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

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Abstract

It is but human to strive for satisfaction in every aspect of life, and in the organizational context this may be related to striving towards securing a good job, with a good pay and high job satisfaction. Satisfaction with job always had been an area of concern for both practicing managers and academicians, primarily because of the reason that job satisfaction significantly affects major organizational outcomes, such as individual performance, organizational productivity and employee absenteeism and employee turnover. Job satisfaction is generally defined as one’s feeling and attitude towards one’s job and all aspects of a particular job, whether good or bad, tend to contribute towards the development of feelings of satisfaction or dissatisfaction.

Key words: human, stress, affects, outcomes, job etc.

INTRODUCTION TO THE TOPIC:-

Job satisfaction is the function of the perceived relationship between what one wants from one’s job and what he/she gets there from.

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 today’s competitive and changing organizations stress becomes an important and influential factor. It is a strong predictor of various personal and work related outcomes. It can be defined as a physiological and psychological reaction to relatively excessive demands made on person.
OBJECTIVES:

* 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.

LIMITATIONS:

* The study is restricted to only one industry in Pune.
* The samples are chosen purely on the basis of convenience.
* As the time span of the project was very limited the no. of employees covered was only a small percentage of total population.
* Hence some employees and staff members were reluctant to give full information regarding the factors so the study is based on information provided.
* The truthfulness of responses given by respondents has its effects on the study.

HYPOTHESIS:

1. H. Role of stress is positively correlated with satisfaction with job
2. H: - Role of stress is positively correlated with satisfaction with management
3. H: - Locus of control is positively correlated with satisfaction with job
4. H0: - Locus of control is positively correlated with satisfaction with management
5. H0: - Role overload, role ambiguity and role conflict are independent.

METHODOLOGY DETAILS – DESCRIPTION OF RESEARCH DESIGN AND PROCEDURES USED:

SOURCES OF DATA:

The task of data collection begins after a research problem has been defined and research design plan chalked out. While deciding about the method of data collection to be used for the study, two types of data collection should be followed viz. primary data and secondary data. The primary data are those which are collected afresh and for the first time and thus happen to be original in character. The secondary data, on the other hand are those which have already been collected by someone else and which have already been passed through the statistical process.

Primary data: -

We collect primary data during the course of performing the surveys or sample surveys through observation and through direct personal interview and communication with employees and workers. Also making use of scientifically formulated questionnaire I collected the required data for research.

Secondary data: -
This means data that are already available. It refers to the data which have already been collected and analyzed by someone else. This type of data can be collected from books, magazines, articles, reports, newspapers, journals, etc.
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.

Questionnaire includes the questions based on work related situations and working conditions and existing managerial practices and also related with social environment.

GRAPHICAL AND TABULAR REPRESENTATION OF DATA:-

TEST OF HYPOTHESIS 1: -

H0: - Role of stress is positively correlated with satisfaction with job

Table 1: - Coefficients of correlation between role stress and job satisfaction

<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>

Assumptions: -

For sufficiently large n > 30, \( Z \sim N(0, 1/(n-3)) \)

For fisher’s Z transformation, \( r = 0.19438 \)

I.e. to test H0: - \( p = 0.9 \) Vs H1: - \( p < 0.9 \)
Test statistic: 

\[ z = \left( \frac{1}{2} \right) \times \log(e) \left( \frac{1 + r}{1 - r} \right) \]

\[ z = \left( \frac{1}{2} \right) \times \log(e) \left( \frac{1 + 0.19438}{1 - 0.19438} \right) \]

\[ z = 0.19688 \]

\[ \& = \left( \frac{1}{2} \right) \times \log(e) \left( \frac{1 + p}{1 - p} \right) \]

\[ \& = \left( \frac{1}{2} \right) \times \log(e) \left( \frac{1 + 0.9}{1 - 0.9} \right) \]

\[ \& = 1.4722194 \]

\[ U = (z - \&) \times \sqrt{n - 3} \]

\[ U = (0.19688 - 1.4722194) \times \sqrt{60 - 3} \]

\[ U = -9.628600 \]

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

Assumptions:

For sufficiently large n > 30, Z → N⁻¹(0, 1) - \[ \frac{\bar{X} - \mu}{\sigma} \]

For Fisher’s Z transformation, \( r = 0.55511 \)

I.e. to test H₀: \( p = 0.9 \) Vs H₁: \( p < 0.9 \)

Test statistic: \( z = \frac{1}{2} \cdot \log(e) \left( \frac{1 + r}{1 - r} \right) \)

\[
\begin{align*}
Z &= \frac{1}{2} \cdot \log(e) \left( \frac{1 + 0.55511}{1 - 0.55511} \right) \\
&= 0.625738
\end{align*}
\]

\[
\begin{align*}
\bar{Z} &= \frac{1}{2} \cdot \log(e) \left( \frac{1 + p}{1 - p} \right) \\
&= \frac{1}{2} \cdot \log(e) \left( \frac{1 + 0.9}{1 - 0.9} \right) \\
&= 1.4722194
\end{align*}
\]

\[
U = (z - \bar{Z}) \cdot \sqrt{n - 3}
= (0.625738 - 1.4722194) \cdot \sqrt{60 - 3}
= -6.0131109
\]

Critical region: - Reject H₀ at 100α% 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
Assumptions: -
For sufficiently large $n > 30$, $Z \sim N \left( \frac{1}{2}, 1/(n - 3) \right)$

For fisher’s Z transformation, $r = 0.52343$

I.e. to test $H_0: - p = 0.9$ Vs $H_1: - p < 0.9$

Test statistic: $z = \left( \frac{1}{2} \right) \log(e) \left( \frac{1 + r}{1 - r} \right)$

$z = \left( \frac{1}{2} \right) \log(e) \left( \frac{1 + 0.52343}{1 - 0.52343} \right)$

$z = 0.581066$

$\$ = \left( \frac{1}{2} \right) \log(e) \left( \frac{1 + p}{1 - p} \right)$

$\$ = \left( \frac{1}{2} \right) \log(e) \left( \frac{1 + 0.9}{1 - 0.9} \right)$

$\$ = 1.4722194

$U = (z - \$) \sqrt{n - 3}$

$U = (0.581066 - 1.4722194) \sqrt{60 - 3}$

$U = -6.728060$

Critical region: -
Reject $H_0$ at 100$\alpha$% level of significance if $U < - U_\alpha$ otherwise accept $H_0$

Since

$U = -6.728060$

$U_\alpha = U_{0.05} = 1.64$ \& $U_\alpha = U_{0.01} = 2.32$

Hence $U < - U_\alpha$

Hence we reject $H_0$

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

**TEST OF HYPOTHESIS 4:**

$H_0$: - Locus of control is positively correlated with satisfaction with management

Assumptions: $\left[ \$ = \frac{1}{2}, 1/(n - 3) \right]$ \hspace{1cm} $N \sim \left[ \frac{1}{2}, 1/(n - 3) \right]$

For sufficiently large $n > 30$, $Z \sim N$

For fisher’s Z transformation, $r = -0.43072$

I.e. to test $H_0: - p = 0.9$ Vs $H_1: - p < 0.9$

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Test statistic: \[ z = \frac{1}{2} \log(e) \left( \frac{1 + r}{1 - r} \right) \]

\[ z = \frac{1}{2} \log(e) \left( \frac{1 + (-0.43072)}{1 - (-0.43072)} \right) \]

\[ z = -0.460782 \]

\[ § = \frac{1}{2} \log(e) \left( \frac{1 + p}{1 - p} \right) \]

\[ § = \frac{1}{2} \log(e) \left( \frac{1 + 0.9}{1 - 0.9} \right) \]

\[ § = 1.4722194 \]

\[ U = (z - §) \sqrt{n - 3} \]

\[ U = (-0.46782 - 1.4722194) \sqrt{60 - 3} \]

\[ U = -14.593842 \]

Critical region: -

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

Since \[ U = -14.593842 \]

\[ U_{\alpha} = U_{5\%} = 1.64 \& \ U_{\alpha} = U_{1\%} = 2.32 \]

Hence \( U < - U_{\alpha} \)

Hence we reject \( H_0 \)

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.

Test procedure: -

<table>
<thead>
<tr>
<th>Attribute</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>
</tbody>
</table>
ROLE AMBIGUITY | 61 | 78 | 10 | 66 | 85 | 300
ROLE CONFLICT | 107 | 74 | 12 | 55 | 52 | 300
Total | 236 | 221 | 30 | 207 | 206 | 900

Table 3: - Expected values (Eij)

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

Table 3: - ((Oij)^2/Eij)

<table>
<thead>
<tr>
<th>STAG</th>
<th>AG</th>
<th>NOT</th>
<th>DISAG</th>
<th>STDISAG</th>
<th>TOTAL</th>
</tr>
</thead>
</table>
ROLE OVERLOAD | 58.78 | 64.629 | 6.4 | 107.2 | 69.67 | 306.6703391 |
ROLE AMBIGUITY | 47.3 | 82.588 | 10 | 63.13 | 105.7 | 308.7513913 |
ROLE CONFLICT | 145.5 | 74.335 | 14.4 | 43.84 | 39.57 | 317.6844986 |
TOTAL | 251.618857 | 221.5522367 | 30.8 | 214.1594203 | 214.9757146 | 933.1062289 |

Test statistic: -

\[
\chi^2 \text{ (r-1)*(s-1)} = \chi^2 \text{ (3-1)*(5-1)}
\]

\[
= \chi^2 2*4
\]

\[
= \chi^2 8
\]

\[
= \sum_i \sum_j \left( \frac{O_{ij}^2}{E_{ij}} \right) - N
\]

\[
= 933.1062289 - 900
\]

\[
= 33.1062289
\]
Hence $\chi^2_{8}$ calculated = 33.1062289

Critical region: -

Reject $H_0$ at 100$\alpha$% level of significance

If $\chi^2 (r-1)\times(s-1) \geq \chi^2 (r-1)\times(s-1), \alpha$ otherwise accept $H_0$

Since $\chi^2_{8}$ calculated = 33.1062289

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

Hence $\chi^2 (r-1)\times(s-1) (\text{cal}) \geq \chi^2 (r-1)\times(s-1), \alpha (\text{tab})$

Hence we reject $H_0$

Conclusion: - 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 get-together 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.

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