Faculty Job Satisfaction Index Model for Private Technical Institutions

Bhagya.L.S
Research Scholar
Bahubali College of Engineering
Shravanabelagola, India

Gomatesh Mahaveer Ravanavar
Professor & Dean Academic
Bahubali College of Engineering
Shravanabelagola, India

ABSTRACT
A faculty can perform to the maximum of their capacity if he/she is satisfied with his/her job. Every profession has certain aspects responsible for job satisfaction along with importance and teaching is not an exception. Unless and until a faculty derives satisfaction on job performance and develops an importance towards education, he/she cannot take an initiation for desirable outcomes to cater to the needs of the society. Only satisfied and well-adjusted faculty can think of the well-being of the students.

In the light of this background, a thorough review of literature was made to understand the contribution of different factors which are responsible for the job satisfaction of the faculty. This study deals with finding the most critical factors for faculty job satisfaction and finally formulating the job satisfaction index to measure their job satisfaction level, especially in the private technical institutions.

A survey was conducted for all cadres of the faculty from thirty six technical institutions in Mysore region under VTU, Karnataka through structured questionnaire. Statistical t - test was conducted to analyze the collected data and finally the job satisfaction index was formulated on a scale of 100.

Keywords: Faculty, Technical Institution, Job Satisfaction, Index Model.

1. INTRODUCTION
Job satisfaction has been a heavily researched topic in human resource management for the past 60 years and continues to be highly important. However, it remains a nebulous concept with many definitions. According to Smith and Stone (1992) job satisfaction as “Satisfaction with specific aspects of a job situation cause satisfaction with facets of the job in general, and eventually with life”, According to Brayfield and Rothe (1951) job satisfaction was concerned with a person’s general feelings about a job. Davis and Newstrom (1989) found that job satisfaction could be regarded as one aspect of life.

Job satisfaction is simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs (Spector, 1997). The term Job satisfaction was brought to limelight by Hoppock. Hoppock (1935) describes job satisfaction as, “any combination of psychological, physiological and environmental circumstances that cause and person truthfully to say I am satisfied with my job.” Job satisfaction has many dimensions.

2. REVIEW OF LITERATURE
There are several factors that influence the work satisfaction level of the faculty. The factors that have an impact on job satisfaction level are Work itself, Pay, Promotion Opportunities, Working Conditions, Job Security, Coworkers, Compensation, Work Environment, Work Stress, and Teacher Training. The research carried by different scholars on few important factors among the above mentioned are briefly explained below.

2.1 Present Pay
Job satisfaction is less likely to be connected with the payment and benefits. Brainard (2005) conducted a study to investigate private schools. Based on the result although teachers are moderately
satisfied with present pay, this factor got low rank among teachers of three schools. So, it can be concluded that teachers are not sufficiently satisfied with their present pay. Ping du et al. (2010) analyzed job satisfaction of academic staff in nine universities of china and found that Chinese university professors display a basic level of job satisfaction.

2.2 Opportunities for Promotion

As suggested by Dr. Mahesh C. (2012) there is a constructive association among promotion and satisfaction of job according to numerous researchers. Academicians are more motivated and committed to perform a job and also more satisfied if promotion opportunities are available to them. As suggested by Kostecas, “Promotion expectations also effect job satisfaction, workers who believe a promotion is possible in the next two year report higher job satisfaction”.

2.3 Job Security

Dr. Mahesh C. (2012) indicated that a clear relationship exists in the job security and satisfaction with the work. Another predictor of job satisfaction is security of services. Security of service is a feature that has a considerable affiliation with the job satisfaction. Siddique et al (2002) writes that permanent employees are more pleased with their jobs in comparison to the employees who are on contract.

2.4 Compensation

Aziri B. (2011) concludes that there is a considerable impact of the employee’s perceptions for the nature of his work and the level of overall job satisfaction. Financial compensation has a great impact on the overall job satisfaction of employees.

3. RESEARCH OBJECTIVES & HYPOTHESIS

The study was made with keeping following two main objectives and six hypotheses were formulated to meet the objectives of the study.

1. To describe the factors those influence for job satisfaction amongst the faculty members
2. To develop a faculty job satisfaction index model

3.1 Hypotheses

H₀¹: There is no significant relationship between faculty job satisfaction and the Governance practiced in the institution.
H₀²: There is no significant relationship between job satisfaction and the Facility provided to the faculty.
H₀³: There is no significant relationship between faculty job satisfaction and the Motivation approaches by the institution.
H₀⁴: There is no significant relationship between faculty job satisfaction and the Management System practiced in the institution.
H₀⁵: There is no significant relationship between job satisfaction and the Pay and benefits provided to the faculty.
H₀⁶: There is no significant relationship between job satisfaction and the Work Itself for the faculty.

4. METHODOLOGY

The study conducted was descriptive nature. The data was collected through the survey method from the faculty of different branches of engineering and from different cadres from the private technical institutions in Mysore region under VTU, Karnataka. Comprehensive research work has been conducted to achieve the objectives of the study. Only primary data have been used for the purpose of this study. To collect primary data a structured questionnaire was designed in the light of the objectives of the study. The structured questionnaire was prepared consisting of 76 questions among which 10 were dichotomous type and for 66 questions five point Likert Scale was used. The design of questionnaire includes identifying other sub-factors under the main identified six critical factors such as Governance, Faculty Facilities, Motivation, Management Systems, Pay and Benefits and Work Itself. The study was intended to analyze faculty responses from newly tenured, mid-career tenured and senior tenured faculty from both male and female faculty to determine their levels of satisfaction as well as importance with respect to various factors.
Data collected was under the categories of Nominal and Ordinal. Out of 480 faculty from 36 colleges to whom the questionnaire was given, 380 faculty responded to the questionnaire. The data was then analyzed by using statistical t-test to check the hypothesis.

5. RESULT AND ANALYSIS

After conducting the pilot test for 33 faculty members, checking for reliability and validity few questions were slightly modified and final questionnaire was distributed to 480 faculty in 36 private technical institutions in Mysore region under VTU, Karnataka. Data collected was reviewed and then analyzed using statistical t-test using SPSS software to meet the objectives of the project work.

After collecting the data, the t-test was conducted by using SPSS software at the significant level of 95% for the opinions given by the faculty to the questionnaire. The p-values obtained from the t-test and the test outcomes are shown in the Tables 5.1 to Table 5.6.

5.1 Governance

Table 5.1 shows whether this is statistically significant. The sig (2-tailed) column in the table provides a p-value which is less than 0.05. Hence null hypothesis is rejected. Thus, it is concluded that there is a significance relationship between job satisfaction and the governance provided to the faculty.

Another way to conclude is t-test reveals that there is a significant relationship between Governance and job satisfaction as ‘t’ value is excluded in lower and upper bound values. As shown in Table 5.1.

<table>
<thead>
<tr>
<th>Table 5.1 One-Sample Test for Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 35</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>Governance</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

5.2 Facility

Table 5.2 shows that the null hypothesis rejected as the sig (2-tailed) p-value less than 0.05. Thus, it can be concluded that there is a significance relationship between job satisfaction and the facility provided to the faculty.

<table>
<thead>
<tr>
<th>Table 5.2 One-Sample Test for Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 63</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>Facility</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

5.3 Motivation

The Table 5.3 shows whether this is statistically significant. The sig (2-tailed) column in the table provides p-value less than 0.05. Thus, we can conclude that there is a significance relationship between job satisfaction and the motivation to the faculty.

<table>
<thead>
<tr>
<th>Table 5.3 One-Sample Test for Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value = 21</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>Motivation</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

5.4 Management Systems

Table 5.4 shows that the null hypothesis is rejected as the sig (2-tailed) p-value is less than 0.05. Thus, it can be concluded that there is a significance relationship between job satisfaction and the management systems to the faculty.
Table 5.4  One-Sample Test for Management System

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management System</td>
<td>-3.700</td>
<td>379</td>
<td>.000</td>
<td>-2.350</td>
<td>[-3.60, -1.10]</td>
</tr>
</tbody>
</table>

5.5 Pay and Benefits

Table 5.5 shows that the null hypothesis is rejected as the sig (2-tailed) p-value is less than 0.05. Thus, it can be concluded that there is a significance relationship between job satisfaction and the pay and benefits to the faculty.

Table 5.5 - One-Sample Test for Pay & Benefits

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>-19.218</td>
<td>379</td>
<td>.000</td>
<td>-8.661</td>
<td>[-9.55, -7.77]</td>
</tr>
</tbody>
</table>

5.6 Work Itself

Table 5.6 shows that the null hypothesis is rejected as the sig (2-tailed) p-value is less than 0.05. Thus, it can be concluded that there is a significance relationship between job satisfaction and the work itself to the faculty.

Table 5.6 One-Sample Test for Work Itself

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>5.122</td>
<td>379</td>
<td>.000</td>
<td>2.284</td>
<td>[1.41, 3.16]</td>
</tr>
</tbody>
</table>

6. SATISFACTION INDEX MODEL

After conducting t-tests for all the six factors, it is concluded that there is a relationship between these six factors and the job satisfaction. Later the job satisfaction index model was prepared. The procedure used to find job satisfaction index is explained below.

1. The mean marks for each factor under all six categories were calculated under importance by the average sum of products of frequencies with Likert scale as shown in the Table 6.1.

2. The top six total marks under each category were considered for indexing as motivation factor has maximum six factors under it. Thus in total 36 factors were considered for indexing.

3. For all these 36 factors, depending upon their mean marks obtained after the survey, the ranks were given to these factors according to the value of their mean marks.

4. Now, the weightages were given to these ranks in the reverse order. That is rank 1 was given the maximum weightage of 36, rank 2 was given the next weightage of 35 and so on.

Table 6.1 Ranking of the Factors

<table>
<thead>
<tr>
<th>SL.No</th>
<th>Likert Scale</th>
<th>Total Marks</th>
<th>Mean Marks</th>
<th>Rank to the Factor</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>F14</td>
<td>1 4 18 40</td>
<td>377</td>
<td>4.30</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>F7</td>
<td>2 15 45</td>
<td>378</td>
<td>4.28</td>
<td>2</td>
<td>35</td>
</tr>
<tr>
<td>F2</td>
<td>2 17 56</td>
<td>377</td>
<td>4.21</td>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>F8</td>
<td>6 25 47 107 193</td>
<td>378</td>
<td>4.21</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>W9</td>
<td>1 18 62 122 176</td>
<td>379</td>
<td>4.20</td>
<td>5</td>
<td>32</td>
</tr>
</tbody>
</table>
5. Now these weightages of the factors under each category were added and are shown in the Table 6.2. These total weightages for the categories were plotted with pie-chart and shown in the Fig.6.1.

6. For analysis purpose these weightages are rounded to nearest number multipliable by 5 on a scale of 100 which is shown in the Table 6.2 and is used for formulating satisfaction index model. A separate pie-chart is drawn for these weightages is shown in the Fig.6.2.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Category</th>
<th>Total weightages of top 6 factors</th>
<th>% of marks</th>
<th>Final weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Facility</td>
<td>194</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Work Itself</td>
<td>167</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Management System</td>
<td>102</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Governance</td>
<td>100</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Pay and Benefits</td>
<td>55</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Motivation</td>
<td>48</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table: 6.2 Index Model
7. Now the satisfactory index formula for individual faculty is written as follows.

\[
\left(\frac{G_{CT}}{G_T} \times G_W\right) + \left(\frac{F_{CT}}{F_T} \times F_W\right) + \left(\frac{M_{CT}}{M_T} \times M_W\right) + \left(\frac{MS_{CT}}{MS_T} \times MS_W\right) + \left(\frac{P_{CT}}{P_T} \times P_W\right) + \left(\frac{W_{CT}}{W_T} \times W_W\right)
\]

\[
\left(\frac{G_{CT}}{50 \times 15}\right) + \left(\frac{F_{CT}}{90 \times 25}\right) + \left(\frac{M_{CT}}{30 \times 10}\right) + \left(\frac{MS_{CT}}{65 \times 15}\right) + \left(\frac{P_{CT}}{45 \times 10}\right) + \left(\frac{W_{CT}}{50 \times 25}\right)
\]

Where,

- \(G_{CT}\) = Calculated total for the factors like \((G1+G2+G3+\ldots+G10)\)
- \(G_T\) = Governance total = 10 questions * 5 marks = 50
- \(G_W\) = Total weight = 15
- \(F_{CT}\) = Calculated total for the factors like \((F1+F2+F3+\ldots+F18)\)
- \(F_T\) = Facility total = 18 questions * 5 marks = 90
- \(F_W\) = Total weight = 25
- \(M_{CT}\) = Calculated total for the factors like \((M1+M2+M3+\ldots+M10)\)
- \(M_T\) = Motivation total = 6 questions * 5 marks = 30
- \(M_W\) = Total weight = 10
- \(MS_{CT}\) = Calculated total for the factors like \((MS1+MS2+MS3+\ldots+MS10)\)
- \(MS_T\) = Management system total = 13 questions * 5 marks = 65
- \(MS_W\) = Total weight = 15
- \(P_{CT}\) = Calculated total for the factors like \((P1+P2+P3+\ldots+P10)\)
- \(P_T\) = Management system total = 9 questions * 5 marks = 45
- \(P_W\) = Total weight = 10
- \(W_{CT}\) = Calculated total for the factors like \((W1+W2+W3+\ldots+W10)\)
- \(W_T\) = Management system total = 10 questions * 5 marks = 50
- \(W_W\) = Total weight = 25

This formula is helpful for higher authority to know the final job satisfaction index for each faculty and also to understand which factors are most satisfied or otherwise for each faculty. This formula can also be used to calculate job satisfaction index for each department. This will help the higher authority to take further necessary actions.

7. CONCLUSION

The data was collected from 36 private technical institutions in Mysore region under VTU, Karnataka. This study mainly focused on satisfaction level of faculty members in private technical institutions. From the t-test conducted for the categories like Governance, Faculty Facility, Motivation, Management System, Pay and benefits and Work Itself with respect to job satisfaction, it is observed that in all the six cases p-values are less than 0.05. Hence the null hypotheses are rejected in all the six cases. Thus it can be concluded that there is a significance relationship between job satisfaction and all the six factors considered for study.
After conducting t-tests, the faculty job satisfaction index model was developed. This model will enable the higher authority of the institutions to take necessary actions to retain the best faculty. This index model is also helpful for higher authority to know the final job satisfaction index for each faculty and also to understand which factors are most satisfied or otherwise for each faculty. This index model can also be used to calculate job satisfaction index for each department of the institution.

REFERENCES
[8] Gholamreza Rahimi1, Qader Vazifeh Damirch2, Mir Hosein Seyyedi3, job satisfaction levels and faculty members of Islamic azad university, Arabian Journal of Business and Management Review (OMAN Chapter), 1(5), 87-95.
[16] Nadeem Malik, A Study on Job Satisfaction Factors of Faculty Members at the University of Balochistan, Journal of Research in Education, No. 2