of Management Research 2010, p15

**Summary**

The Cotton Textile plays a vital role in human life. Textile industries are one of the important industries of India for earning Foreign Exchange and giving employment to lakhs of workers. Because of being a highly labour intensive industry it needs to concentrate more in the area of employee welfare. In this study we selected Salem District in Tamil Nadu, India for identifying various methods and also to identify the effectiveness of the methods. The study shows that 15% of the employees are highly satisfied with their welfare measures.

### 5.3. Article 3

**Title:** Health and welfare measures in Tamil Nadu spinning mills, India.

**Date of Publication:** Nov, 2012

**Author(s):** Sekar.M, Sundaram, M. Shanmuga, A. Subburaj

**Source:** Indian Streams Research Journal; Nov 2012, Vol. 2 Issue 10, Special section p1

**Summary**

This industry enables the Central and State Government to earn revenue, besides foreign exchange through exports. Out of 2049 large and medium textile mills in India, 893 mills are located in Tamil Nadu. Similarly, out of 996 small units in India, 792 are located in Tamil Nadu. The 893 large and medium textile mills include 18 Cooperative Spinning Mills, 17 National Textile Corporation Mills and 23 Composite Mills. The spinning capacity is 14.75 million spindles with a labor force of about 2.17 lakhs. This study analyses the different health and welfare measures that are perceived by the workers. It reveals the expectation and satisfaction of the workers regarding the various health and welfare measures provided by the textile industries.

### 6. RESEARCH METHODOLOGY

The study is Descriptive in nature.

**Sources of Data**

- Primary Data.
- Secondary Data.
Period of Study
A study on satisfaction level of employee welfare measures is undertaken in 4 months.

Sample Size
The sample size is taken as 120.

Sampling Technique
The technique used here is convenience sampling. It is a non-probability sampling technique where subjects are selected because of their convenient accessibility. The subjects are selected just because they are easiest to recruit for the study.

Statistical Tools
The various statistical tools used here are Correlation Analysis, ANOVA and Chi-Square distribution.
Percentage analysis
Correlation Analysis
Chi-square distribution

6.1. Analysis and Interpretation

Table 1 Opinion on Conveyance Allowance

<table>
<thead>
<tr>
<th>Conveyance allowance</th>
<th>No of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfactory</td>
<td>39</td>
<td>32.5</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>34</td>
<td>28.33</td>
</tr>
<tr>
<td>Average</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>8</td>
<td>6.66</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is inferred that 32.5% of respondents highly satisfactory with the conveyance allowance, 28.33% satisfactory, 12.5% and 6.66% dissatisfactory and highly dissatisfactory towards it and 20% comes under average category.

Table 2 Opinion on Laterinal and Urinal (Toilet) Facilities

<table>
<thead>
<tr>
<th>Laterinal &amp; Urinal facilities</th>
<th>No of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfactory</td>
<td>40</td>
<td>33.33</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>35</td>
<td>29.16</td>
</tr>
<tr>
<td>Average</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is inferred that 33.33% of respondents highly satisfactory that there are improvements in the latrinal& urinal facility, 29.16% satisfactory, 12.5% and 5% dissatisfactory and highly dissatisfactory towards it and 20% comes under average category.
Table 3 Opinion on Canteen Services

<table>
<thead>
<tr>
<th>Canteen services</th>
<th>No of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfactory</td>
<td>14</td>
<td>11.66</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>20</td>
<td>16.66</td>
</tr>
<tr>
<td>Average</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>27</td>
<td>22.5</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>35</td>
<td>29.16</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is inferred that 11.66% of respondents highly satisfy that the canteen services, 16.66% satisfactory, 22.5% and 29.16% dissatisfactory and highly dissatisfactory towards it and 20% comes under average category.

Table 4 Opinion on Lighting Facility

<table>
<thead>
<tr>
<th>Lighting facility</th>
<th>No of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfactory</td>
<td>28</td>
<td>23.33</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>35</td>
<td>29.16</td>
</tr>
<tr>
<td>Average</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>17</td>
<td>14.16</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>10</td>
<td>8.33</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is inferred that 23.33% of respondents highly satisfactory that the lighting facility, 29.16% satisfactory, 14.16% and 8.33% dissatisfactory and highly dissatisfactory towards it and 25% comes under average category.

Table 5 Opinions on Maternity/ Paternity Leaves

<table>
<thead>
<tr>
<th>Maternity leaves</th>
<th>No of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfactory</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>32</td>
<td>26.66</td>
</tr>
<tr>
<td>Average</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>19</td>
<td>15.83</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>9</td>
<td>7.5</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table shows that 20% are satisfied with the maternity/paternity leave provided by the company. 26.66% were satisfied with the benefits and 15.83% were dissatisfied with the benefits. Only 7.5% were highly dissatisfied with the benefits.

Table 6 Opinion on Recreational Facility

<table>
<thead>
<tr>
<th>Recreational facility</th>
<th>No of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfactory</td>
<td>34</td>
<td>28.33</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>29</td>
<td>24.16</td>
</tr>
<tr>
<td>Average</td>
<td>26</td>
<td>21.66</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>22</td>
<td>18.33</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>9</td>
<td>7.52</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is inferred that 28.33% of respondents highly satisfactory with the recreational facility, 24.16% satisfactory, 18.33% and 7.52% dissatisfactory and highly dissatisfactory towards it and 21.66% comes under average category.
Table 7 Opinion on Interest towards Job

<table>
<thead>
<tr>
<th>Job interest</th>
<th>No of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Satisfactory</td>
<td>38</td>
<td>31.66</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Average</td>
<td>26</td>
<td>21.66</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>14</td>
<td>11.66</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is inferred that 31.66% of respondents highly satisfactory about the overall welfare activities, 25% satisfactory, 11.66% and 10% dissatisfactory and highly dissatisfactory towards it and 21.66% comes under average category.

7. STATISTICAL TOOL ANALYSIS

7.1. Correlation

Tabulation
Correlation analysis between experience and regular increments

Table 8

<table>
<thead>
<tr>
<th>EXPERIENCE (X)</th>
<th>REGULAR INCREMENTS (Y)</th>
<th>x - x̅</th>
<th>y - y̅</th>
<th>(x - x̅)(y - y̅)</th>
<th>(x - x̅)²</th>
<th>(y - y̅)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.11</td>
<td>0.21</td>
<td>-0.09</td>
<td>0.01</td>
<td>-0.0009</td>
<td>0.0081</td>
<td>0.0001</td>
</tr>
<tr>
<td>0.25</td>
<td>0.28</td>
<td>0.05</td>
<td>0.08</td>
<td>0.0040</td>
<td>0.0025</td>
<td>0.0064</td>
</tr>
<tr>
<td>0.29</td>
<td>0.23</td>
<td>0.09</td>
<td>0.03</td>
<td>0.0027</td>
<td>0.0081</td>
<td>0.0009</td>
</tr>
<tr>
<td>0.18</td>
<td>0.16</td>
<td>-0.02</td>
<td>-0.04</td>
<td>0.0008</td>
<td>0.0004</td>
<td>0.0016</td>
</tr>
<tr>
<td>0.17</td>
<td>0.12</td>
<td>-0.03</td>
<td>-0.08</td>
<td>0.0024</td>
<td>0.0009</td>
<td>0.0064</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>0.0090</td>
<td>0.0200</td>
<td>0.0154</td>
</tr>
</tbody>
</table>

7.2. Calculation

Correlation Formula

\[ r = \frac{\Sigma[(x - \bar{x})(y - \bar{y})]}{\sqrt{\Sigma(x - \bar{x})^2 \Sigma(y - \bar{y})^2}} \]

Formula Substitution

\[ r = 0.0090 / \sqrt{0.0200}, \sqrt{0.0154} \]

\[ r = 0.0090 / (0.1414), (0.1241) \]

\[ r = 0.0090 / 0.0176 \]

\[ r = 0.5114 \]

Inference
From the correlation analysis, it is found that there exist a high positive correlation between experience and regular increments.
Chi-Square Test

Hypothesis Study

Null hypothesis
H₀: There is no relationship between age and job interest.

Alternate hypothesis
H₁: There is a relationship between age and job interest.
Level of Significance: α = 0.05

7.3. Observed Frequency Distribution

Table 9

<table>
<thead>
<tr>
<th>JOB INTEREST</th>
<th>AGE (YEARS)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below 25</td>
<td>26-30</td>
<td>31-35</td>
<td>36-40</td>
<td>Above 40</td>
<td></td>
</tr>
<tr>
<td>Highly Satisfactory</td>
<td>22</td>
<td>14</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>14</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Average</td>
<td>10</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>52</td>
<td>27</td>
<td>19</td>
<td>16</td>
<td>6</td>
<td>120</td>
</tr>
</tbody>
</table>

7.4. Expected Frequency Distribution

Table 10

<table>
<thead>
<tr>
<th>JOB INTEREST</th>
<th>AGE (YEARS)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below 25</td>
<td>26-30</td>
<td>31-35</td>
<td>36-40</td>
<td>Above 40</td>
<td></td>
</tr>
<tr>
<td>Highly Satisfactory</td>
<td>16.5</td>
<td>8.6</td>
<td>6.0</td>
<td>5.1</td>
<td>1.9</td>
<td>38</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>13.0</td>
<td>6.8</td>
<td>4.8</td>
<td>4.0</td>
<td>1.5</td>
<td>30</td>
</tr>
<tr>
<td>Average</td>
<td>11.3</td>
<td>5.9</td>
<td>4.1</td>
<td>3.5</td>
<td>1.3</td>
<td>26</td>
</tr>
<tr>
<td>Dissatisfactory</td>
<td>6.1</td>
<td>3.2</td>
<td>2.2</td>
<td>1.9</td>
<td>0.7</td>
<td>14</td>
</tr>
<tr>
<td>Highly Dissatisfactory</td>
<td>5.2</td>
<td>2.7</td>
<td>1.9</td>
<td>1.6</td>
<td>0.6</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>52</td>
<td>27</td>
<td>19</td>
<td>16</td>
<td>6</td>
<td>120</td>
</tr>
</tbody>
</table>
7.5. Calculation

Table 11

<table>
<thead>
<tr>
<th>OBSERVED FREQUENCY (O)</th>
<th>EXPECTED FREQUENCY (E)</th>
<th>C.S = (O-E)² / E</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>16.5</td>
<td>1.83</td>
</tr>
<tr>
<td>14</td>
<td>8.6</td>
<td>3.39</td>
</tr>
<tr>
<td>2</td>
<td>6.0</td>
<td>2.67</td>
</tr>
<tr>
<td>0</td>
<td>5.1</td>
<td>5.10</td>
</tr>
<tr>
<td>0</td>
<td>1.9</td>
<td>1.90</td>
</tr>
<tr>
<td>14</td>
<td>13.0</td>
<td>0.08</td>
</tr>
<tr>
<td>8</td>
<td>6.8</td>
<td>0.21</td>
</tr>
<tr>
<td>6</td>
<td>4.8</td>
<td>0.30</td>
</tr>
<tr>
<td>2</td>
<td>4.0</td>
<td>1.00</td>
</tr>
<tr>
<td>0</td>
<td>1.5</td>
<td>1.50</td>
</tr>
<tr>
<td>10</td>
<td>11.3</td>
<td>0.15</td>
</tr>
<tr>
<td>3</td>
<td>5.9</td>
<td>1.43</td>
</tr>
<tr>
<td>5</td>
<td>4.1</td>
<td>0.20</td>
</tr>
<tr>
<td>7</td>
<td>3.5</td>
<td>3.50</td>
</tr>
<tr>
<td>1</td>
<td>1.3</td>
<td>0.07</td>
</tr>
<tr>
<td>4</td>
<td>6.1</td>
<td>0.72</td>
</tr>
<tr>
<td>2</td>
<td>3.2</td>
<td>0.45</td>
</tr>
<tr>
<td>4</td>
<td>2.2</td>
<td>2.20</td>
</tr>
<tr>
<td>3</td>
<td>1.9</td>
<td>0.64</td>
</tr>
<tr>
<td>1</td>
<td>0.7</td>
<td>0.13</td>
</tr>
<tr>
<td>2</td>
<td>5.2</td>
<td>1.97</td>
</tr>
<tr>
<td>0</td>
<td>2.7</td>
<td>2.70</td>
</tr>
<tr>
<td>2</td>
<td>1.9</td>
<td>0.01</td>
</tr>
<tr>
<td>4</td>
<td>1.6</td>
<td>3.60</td>
</tr>
<tr>
<td>4</td>
<td>0.6</td>
<td>19.27</td>
</tr>
<tr>
<td><strong>2TOTAL (C.S)</strong></td>
<td></td>
<td><strong>55.02</strong></td>
</tr>
</tbody>
</table>

Degrees of freedom = (R-1) (C-1) = (5-1) (5-1) = 16
Expected value of (C.S) 0.05 with 9 d.o.f = 26.296
Expected value of (C.S) from the table = 55.02

Inference
From the Chi-square test, it is found that (C.S) > (C.S) 0.05. Hence we reject the null hypothesis. Thus there exists a relationship between age and job interest.

8. CONCLUSIONS
The study concludes that the welfare facilities provided construction areas are satisfactory. But the general feeling among the peoples are bad, but the study reveals a different condition. Without providing a good labour welfare facilities to the working groups employers cannot achieve their goals. So now most of the companies are started thinking on it and providing a goods welfare measures to their employees.
REFERENCES


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