The Impact of Job Stress on Job Performance among Operational Level Employees: Two Selected Electrical Manufacturing Companies in Colombo District, Sri Lanka

Jayasooriya, KPLM and Gamage, AS

Abstract

Area of the Study
This study attempts to identify the impact of job stress on job performance among operational level employees in two selected electrical manufacturing companies in Colombo district, Sri Lanka.

Problem of the Study
There is an empirical knowledge gap in Sri Lankan context on the impact of job stress on job performance of operational level employees in electrical manufacturing companies. This study is aimed to investigate what is the impact of job stress on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka.

Method of the Study
The data were collected from a randomly selected sample of 108 operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka by administering a structured questionnaire, which consisted of 38 questions/statements with 5 point scale. The data analysis included the univariate and bivariate analyses.

Findings of the Study
This study found that there is a strong positive relationship between workload and job performance and there is a weak negative relationship between role conflict and role ambiguity with the job performance among production assistants of the two selected electrical manufacturing companies in Colombo district, Sri Lanka.

Conclusion of the Study
It is concluded that the workload is positively associated with job performance while role conflict and role ambiguity are negatively associated with the job performance among production assistants of two selected electrical manufacturing companies in Colombo district, Sri Lanka. Thus, job performance of employee is significantly based on the job stress. Hence, it can be concluded that job stress is a major factor which can affect the job performance of the all operational level employees in the electrical manufacturing industry.

Keywords: Job Stress, Job Performance, Operational Level Employees, Electrical Manufacturing Companies

Introduction
Every organization is consisted with different types of employees to achieve their organizational goals and objectives. Hence, managing human resource is a one of the most important components in any organization. Human Resource Management (HRM) is
the management of human resources that mostly affect to the any organization success. Opatha (2012) stated that the HRM is the well-organized and effective utilization of human resources to attain the goals of an organization through HRM functions.

Success of any business depends on the performance of employees. Therefore, competition is growing gradually hence increasing the levels of stress among employees. Although current world has brought reimbursements of the innovative technologies, modern life style and a lot of facilities, but this has also enhanced competition (Zeb, Saeed & Rehman 2015). This has raised pressure on the workers to work hard and also get more productivities to attain competitive gains (Zeb, Saeed & Rehman 2015).

Job stress can be defined as when people cooperate with each other throughout their jobs, changes occur within the people who force them to diverge from their repetitiveworking. Stress at work is a significance phenomenon of modern life styles and it is induced by work, also it is a universal phenomenon which affects many individuals in a variety of working environments (Analoui & Khoury 2010). Stress at job arises owing to clash between the workers’ capabilities and job demands (Bhatti et al. 2011). Jha & Ratnawat (2014) mentioned that stress is many times misunderstood and misinterpreted resulting into preventabledifficulties and is thus significant to recognize the stress well before thinking of handling it.

Job performance is an activity which assists a person to fruitfully complete his responsibilities and obligations, allocated to him, when an individual is subject to utilize the available resources under normal constraints. Job performance is one of the most significant dependent variables and has been considered for a extended period of time (Jankingthong & Rurkkhum 2012). Westman and Eden (cited in Damiri & Arshadi 2013) used a correlational strategy to examine the relationship between stress resulting from excessive demands and performance among trainees. Their results presented a negative linear relationship between stress and job performance; that is, as job stress increased, job performance decreased. Job performance can be recognized as an activity in which an individual is capable of achieve the task allocated to him/her fruitfully, subject to the normal constraints of rational utilization of the existing resources (Dar et al. 2011).

The literature displays varying results in regard to the relationship between job stress and job performance. Although there are few researches which have been done by various scholars in foreign countries and still there is a gap in Sri Lankan context with relevant to this topic. In electrical industry is becoming more complex and more competitive than ever. Because this sector has greater employment potential, many job opportunities are prevailing with greater responsibilities and one of the growing industries in Sri Lanka.

Hence it is vital to identify what kind of impact of the job stress has on job performance of operational level employees in electrical manufacturing companies in Sri Lanka. Given its significance, the study aims to examine the impact of job stress on job performance among
operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka.

**Problem Background and Problem of the Study**

Number of studies has been carried out to find out the impact of job stress on employee performance and show that there is significant impact of job stress on employees’ job performance. As investigated Ayyuob et al. (2013) stress happens in all business either big or small the work place and organizations have change so much complex due to which is exists, work place stress has vital effects over the workers’ job performance. Munir and Islam (cited in Kachaliav & Lopes 2016) proved relationship between work stressors such as role ambiguity, workload pressure, home-work interface, performance pressure, relationship with others and role conflicts on one side and job performance on the other with motivation as mediator and generate that role conflict and role ambiguity have a positive relation with stressors against the common view while the relationship is found to be negative between other stressors and job performance. Although, a considerable number of researches have been done in western countries, it seems to be there is quite less research on job stress in Sri Lankan context. This research attempts to find whether there is impact of job stress on job performance of production assistants in two selected electrical manufacturing companies in Colombo district, Sri Lanka. Therefore by considering the above factors it can be stated that this research would be a new research compared to other research studies.

The theoretical and empirical evidence on impact of job stress on job performance has been contradictory. The researches show that there are mixed findings and variation in the impact of workload, role conflict and role ambiguity on job performance. It appears that there is a gap in the empirical knowledge available, especially in Sri Lankan context in impact of job stress on job performance among operational level employees in electrical manufacturing companies. Therefore, the research problem addressed under this study is to examine the impact of job stress on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka.

**Research Framework**

The research framework of this study has four major variables, of which three are independent and one is dependent variable. The dependent variable is job performance. Worker's performance is the capability of the workers to work effectively and efficiently to achieve the organizational goals and objectives (Kovach cited in Zeb, Saeed & Rehman 2015). The variance of the dependent variable is attempted to be explained by independent variables, that is job stress. Hence the independent variables of this study are workload, role conflict and role ambiguity.

Workload mentions to the attentiveness or the amount of duties and tasks, which employee responsible at work (Ali, et al. cited in Jamil et al. 2016). Spector and Jex (cited in Idris 2011) mentioned that Quantitative Workload Inventory (QWI) represented the elements of amount of work, quantity of workload and time pressure. This aspect denotes to the degree of stress
practiced by individuals owing to the conception that they are unable to familiarize or be active with the amount of work allocated to them (Idris cited in Jamil et al. 2016). Based on the literature, following hypothesis was developed.

**H1:** Workload has significant impact on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka

Role conflict can be defined as individuals together do diverse roles which conflict each other (Jamil et al. 2016). In accordance with Rizzo et al. (cited in Tang & Chang 2010) defined role conflict as the dimensions of congruency-in congruency or compatibility-incompatibility in the necessities of the role, where congruency or compatibility is adjudicated relative to a set of standards or circumstances which impose upon role performance. When role requirements of an individual are irreconcilable, it consents role conflict to happen, also role conflict happens when individuals face many inconsistent job tasks, or when they gratify to do things they do not have need to do (Seller & Damas cited in Jamil et al. 2016). It is a serious condition, because obligation to the role requirement makes it problematic to contain to the requirements of another (Seller & Damas cited in Jamil et al. 2016). Yuniarsih, et al. cited in Saranani (2015) stated that the conflict cannot be escaped in the business, but the conflict between groups at once can be positive and negative forces, so that the management should not have to remove whole conflicts, but only on the conflict that effects upon interruption of business organizations attain objectives. Hence, this study developed second hypothesis as:

**H2:** Role Conflict has significant impact on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka

Role ambiguity can be defined as the lack of information needed by the individual in achieving his or her role in an organization, such as information, limits of authority and responsibility, policies and rules of the organization and methods of performance evaluation (Ammar cited in Jamil et al. 2016). Role ambiguity arises when individual does not have clear role to do the allocated job (Kahn, et al. cited in Jamil et al. 2016). Rizzo, et al. (cited in Tang & Chang 2010) described role ambiguity as reflect certainty about duties, authority, allocation of time, and relationships with others; the clarity or existence of guides, directives, policies; and the ability to predict sanctions as outcomes of behavior. Jackson and Schuler (cited in Ahmed & Ramzan 2013) studies found role ambiguity to lead to negative outcomes as reduces confidence, a sense of hopelessness, anxiety, and depression. Thus, the third hypothesis of this study is as follows:

**H3:** Role Ambiguity has significant impact on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka

Relevant schematic diagram developed based on research article of Jamil et al. (2016) is shown in Figure 01. Workload, role conflict and role ambiguity of operational level employees in electrical manufacturing companies are labeled as independent variable. Job
performance of operational level employees in electrical manufacturing companies is considered as the dependent variable.

Figure 1: Schematic Diagram of the Research Framework

Source: Jamil et al. (2016)

**Method**

**Study Design**

The main objective of this research is to investigate the impact of job stress on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka. Thus, the type of investigation that demands for a study in this nature is a correlational one. Further, as the nature of the survey was analytical as this survey attempts to analysis the relationships between the dependent variable and the independent variable. According to Sekeran (2003), the time horizon may be either cross sectional or over a period of several days/ weeks/ months or longitudinal study where data collection is done in more points in the time. The study was carried out among a sample of 108 operational level employees in two selected electrical manufacturing companies in Colombo district among the population of 150 operational level employees. In this study unit of analysis was individual: production Assistants among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka.

**Measures**

The variables in the research model, workload, role conflict, role ambiguity and job performance were measured through questionnaire with five point scales, which completed by respondents themselves approximately as they have experienced. The independent variables of the research model, workload, role conflict and role ambiguity were measured by an instrument consisting of 18 statements. Those questions were developed based on the standard questionnaires, which were originally developed by Rizzo, et al. (cited in Chen, Lin & Lien 2011). The dependent variable of the research model was the job performance and it was measured by an instrument containing of 20 statements, which were developed based on the standard questionnaires originally developed by Uthayakumar (cited in Kottawatta 2007). The job performance was measured in terms of three dimensions as traits, behaviour and results.
Reliability and Validity

The internal reliability of the instrument was estimated using Cronbach’s Alpha. The result of Cronbach’s Alpha test is given in Table 01, which implies that the instrument employed in this study was reliable.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Stress</td>
<td>0.718</td>
</tr>
<tr>
<td>Job Performance</td>
<td>0.913</td>
</tr>
</tbody>
</table>

The content validity of the instruments was confirmed by the conceptualization and operationalization of the variable using the available literature, and indirectly by the high internal consistency reliability of the instruments as represented by Alphas. While the construct validity of the variables of the survey was confirmed by the element that the correlation and the regression analysis support the hypotheses formulated linking the relationship between the independent variables and the dependent variables.

Techniques of Data Analysis

Data collected from primary source were analyzed using the computer based statistical data analysis package, SPSS (Version 16.0) for validity, reliability and relationship testing. The data analysis included univariate and bivariate analyses.

Results

To investigate the responses for workload, role conflict and role ambiguity with job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka, the univariate analysis and bivariate analysis were used. The results of the univariate analysis are given in Table 02.

<table>
<thead>
<tr>
<th></th>
<th>Job Stress</th>
<th>Workload</th>
<th>Role conflict</th>
<th>Role ambiguity</th>
<th>Job Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>108</td>
<td>108</td>
<td>108</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>Mean</td>
<td>2.7063</td>
<td>3.6921</td>
<td>2.2431</td>
<td>2.1836</td>
<td>3.6329</td>
</tr>
<tr>
<td>Median</td>
<td>2.6597</td>
<td>3.7500</td>
<td>2.1250</td>
<td>2.1667</td>
<td>3.6000</td>
</tr>
<tr>
<td>Mode</td>
<td>2.62</td>
<td>4.00</td>
<td>2.00</td>
<td>2.17</td>
<td>3.60</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.32656</td>
<td>.71500</td>
<td>.40327</td>
<td>.45796</td>
<td>.50674</td>
</tr>
<tr>
<td>Variance</td>
<td>.107</td>
<td>.511</td>
<td>.163</td>
<td>.210</td>
<td>.257</td>
</tr>
<tr>
<td>Skewness</td>
<td>.468</td>
<td>.133</td>
<td>.332</td>
<td>.219</td>
<td>.204</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.233</td>
<td>.233</td>
<td>.233</td>
<td>.233</td>
<td>.233</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.439</td>
<td>-.664</td>
<td>-.314</td>
<td>-.556</td>
<td>.088</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.461</td>
<td>.461</td>
<td>.461</td>
<td>.461</td>
<td>.461</td>
</tr>
</tbody>
</table>
The bivariate analysis includes the Correlation Analysis and the Simple Regression Analysis, which were used to investigate any relationship between job stress and job performance among production assistants of two selected electrical manufacturing companies in Colombo district, Sri Lanka. Statistics for the correlations are given in Table 03.

According to Table 03, the Pearson Correlation Coefficient of workload and job performance is 0.836 and relationship is statistically significant as correlation is significant at 0.01 level (2-tailed). This indicates that there is a strong positive correlation between workload and job performance. The Pearson Coefficient of role conflict and role ambiguity with job performance is -0.225 and -0.195 respectively, which indicate that there is a weak negative relationship between role conflict and role ambiguity with job performance among production assistants of two selected electrical manufacturing companies in Colombo district, Sri Lanka. The found relationships are statistically significant as correlation is significant at 0.05 level (2-tailed).

Table 03: Correlation between Job Stress, dimensions of job stress and Job Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload</td>
<td>108</td>
<td>.836**</td>
<td>.000</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>108</td>
<td>-.225*</td>
<td>.019</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>108</td>
<td>-.195*</td>
<td>.043</td>
</tr>
<tr>
<td>Job Stress</td>
<td>108</td>
<td>.427**</td>
<td>.000</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Pearson correlation coefficient between the job stress and job performance is 0.427, which is positive. It shows that there is a positive relationship between job stress and job performance among production assistants of two selected electrical manufacturing companies in Colombo district, Sri Lanka. The found relationship is statistically significant as correlation significant at 0.01 level (2-tailed). Thus, statistical evidence to claim that job stress and job performance is positively related. Here relationship was statistically significant at 99% confidence level (p<0.01). Additionally regression analysis was used to find out the impact between independent variable and dependent variable (Refer Table 04).

Table 04: Simple Linear Regression Analysis

<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>Constant</th>
<th>b value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.427a</td>
<td>.182</td>
<td>.174</td>
<td>.46049</td>
<td>1.842</td>
<td>0.427</td>
</tr>
</tbody>
</table>
It indicates that about 18.2% of the variance (R Square) in the job performance is explained by job stress. Accordingly, the regression equation of job performance is: \( JP = 1.842 + 0.427 (JS) \). According to the results of simple regression analysis, job stress was found to have a positive impact on production assistants’ job performance with the strength of \( b \) value of 0.427. Hence, job stress was found to be a predictor of job performance.

Discussion and Conclusion

This study mainly addressed to find out the impact of job stress on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka. Therefore, it is important to identify and prove that is there positive or negative impact of job stress on job performance.

According to data analysis result, it was found out that there is a positive relationship between job stress and job performance. The correlation between these variables was 0.427 (production assistants), which is significant at 0.000 levels. This correlation was found to be strong as it is more than the lower bound of strong correlation (0.5). According to the results of simple regression analysis, job stress was found to have a positive impact on job performance with the strength of \( b \) value of 0.427. Hence, job stress was found to be a predictor of job performance.

Discussing the level of job stress of the respondents in the sample, it was found that they have a favourable level of job stress with the mean value of 2.7063. Accordingly, it was found that operational level employees of two selected electrical manufacturing companies in Colombo district were satisfied with their jobs. And also the level of job performance of the respondents in the sample is high with the mean value of 3.6329.

There are several researches which have expressed a number of finding relating to job stress and job performance. Kazmi et al. (2008) contributed “Stress is not always negative or harmful and indeed, the absence of stress is death”. But it still has destructive impact on employee performance. But the findings of correlation and regression analysis empirically confirm the arguments given by Rizwan et al. (2014) and Jamil et al. (2016). They argue that workload, role conflict and role ambiguity are most important dimensions of determining job performance, and workload leads to increased job performance, role conflict leads to decreased the job performance and role ambiguity hasn’t significant effect on job performance.

According to the findings of the research, it is substantiated that there is a strong positive relationship between workload and job performance and there is a weak negative relationship between role conflict and role ambiguity with the job performance. Hence, there is a slightly positive relationship between job stress and job performance among production assistants of the two selected electrical manufacturing companies in Colombo district, Sri Lanka.
Hence, there is divergent of the impact of job stress factors on job performance among operational level employees of two selected electrical manufacturing companies in Colombo district, Sri Lanka. Job performance of employee is significantly based on the job stress. Also it was found that job performance of the employee ranked in high level. Hence, it can be concluded that job stress is a major factor which can affect the job performance of the employee. Therefore, job stress is significant element to determine the job performance of the all operational level employees in the electrical manufacturing industry.

References


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**Jayasooriya, KPLM**  
Department of Human Resource Management  
University of Sri Jayewardenepura  
jhrm@sjp.ac.lk  
madushaniprabasara@gmail.com  

**Gamage, AS**  
Senior Lecturer  
Department of Human Resource Management  
University of Sri Jayewardenepura  
jhrm@sjp.ac.lk  
aruna@sjp.ac.lk