ROLE OF STRESS AND LOCUS OF CONTROL ON JOB SATISFACTION AMONG EMPLOYEES WITH SPECIAL REFERENCE TO MANUFACTURING INDUSTRY

VIJAY DHOLE *; JAIMINI TIPNIS**

*Associate professor,
Singhad institute of business administration and research,
kondhwa-pune

**Associate professor,
Singhad institute of business administration and research,
Kondhwa-pune

Abstract:

There are several variables which may affect the feeling of satisfaction at workplace, such as work-family conflict, injustice perception and social support, immediate changes in personal or vocational life, work culture, stress and locus of control. Among these variables stress and locus of control are more important and frequent predators of job satisfaction. In this study population consists of 150 employees and probability sample consists of 60 employees. Under this study I used stratified random sampling with probability sample as a procedure for research.

Key Words: Stress, Job Satisfaction, Workplace.

Introduction:

Role stress produces many complications for individuals and organizations. They exert harmful effects on job related outcomes. There is substantive amount of literature, which indicate the harmful effects of role stress on various individual and work related outcomes. Mukharjee and Malhotra (2006) found a significant positive effect of role clarity, a reverse construct of role ambiguity on job satisfaction among employees of inbound telephone call centers in the United Kingdom. In addition meta-analytic studies have conducted to examine the relationship between role stress and job satisfaction.

Locus of control refers to the extent to which individuals believe that they can control events that affect them. Despite volumes of research work available in the domain of job satisfaction due to its dynamic and complex nature along with the fact that environmental situation and personality characteristics are continuously evolving, it has been imperative to study the phenomenon again with different sets of assumptions and research paradigm.
**OBJECTIVE:**

* To study role of stress
* To study locus of control
* To study and test independence of attributes
* To find out the effect of “role of stress” on job satisfaction among workers and employees with special reference to manufacturing industry.
* To find out the effect of “locus of control” on job satisfaction among workers and employees with special reference to manufacturing industry.

**HYPOTHESIS:**

1. \( H_0: \) Role of stress is positively correlated with satisfaction with job  
   \( H_1: \) Role of stress is negatively correlated with satisfaction with job

2. \( H_0: \) Role of stress is positively correlated with satisfaction with management  
   \( H_1: \) Role of stress is negatively correlated with satisfaction with management

3. \( H_0: \) Locus of control is positively correlated with satisfaction with job  
   \( H_1: \) Locus of control is negatively correlated with satisfaction with job

4. \( H_0: \) Locus of control is positively correlated with satisfaction with management  
   \( H_1: \) Locus of control is negatively correlated with satisfaction with management

5. \( H_0: \) Role overload, role ambiguity and role conflict are independent.  
   \( H_1: \) Role overload, role ambiguity and role conflict are dependent.

**SAMPLING PROCEDURES:**

A sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given population. Samples can be either probability samples or non-probability samples. With probability samples each element has a known probability of being included in the sample but the non-probability samples do not allow determining this probability. If a population from which a sample is to be drawn does not constitute a homogenous group, stratified sampling technique is generally applied in order to obtain a representative sample. Under Stratified random sampling the population is divided into several sub-populations that are individually more homogenous than the total population (the different sub-populations are called strata) and then we select items from each stratum to constitute a sample. Since each stratum is more homogenous than the total population, we are able to get more precise estimates for each stratum.
and by estimating accurately each of the component parts; we get a better estimates of the whole. In this study population consists of 150 employees and probability sample consists of 60 employees. Under this study I used stratified random sampling with probability sample as a procedure for research.

**METHODS AND INSTRUMENTS OF DATA GATHERING:**

The instruments used are: - observation, through direct communication with workers and employees and questionnaire. In the observation and direct personal interview and communication with employees and workers I get to know about the process of manufacturing of air filters and clean room equipments right from purchasing material to drawings to packaging and dispatch.

The questionnaire was clearly defined with the help of articles on stress management. Questionnaire includes the questions based on work related situations and working conditions and existing managerial practices and also related with social environment.

**TEST OF HYPOTHESIS 1: -**

\( H_0: \text{ Role of stress is positively correlated with satisfaction with job} \)

\( Vs \)

\( H_1: \text{ Role of stress is negatively correlated with satisfaction with job} \)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Satisfaction with Job</th>
<th>Satisfaction with Management</th>
<th>Satisfaction Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role overload</td>
<td>-0.0632</td>
<td>0.29468</td>
<td>0.08184</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>-0.1655</td>
<td>0.46284</td>
<td>0.08174</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>0.67139</td>
<td>0.7082</td>
<td>0.77789</td>
</tr>
<tr>
<td>Overall Stress</td>
<td>0.19439</td>
<td>0.55511</td>
<td>0.37541</td>
</tr>
<tr>
<td>I.E. Control</td>
<td>0.52344</td>
<td>-0.4307</td>
<td>0.18479</td>
</tr>
</tbody>
</table>

Critical region: -

Reject \( H_0 \) at 100\( \alpha \)% level of significance if \( U < -U_\alpha \) otherwise accept \( H_0 \)

Since

\( U = -9.628600 \)

\( U_\alpha = U_{5\%} = 1.64 \& U_\alpha = U_{1\%} = 2.32 \)

Hence \( U < -U_\alpha \)

Hence we reject \( H_0 \)

Conclusion: - role of stress is negatively correlated with satisfaction with job
TEST OF HYPOTHESIS 2:

H₀: - Role of stress is positively correlated with satisfaction with management
Vs
H₁: - Role of stress is negatively correlated with satisfaction with management

Assumptions:
For sufficiently large n > 30, \( Z \sim N \left(0, \frac{1}{n-3}\right) \)

For fisher’s Z transformation, \( r = 0.55511 \)
I.e. to test H₀: \( p = 0.9 \) Vs H₁: \( p < 0.9 \)

Critical region:
Reject H₀ at 100\( \alpha \)% level of significance if \( U < - U_\alpha \) otherwise accept H₀

Since
\( U = -6.0131109 \)
\( U_\alpha = U_{0.05} = 1.64 \) & \( U_\alpha = U_{0.01} = 2.32 \)
Hence \( U < - U_\alpha \)
Hence we reject H₀

Conclusion: - role of stress is negatively correlated with satisfaction with management
TEST OF HYPOTHESIS 3: -

H₀: - Locus of control is positively correlated with satisfaction with job
Vs
H₁: - Locus of control is negatively correlated with satisfaction with job

Assumptions: -
For sufficiently large n > 30, Z ~ N \( \frac{r}{\sqrt{1/n - 3}} \)
For fisher’s Z transformation, \( r = 0.52343 \)
I.e. to test H₀: - p = 0.9 Vs H₁: - p < 0.9

Critical region: -
Reject H₀ at 100\(\alpha\)% level of significance if \( Z < - Z_{\alpha} \) otherwise accept H₀

Since
\( Z = -6.728060 \)
\( Z_{\alpha} = Z_{0.05} = 1.64 \) & \( Z_{1\%} = 2.32 \)
Hence \( Z < - Z_{\alpha} \)
Hence we reject H₀

Conclusion: - locus of control is negatively correlated with satisfaction with job

TEST OF HYPOTHESIS 4: -

H₀: - Locus of control is positively correlated with satisfaction with management
Vs
H₁: - Locus of control is negatively correlated with satisfaction with management

Assumptions: -
For sufficiently large n > 30, Z ~ N \( \frac{r}{\sqrt{1/n - 3}} \)
For fisher’s Z transformation, \( r = -0.43072 \)
I.e. to test H₀: - p = 0.9 Vs H₁: - p < 0.9

Critical region: -
Reject H₀ at 100\(\alpha\)% level of significance if \( Z < - Z_{\alpha} \) otherwise accept H₀

Since
\( Z = -14.593842 \)
\( Z_{\alpha} = Z_{0.05} = 1.64 \) & \( Z_{1\%} = 2.32 \)
Hence \( Z < - Z_{\alpha} \)
Hence we reject H₀

Conclusion: - locus of control is negatively correlated with satisfaction with management
TEST OF HYPOTHESIS 5: -

Testing of independence of attributes: - Here attributes are Role overload, Role ambiguity and Role conflict

\( H_{0} \): - Role overload, role ambiguity and role conflict are independent.

Vs

\( H_{1} \): - Role overload, role ambiguity and role conflict are dependent.

Test procedure: -

Table 19: - Observed values (Oij)

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROLE OVERLOAD</td>
<td>68</td>
<td>69</td>
<td>8</td>
<td>86</td>
<td>69</td>
<td>300</td>
</tr>
<tr>
<td>ROLE AMBIGUITY</td>
<td>61</td>
<td>78</td>
<td>10</td>
<td>66</td>
<td>85</td>
<td>300</td>
</tr>
<tr>
<td>ROLE CONFLICT</td>
<td>107</td>
<td>74</td>
<td>12</td>
<td>55</td>
<td>52</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>236</strong></td>
<td><strong>221</strong></td>
<td><strong>30</strong></td>
<td><strong>207</strong></td>
<td><strong>206</strong></td>
<td><strong>900</strong></td>
</tr>
</tbody>
</table>

Table 20: - Expected values (Eij)

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT</th>
<th>DIS</th>
<th>STDISAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROLE OVERLOAD</td>
<td>78.667</td>
<td>73.6666</td>
<td>10</td>
<td>69</td>
<td>68.333</td>
</tr>
<tr>
<td>ROLE AMBIGUITY</td>
<td>78.667</td>
<td>73.6666</td>
<td>10</td>
<td>69</td>
<td>68.333</td>
</tr>
<tr>
<td>ROLE CONFLICT</td>
<td>78.667</td>
<td>73.6666</td>
<td>10</td>
<td>69</td>
<td>68.333</td>
</tr>
</tbody>
</table>

Table 21: - \((Oij)^2/Eij\)

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROLE OVERLOAD</td>
<td>58.78</td>
<td>64.629</td>
<td>6.4</td>
<td>107.2</td>
<td>69.67</td>
<td>306.6703391</td>
</tr>
<tr>
<td>ROLE AMBIGUITY</td>
<td>47.3</td>
<td>82.588</td>
<td>10</td>
<td>63.13</td>
<td>105.7</td>
<td>308.7513913</td>
</tr>
<tr>
<td>ROLE CONFLICT</td>
<td>145.5</td>
<td>74.335</td>
<td>14.4</td>
<td>43.84</td>
<td>39.57</td>
<td>317.6844986</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>251.618857</strong></td>
<td><strong>221.5522367</strong></td>
<td><strong>30.8</strong></td>
<td><strong>214.1594203</strong></td>
<td><strong>214.9757146</strong></td>
<td><strong>933.1066289</strong></td>
</tr>
</tbody>
</table>

Critical region: -

Reject \( H_{0} \) at 100\( \alpha \)% level of significance

If \( \chi^2 \leq (r-1)\times(s-1), \alpha \) otherwise accept \( H_{0} \)

Since

\( \chi^2 \) calculated = 33.1062289

\( \chi^2 \leq (r-1)\times(s-1), \alpha \Rightarrow \chi^2 \leq (3-1)\times(5-1), 5\% = 15.507 \)

Hence \( \chi^2 \leq (r-1)\times(s-1), \alpha \) (tab)

Hence we reject \( H_{0} \)

Conclusion: - role overload, role ambiguity and role conflict are dependent.
SUMMARY OF THE STUDY:

Table no 22: - no of employees against role overload

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO OF EMPLOYEES</td>
<td>68</td>
<td>69</td>
<td>8</td>
<td>86</td>
<td>69</td>
<td>300</td>
</tr>
<tr>
<td>PERCENTAGE</td>
<td>23%</td>
<td>23%</td>
<td>3%</td>
<td>29%</td>
<td>23%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Summary: -
Role overload occurs when an individual has too many role demands given the time available to satisfy them. Thus above pie chart shows us that 22% - 23% employees strongly agree that they are having role overload, 3% of them cannot decide, 23% - 29% employees strongly disagree that they are having role overload.
Table no 23: no of employees against role ambiguity

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO OF EMPLOYEES</td>
<td>61</td>
<td>78</td>
<td>10</td>
<td>66</td>
<td>85</td>
<td>300</td>
</tr>
<tr>
<td>PERCENTAGE</td>
<td>20%</td>
<td>26%</td>
<td>3%</td>
<td>22%</td>
<td>28%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Fig no. 23: - Pie chart of Role ambiguity

Summary: -
Role ambiguity refers to the situation where the role and responsibility deputed to the person has not been clearly defined. Thus above pie chart shows us 20% - 26% employees strongly agree that they are under the role ambiguity where as 22% - 28% employees are strongly disagree that they are under the role ambiguity where as 4% of them cannot decide.
Table no 24: - no of employees against role conflict

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO EMPLOYEES</td>
<td>107</td>
<td>74</td>
<td>12</td>
<td>55</td>
<td>52</td>
<td>300</td>
</tr>
<tr>
<td>PERCENTAGE</td>
<td>36%</td>
<td>25%</td>
<td>4%</td>
<td>18%</td>
<td>17%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Fig no. 24: - Pie chart of Role conflict

Summary: -
Role conflict refers to a situation in which a person is expected to play two incompatible roles at a time. Thus the above chart shows 36% employees strongly agree that they are under role conflict, where as 25% employees only agree that they are under role conflict, also 4% cannot decide, 17% - 18% employees are strongly disagree that they are under role conflict.
Table no 25: - no of employees against job related conditions

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT DECIDED</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO OF EMPLOYEES</td>
<td>124</td>
<td>75</td>
<td>69</td>
<td>50</td>
<td>42</td>
<td>360</td>
</tr>
<tr>
<td>PERCENTAGE</td>
<td>34%</td>
<td>21%</td>
<td>19%</td>
<td>14%</td>
<td>12%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Fig no. 25: - Pie chart of satisfaction with Job related conditions

Summary: -
Above pie chart shows us that 34% of the employees are satisfied with job related conditions in organization, viz. machines, rest and recreation, co workers, place at which you work salary and employee welfare schemes. Also 12% of the employees are not satisfied with job related conditions in organization.
Table no 26: - no of employees against satisfaction with management

<table>
<thead>
<tr>
<th></th>
<th>STAG</th>
<th>AG</th>
<th>NOT DECIDED</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO EMPLOYEES</td>
<td>97</td>
<td>68</td>
<td>55</td>
<td>53</td>
<td>87</td>
<td>360</td>
</tr>
<tr>
<td>PERCENTAGE</td>
<td>27%</td>
<td>19%</td>
<td>15%</td>
<td>15%</td>
<td>24%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Fig no. 26: - Pie chart of satisfaction with managerial practices

Summary: -

The pie chart shows us that 27% employees are satisfied with existing managerial practices, viz. rewards, opportunities for promotion, expression of grievances, recognition of skills and abilities, leave policies and overtime rules. Also 24% employees are not satisfied with existing managerial practices.

From table no 18: we observe that Role overload is negatively correlated with satisfaction with job. Role overload is positively correlated with satisfaction with management. Role ambiguity is negatively correlated with satisfaction with job. Role ambiguity is positively correlated with satisfaction with management. Role conflict is positively correlated with satisfaction with job. Role conflict is positively correlated with satisfaction with management. Overall stress is positively correlated with satisfaction with job. Overall stress is positively correlated with satisfaction with management. I.E. control is positively correlated with satisfaction with job. I.E. control is negatively correlated with satisfaction with management.

From hypothesis we observe that Role stress is negatively correlated with satisfaction job. Role stress is negatively correlated with satisfaction management. Locus of control is negatively correlated with satisfaction job. Locus of control is negatively correlated with satisfaction management. The attributes role overload, role ambiguity and role conflict are dependent.
MAJOR FINDINGS: -
* Role overload is negatively correlated with satisfaction with job.
* Role overload is positively correlated with satisfaction with management.
* Role ambiguity is negatively correlated with satisfaction with job.
* Role ambiguity is positively correlated with satisfaction with management.
* Role conflict is positively correlated with satisfaction with job.
* Role conflict is positively correlated with satisfaction with management.
* Overall stress is positively correlated with satisfaction with job.
* Overall stress is positively correlated with satisfaction with management.
* I.E. control is positively correlated with satisfaction with job.
* I.E. control is negatively correlated with satisfaction with management.

CONCLUSIONS: -
* Role of stress is negatively correlated with satisfaction job.
* Role of stress is negatively correlated with satisfaction management.
* Locus of control is negatively correlated with satisfaction job.
* Locus of control is negatively correlated with satisfaction management.
* Role overload, role ambiguity and role conflict are dependent.

SUGGESTIONS: -
* For reducing stress organization should implement Training and Development programs not only for employees but also for workers.
* For proper functioning of business they should implement Management control system.
* This organization should implement Time management programs.
* Company should implement Brain storming techniques so that knowledge of workers and employees will be up to date.
* They should install modern machinery.
* Strategic planning is necessary for smooth working of business.
* Another most important thing is that this organization should have some sort of gettogether yearly once and appreciation of work of employees and workers should be done so that they get motivated to work.
* On the basis of results of this study, organizations can make a strategy to enhance the internal locus of control of their managers or employees which ultimately increases satisfaction and reduces the effects of role of stress on managers.
* Organization should provide recreation facilities to their workers and employees.

BIBLIOGRAPHY: -

Journal referred: -

Thesis referred: -
* Job stress, job satisfaction and life satisfaction between managerial and technical is personnel

Online reference: -
www.stressmanagement.com