The Factors Affecting to Job Satisfaction on Non-Technical Employees Working at Power and Energy Sector in Sri Lanka

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Abstract: Employees are the backbone of any organization. They are the most precious and important asset among all the assets of any organization. The power and energy sector plays a vital role in sustaining the economic development of a country, so the employee job satisfaction becomes one of the priority in the power and energy sector. Therefore, the study aims to identify what are the major factors affecting to job satisfaction of non-technical employees in power and energy sector in Central Province in Sri Lanka with reference to Ceylon Electricity Board. All employees who are working in Ceylon Electricity board in Central Province where the population of the study and out of them 150 employees were selected as sample of the study based on stratified sampling technique. Further study result highlighted statistically significant impacts of pay and rewards, job security, working condition and recognition on employee job satisfaction in power and energy sector, however possibility of growth no longer make significant impacts on employee job satisfaction. Finally, study identified pay and rewards as a greatest explanatory variable of employee job satisfaction in Power and energy sector, in Sri Lanka

Keywords: Job Satisfaction, power and energy sector, Ceylon Electricity Board, Sri Lanka

1. Introduction

Job satisfaction is an important topic in the modern business world. Because satisfaction is an indicator of how well a person is doing his or her job. Human resource management is an important aspects of an organization. Success and failure of an organization depends mostly on the performance of employees. Job satisfaction is obviously an important factor for all organizations. Companies must continuously improve employee satisfaction in order to minimize the employee turnover and maintain the stability in the market. Job satisfaction explains that an individual’s general attitude toward his or her job.

There are a variety of factors that can influence a person’s level of job satisfaction. Some of these factors include the level of pay and benefits, the perceived fairness of the promotion system within a company, the quality of the working conditions, leadership and Social relationships. Job design aims to enhance job satisfaction and performance methods include job rotation, job enlargement and job enrichment. Other influences on satisfaction include the management style and culture, employee involvement, empowerment and autonomous workgroups. Job satisfaction is a very important attribute which is frequently measured by organizations. The most common way of measurement is the use of rating scales where employees report their reactions to their jobs Power and Energy is the life-blood for the progress of human civilization.Carried out in developed economies and very little is available about the capital structure of firms in emerging economies.

Identification of Job satisfaction concept is more important to energy sector because the power and energy sector playing major role within the economic and social framework in every country to develop their economic situation. As both agricultural and industrial activities increase, the demand for energy similarly increases. In the developing world provision of a greater access to energy is suggested by some that will help grow their economies and improve the lives of the poor.

As a developing country, Sri Lanka provisioning a remarkable position for the Power and Energy Sector. Energy supply in Sri Lanka is mainly based on three primary resources, namely, biomass, petroleum and hydroelectricity. By the end of the year 2016, 239 grid connected power plants have been operated in Sri Lanka, with total installed capacity of 3,887 MW. Out of these power plants 27 have been owned and operated by Ceylon Electricity Board (CEB) including 17 hydro plants, 9 thermal plants and 1 wind power plant. Electricity and petroleum sub-sectors are likely to record higher annual growth rates of about 7-8%. Hydro electricity production and biomass-based energy supplies, which are the only large-scale indigenous primary energy resources available in Sri Lanka, are expected to increase only marginally in the near future.

The main purpose of this study is to identify what the major factors are affecting to job satisfaction of non-technical employees in power and energy sector in Central Province in Sri Lanka with reference to Ceylon Electricity Board. All employees who are working in Ceylon Electricity board in Central Province where the population of the study and out of them 150 employees were selected as sample of the study based on stratified sampling technique.

The paper is organized as follows: first section of the paper gives a brief introduction to the background of the study and literature research and the research objectives. Section 2 gives description of the methodology. Section 3 discusses
the results from the model used section 4 presents the conclusion and section 5 list down the references.

1.1 Background of the Study

The Ceylon Electricity Board (CEB) is a corporate body establish in terms of Parliament No.17 of 1969 as the successor to the Department of Government Electrical Undertakings. It is the responsibility of the CEB to make optimal use of the physical and human resources available through the application of pragmatic and time tested managerial tools and methods taking into account the ultimate objective of the CEB to achieve its goals. It is the duty of the CEB to provide reliable electricity to the entire nation at internationally competitive prices effectively and efficiently through a meaningful partnership with skilled and motivated employees using appropriate state of the art technology for the socioeconomic development of the country in an economically sustainable manner while meeting acceptable environmental standards and a satisfactory rate of return on investments.

This poses a major challenge to all the employees of the CEB to function with great commitment and zeal to discharge their duties at optimal efficiency and cut down waste. It is also important to realize that we should be able to generate sufficient funds to successfully meet the aforementioned objectives and indeed to adequately meet the development needs of the future.

There are several types of employee categories are working in CEB and are including under the several of job profiles such as Engineers, Accountants, Human Resource officers, Mechanical Supervisors, IT Technicians, clerks and several more. As per their job role and working capabilities some of these employees doing technical refer duties such as engineering, mechanical and some of employees such as Accountant, HR officers, Clerks are doing managerial referred duties and they are categorizing as non-technical staff.

According to the salary scales, the wedges, allowances and facilities obtaining to the employees are being various. According to the similar situations non-technical employees of CEB got tended to make some labor issues (such as strikes) in past five years.

Based on these situations it implies that these types of employees have different level of job satisfaction about their jobs. This research paper aims to identify what the major factors are affecting to job satisfaction of non-technical staff at Ceylon electricity board of central province working in Sri Lanka.

2. Literature Review

2.1. Theoretical Background

Job satisfaction is the most widely researched job attitude and among the most extensively researched subjects in Industrial /Organizational Psychology. Several work motivation theories have corroborated the implied role of job satisfaction. Work satisfaction theories, such as Maslow’s (1943) Hierarchy of Needs, Herzberg’s (1968) Two-Factor (Motivator-Hygiene) Theory, Adam’s (1965) Equity Theory, Porter and Lawler’s (1968) modified version of Vroom’s (1964) VIE Model, Locke’s (1969) Discrepancy Theory, Hackman and Oldham’s (1976) Job Characteristics Model, Locke’s (1976) Range of Affect Theory, Bandura’s (1977) Social Learning Theory, and Landy’s (1978) Opponent Process Theory, have tried to explain job satisfaction and its influence.

2.2. Definition of Job satisfaction

Job satisfaction is one of the most complex area facing today’s managers when managing their employees (Aziri, 2011). As well, it is a state felt by a person who has experienced performance or an outcome that fulfilled employee expectations (Ilyas & Arif, 2013). Job satisfaction is the positive feelings about a job, resulting from an evaluation of its characteristics (Robbins & Judge, 2013). A person with high level of job satisfaction holds positive feeling about his or her job, while a person with a low level of satisfaction holds negative feelings.

Job satisfaction is the difference between the amount of rewards employees receive and the amount they believe they should be received (Robbins & Judge, 2013). Satisfaction refers to a "person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations". Job satisfaction is defined as “the extent to which people’s willingness towards the job” and is influenced by multiple factors. Salary, efficiency in work, fringe supervision & co- worker relations are the most important factors contributing to employee job satisfaction (Mosanmod&Nurul, 2011). Job dissatisfaction of employees mainly occurs due to absence of work recognition and the benefits that they are received. However, company policies and practices, achievement and advancement, feedback and communication, ability to work independently and general working conditions make employee satisfy at every time (Maniram& Dissertation, 2007). Salary is the most important factor of job satisfaction and the influence of supervisor support, healthy working environment, work-life balance, career opportunities, promotion, proper training and development opportunities are also important for determining employee’s job satisfaction (Neog&Barua, 2014). Factors that lead to highest employee’s job satisfaction are working condition, job security, and relationship with co-workers and pay however freedom, relationship with immediate supervisor and promotion are works as lowest satisfaction drives.

2.3. Empirical findings

According to the study conducted by Friedlander and Margulies (1969), it was discovered that management & friendly staff relationships contribute to the level of job satisfaction. However, this result contradicts with view of Herzberg (1966) who supported the view that supervision is irrelevant to the level of job satisfaction. Work conditions are defined as an employee’s work place, work instruments, the work itself, organization policy, and organizational rules. Arnold and Feldman (1996), promoted factors such as
temperature, lighting, ventilation, hygiene, noise, working hours, and resources as part of working conditions.

The worker would rather desire working conditions that will result in greater physical comfort and convenience. The absence of such working conditions, amongst other things, can impact poorly on the worker’s mental and physical well-being (Baron and Greenberg, 2003). Robbins (2001) advocates that working conditions will influence job satisfaction, as employees are concerned with a comfortable physical work environment. In turn this will render a more positive level of job satisfaction. Arnold and Feldman (1996) shows that factors such as temperature, lighting, ventilation, hygiene, noise, working hours, and resources are all part of working conditions. Employees may feel that poor working conditions will only provoke negative performance, since their jobs are mentally and physically demanding.

Past researchers found a significant relationship between pay, rank and job satisfaction. (Oshagbemi,2006). And According to financial benefits, compensation and rewards play a major role in influencing the satisfaction of employees regarding their pay. Employees take remuneration and compensation as recognition of their good work. Indicated the need for incentive packages to reduce employee dissatisfaction with their pay levels.

As well as theoreticians such as Locke (1976), early researchers into job satisfaction studied manufacturing firms, and an example was Hulin and Smith’s (1965) study of job satisfaction in US electronics firms. To measure job satisfaction, they employed dependent variables of satisfaction: work type, pay, supervision, promotion opportunities and co-worker relationships; and six independent variables: age, tenure with the company and length of time on the job, job level, salary, and salary desired minus salary received. However, support was found only for male workers and this was related in linear form to satisfaction with work and pay. Job satisfaction was then linked to turnover and organizational commitment by Williams and Anderson (1991), who posited intrinsic and extrinsic cognitive variables. Surveys for job satisfaction followed the various interests of the researchers and variables were not uniform. Hirschfeld (2000) noted that subscales of the short-form of the Minnesota Satisfaction Questionnaire were consistent with the theoretical distinction between intrinsic and extrinsic job satisfaction.

3. Research Methodology

The quantitative research design is used for this study. The primary data strategy is usually associated with the deductive approach. It is a popular and common strategy in business and financial management research. Several approaches developed for determination of the employee job satisfaction and many studies were conducted about factors that affect employee job satisfaction in the literature. Therefore, significant background information is obtained about the related and effecting factors of job satisfaction. According to the literature, six independence variables have selected for this study to test the job satisfaction.

The study adopted descriptive survey design. Support the descriptive design as it is concerned with finding out the aspect of a phenomenon such as who, what, where, when and how. The design was found appropriate because it gave a complete description of the situation, minimizing bias.

Population comprised of all non-technical category employees in Ceylon Electricity Board within the central province. The population of the study was all employees who are working on clerical, accounts and human resource duties in Ceylon Electricity Board in central province, and out of them 150 employees were selected as sample of the study using stratified sampling. Several employee types such as Clerks, Typist, IT Officers, Office Employees, Meter Readers and several were included for the selected sample. And also sample was selected including all the CEB central province offices and sub units and under the various age categories.

Data were collected using self-administrated structured questioners. The questionnaire written in both Sinhala and English was handed over to the employees at their work places. The questionnaire included three sections. Section “A” contained eight questions about basic background of the employees and the section “B” consisted with ten questions about overall job satisfaction. The section “C” comprised with twenty- eight questions covering six independent variables. The questioners were distributed within all the CEB office and Sub-units in Central Province and gathered them on particular manner.

The questions of both section A and B were measured on five point Likert scale which varying between strongly disagree to strongly agree where 1 is used to denominate strongly disagree and 5 for strongly agree. Data were analyzed through various statistical tests using SPSS software. Descriptive statistics, correlation analysis and regression tests were applied to find out the answers for research questions. Job security was measured under the legalization of employee job, Employee Provident fund and Employee Pension Fund indicators. Promotion schemes, Career development paths were used to measure the possibility of growth of the employee. Working condition of the employee was measured by using Working environment.
situations, working situation safety, Facilities belongs while working and provided resources for workings. Employee recognition was measured using Acknowledgement, Appreciation and Approval of the Positive accomplishment.

3.2. Hypothesis

H1. Pay and Rewards has a positive impact on employees’ job satisfaction in non-technical staff working at power and energy sector in central province
H2. Job security has a positive impact on employees’ job satisfaction in non-technical staff working at power and energy sector in central province
H3. Possibility of growth has a positive impact on employees’ job satisfaction in non-technical staff working at power and energy sector in central province
H4. Working condition has a positive impact on employees’ job satisfaction in non-technical staff working at power and energy sector in central province
H5. Recognition has a positive impact on employees’ job satisfaction in non-technical staff working at power and energy sector in central province.

3.3 Operationalization

Table 1: Respondent’s socio-economic characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay and rewards</td>
<td>Salary, Over time Rate, Allowances, Bonus, Medical Scheme, Increments</td>
<td>Five Point Likert Scale</td>
</tr>
<tr>
<td>Job Security</td>
<td>Job Legalization, Employee Funds, Compensation</td>
<td>Five Point Likert Scale</td>
</tr>
<tr>
<td>Possibility of Growth</td>
<td>Promotion Schemes, Scholar Opportunities</td>
<td>Five Point Likert Scale</td>
</tr>
<tr>
<td>Working Condition</td>
<td>Working Environment, Safety, Facilities, Resources</td>
<td>Five Point Likert Scale</td>
</tr>
<tr>
<td>Recognition</td>
<td>Acknowledgement, Appreciation, Approval of the Positive accomplishment</td>
<td>Five Point Likert Scale</td>
</tr>
</tbody>
</table>

4. Data Analysis

4.1 Demographic profile of respondents

The demographic profile of respondents describes the status of respondents according to such factors as gender, age, marital status, education level, trading experience and designation. Table 1 reports the socio-economic characteristics of respondents. The descriptive statistics stated that there are 98 Clerks, 13 Data Entry Operators, 13 Meter Readers and 26 other non-technical employees in the sample. The age analysis indicated that most of employees belong to age category of 20-40, the amount was 109, and 41 respondents were above the age of 40. All respondent had qualified General Certificate Examination (GCE) Advanced Level which is the university entrance exam in Sri Lanka. The sample included 27 graduates and 82 employees with extra educational courses. And out of all 97 respondents were female and rests were male. As a percentage 64.7% is female and 35.3% of sample is Male. 14 respondents were experienced with two years to less than five years as a percentage 9.3% and 68 were experienced with five years to less than ten years as a percentage 45.3% and 68 are working in CEB more than ten years. 137 of them were married (91.3%) and rest are single (8.7%).

4.2. Multiple Regression Analysis

The study measured the impact of independent variables on dependent variable through multiple regression analysis. According to the test, R square value of the model is 0.955. It indicated that the 95.5% variation of the job satisfaction of CEB employees in Central province, is explained by five independent variables: work itself, salary, job security and recognition. The significant value of ANOVA test is 0.000. It indicated that model is strong enough to explain job satisfaction of CEB employees in Central province Sri Lanka.

Table 2: Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Sig.</th>
<th>F value Sig F= .000</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.504</td>
<td>0.141</td>
<td>0.028</td>
</tr>
<tr>
<td>Pay &amp; rewards AVG</td>
<td>0.396</td>
<td>0.035</td>
<td>0.000</td>
</tr>
<tr>
<td>Job security AVG</td>
<td>0.145</td>
<td>0.033</td>
<td>0.000</td>
</tr>
<tr>
<td>Possibility of growth AVG</td>
<td>-0.425</td>
<td>0.029</td>
<td>0.000</td>
</tr>
<tr>
<td>Working Con AVG</td>
<td>0.786</td>
<td>0.027</td>
<td>0.000</td>
</tr>
<tr>
<td>Recognition AVG</td>
<td>0.037</td>
<td>0.018</td>
<td>0.043</td>
</tr>
</tbody>
</table>

According to the regression result, the beta coefficient of pay and rewards, job security, working condition and recognition were 0.396, 0.145, 0.786 and 0.037 respectively. All the values were statistically significant at 0.05 percent level. Hence study accepted the hypotheses one, two, four and five. Accordingly, when changing the employee pay and rewards by one percent it will lead to change employee job satisfaction by 0.396 percent. As well as, when changing job security and working condition by one percent both will
lead to change employee job satisfaction by 0.145 and 0.786 consecutively. On the other hand, job satisfaction of CEB employee will change by 0.037 when changing recognition by one percent. However, there is a negative relationship between possibility of growth and job satisfaction of CEB employees. Hence the study rejected hypotheses three.

According to the regression result, employee’s working condition has a greatest impact on job satisfaction among other variables.

4.3 Model Fit Analyze

The estimated regression line fits the data quite well. The R2 value of .911 means that 91% of the variation in Job satisfaction explained by the variation in Pay and Benefits, Recognition, Job Safety, Possibility of Growth and Working Conditions at 99% Confidence level.

4.4 Correlation analysis

Table 4 indicates the associations between independent variables and dependent variable. According to the table the correlation coefficients of pay & Rewards, Job security, Possibility of Growth, Working condition and Recognition with job satisfaction were 0.498, 0.160, 0.161, 0.794 and 0.564 respectively. As well the respective sig values of all coefficients were less than 0.01. Accordingly all independent variables have statistically significant positive associations with job satisfaction in power and energy sector in Sri Lanka.

The correlation coefficient between Job Satisfaction and Pay & Rewards is 0.498 in Confidence level of 99%. The correlation coefficient between Job Satisfaction and Job security is 0.160 in Confidence level of 90%. The correlation coefficient between Job Satisfaction and Growth is 0.161 the correlation coefficient between working Condition is 0.794. The correlation coefficient between recognition is 0.564. The correlation coefficient analysis explains that there is a positive relationship between Job Satisfaction and Pay & rewards Job Security, Possibility of growth, Working Condition and recognition.

5. Conclusion and Recommendations

According to the regression result there is a significant impact of Pay and benefits on non-technical employees’ job satisfaction in Ceylon Electricity Board in Sri Lanka. The findings have supported by many previous literatures. Siebern- Thomas (2005) found a statistically significant impact of wage on job satisfaction in European Community Households Panel. Perceived pay and promotion work as most influencing factor of job satisfaction in public sector (Sowmya & Panchanatham 2011).

The regression further indicated that there is a significant impact of job recognition and job security on non-technical employee’s job satisfaction in Ceylon Electricity Board. The relationship has supported by many previous literatures. Job dissatisfaction of employees mainly occurs due to absence of work recognition and the benefits that they should be received (Maniram& Dissertation, 2007). Higher job security and work recognition by the society make employee more satisfy about his or her job (Tanjeen, 2013). However, the impact of possibility of growth and working condition on employee job satisfaction were statistically insignificant in telecommunication sector. A study conducted by Tanjeen (2013) also found immediate supervisor’s support and possibility of growth as lowest satisfaction drives in Power and energy sector. Nevertheless absence of proper workspaces, air quality and temperature, lighting and unfavorable conditions of office environment can have reasonable influences on employees’ satisfaction. The study of factor affecting job satisfaction of non-technical employee’s in power and energy sector in central province was undertaken with the purpose of identifying the major factors affecting job satisfaction. The study selected Pay and reward, recognition, possibility of growth, working conditions and job security as independent variables. Data were mainly collected from all the offices and sub units in central province under Ceylon Electricity Board. According to the findings of the study, employee’s job satisfaction was at considerable level. Accordingly, study realized the first and second objectives of the research. The multiple

Table 3: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>std error of the Estimate</th>
<th>Change Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td>1</td>
<td>0.955</td>
<td>0.911</td>
<td>0.908</td>
<td>0.9499</td>
<td>0.911</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Working Con AVG, Safety AVG, Recognition AVG, Growth AVG, Payment AVG
b. Dependent Variable: Overall AVG

Table 4: Correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>Job Satisfaction</th>
<th>Pay &amp; Reward</th>
<th>Job Security</th>
<th>Growth</th>
<th>Working Condition</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay &amp; Rewards</td>
<td>.498***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Security</td>
<td>.160*</td>
<td>.278***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth AVG</td>
<td>.161*</td>
<td>.677***</td>
<td>.348***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Con AVG</td>
<td>.794***</td>
<td>.185***</td>
<td>.065</td>
<td>.256***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Recognition AVG</td>
<td>.564***</td>
<td>.798***</td>
<td>.056</td>
<td>.445***</td>
<td>.278***</td>
<td>1</td>
</tr>
</tbody>
</table>

Note.
*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.10 level (2-tailed).
Regression analysis was conducted to find out factors affecting job satisfaction of non-technical employees under five directional hypotheses. The regression results indicated statistical significant impacts of recognition, Pay and rewards, job security, working conditions and possibility of growth on job satisfaction. Accordingly, study accepted all hypotheses finally study identified recognition and possibility of growth as greatest explanatory variable of employee job satisfaction of non-technical employees in power and energy sector. Based on the study findings, it is highly recommended that management should provide more ways for employee career development and growth employee to enhance the level of job satisfaction. It can be considering with more promotion schemes, career development paths, new job role introducing etc. And also based on the study findings, it is also recommended that management of CEB should provide more financial benefits to employee to enhance the level of job satisfaction. In this process, salary increments, allowances, annual bonus and more overtime payments can be used. In addition to that management should maintains employee job security and better working conditions for the improvement of job satisfaction level of employee. Mostly organization can be used new office lay outs, comfortable equipment, new technological working environments and also have to consider to build satisfaction environment within the office areas and sub unit areas.

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