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The Impact of Physical Working Condition on Operational Employees' Job Performance in Large Garment Factory in Galle District, Sri Lanka

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Abstract

Area of the Study

This study discusses the impact of physical working condition on job performance of operational employees in large scale garment factories in Galle district.

Problem of the Study

There is an empirical and knowledge gap in the Sri Lankan context on the relationship between physical working conditions and job performance of operational employees. The research problem of this study: Is there an impact of physical working condition on employee job performance of large scale garment factory in Galle district?

Method of the study

The data were collected from a random sample of 100 operational employees in a garment factory in Galle district and used a structural questionnaire, which indicate the statement of physical working condition and job performance with 5 points Likert scale. The data were analyzed using univariate and bivariate analyses with the SPSS computer package (Version 16).

Findings of the Study

The major finding of the study is that physical working condition is positively correlated with employees' job performance. Moreover, four main dimensions of physical working condition namely workplace noise, temperature, air quality and lighting condition identified for the study. It was found that those are positively correlated with employees' job performance.

Conclusion of the Study

Final result of the study reveals that workplace noise, temperature, air quality and lighting condition are positively impact on operational employees' job performance. In conclusion, physical working condition of organization positively impact on their employees' job performance.

Keywords: Physical Working Condition, Job Performance, Operational Employees, Garment Industry

Introduction

Sri Lanka is a developing nation and it has shifted away from a socialist orientation and opened economy to foreign investment (Apeksha 2015). Sri Lanka has traditionally been an agro-based economy but over a period the government of Sri Lanka realized the need to have an industrialization approach for development of the economy (Apeksha 2015). During the above period, government has established that Sri Lankan garment industry/ apparel industry is importance. Sri Lanka's apparel industry began to grow extensively in the 1980s as a

substitute to India's garment manufacturers, because of its open economic policy as well as the trade and investment friendly environment (Wikipedia 2015).

Today, garment industry provides major contribution to Sri Lankan economy which significance evidences provide by Central Bank Annual Report. According to Goss Domestic Product, textile and garment sector contribution is 15.7% (Central Bank Annual Report 2015) and textile and garment sector export contribution value is US\$ million 4820.2 and 45.9% (Central Bank Annual Report 2015).

According to indicated data of the Central Bank Annual Report (2015) 1,562,000 provided employees by manufacturing industry and percentage value are 18.3. Garment industry is a main sub group of manufacturing industry. Hence garment industry provides large number of employee openings for Sri Lankan job market. Therefore if maintaining successful garment factory important to pay attention on operational employees' job performance.

According to Business Dictionary, job performance has been defined as the work related activities expected of an employee and how well those activities were executed. Motowidlo, Borman and Schmidt defined job performance as the overall expected value from employees' behaviors carried out over the course of a set period of time (Motowidlo, Borman & Schmidt 1997). In practice organization measure employee performances by using dimensions such as employee productivity, quality of work, number of production unit, employee new idea so on. Some website (Smallbusiness.chron.com 2014) mentioned that there are many factors affect for employee's job performance such as working time, supervision, employee attitude, incentives so on. Physical working condition is one of the important factors among those factors. Anytime, physical working condition influenced to employees' satisfaction, absenteeism, job stress, labor relation so on.

Due to the globalization, rapid development in technology & high international competition retaining talented employees within the organization is challengeable. Therefore it is better to maintaining proper physical working condition if organization need to retain employees. One of the fundamental human requirements is a Physical working condition that allows people to perform their work optimally under comfortable conditions.

Problem of the Study

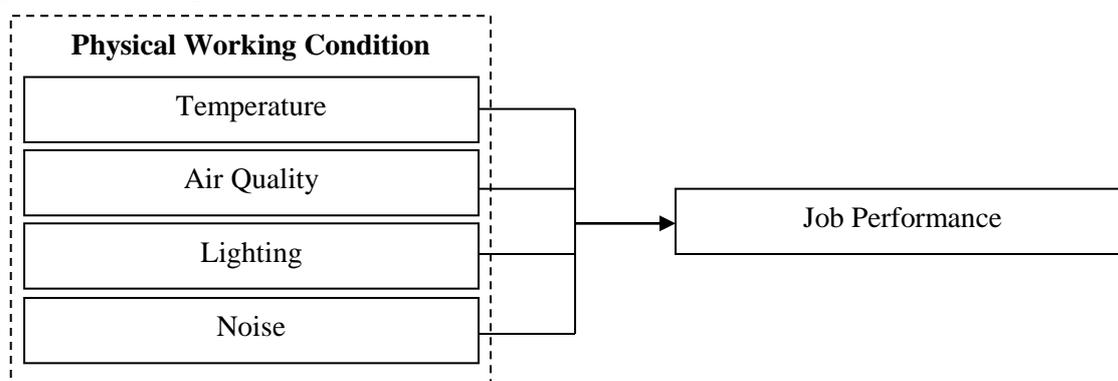
The current awful nature of physical working conditions in the world may be the source of performance, occupational hazards, job satisfaction, deceases and injuries in workplaces. Noise is one of major dimension in physical working conditions. Wikipedia (2015) defined that noise is a sound that someone or something makes. Noise contributes to dissatisfaction with the physical environment; it also may contribute to dissatisfaction with the job (Leung et al. 2005). However, increased levels of noise in the workplace can cause employees to endure stress and fatigue (Smith 1991). When viewing contrasts between dark and light areas of a computer screen, people can experience headaches (Purdey 2008). Raffaello and Mas in 2002 said that occupant satisfaction with physical working

environments is related to indoor air quality, thermal comfort, lighting and acoustic conditions. Physical working condition appear to have both positive and neither positive nor negative impact on the job performance of operational employees. However, there is an unclear idea about physical working conditions and job performance. It seems that there is gap in empirical evidence, especially in the Sri Lankan context with regard to the impact of physical working condition on job performance in the garment industry of operational employees. Therefore, the problem addressed in this study is: *Is there an impact of physical working condition on employee job performance of large scale garment factory in Galle district?*

Research Framework

The relationship among the variable are depicted clearly in the theoretical framework, which guide this current research to find out the possible relationship among the operational employees' job performance and physical working condition. The hypothesis tests by the current research. The conceptual framework of the study illustrates in Figure 01. According to conceptual framework independent variable of this study is physical working condition and dependent variable of this study is job performance. Furthermore, Independent variable consists with temperature, air quality, lighting and acoustic conditions.

Figure 01: Conceptual Framework



Difference scholars have been identified different way of relationship between physical working condition and employee performance from published research articles. Hence physical working environment and its design and layout can affect employee behavior in the workplace. According to Brill (1992) who is estimates that improvements in the physical design of the workplace may result in a 5-10 per cent increase in employee productivity. Stallworth and Kleiner (1996) argued that increasingly an organization's physical working condition is designed around employee needs in order to maximize productivity and satisfaction.

In another study, Kamalrulzaman, et al. (2011) said that, office employees spend a great deal of time in buildings where the comfort level of the physical environment will influence their work performance and help to develop a healthy working environment (By having a better office workplace, the employees will work better, produce better work and enhance their

work performance). Furthermore, the positive relationship between job performance and physical working condition is established by the research finding of Brill (1992), Smith (1991), Stallworth and Kleiner (1996), Kamalrulzaman et al. (2011). According to above literature, the following hypotheses are derived in this study.

H1: Lighting as a one of physical working conditions is positively related with operational employees' job performance in large garment factory in Galle district.

H2: Noise as a one of physical working conditions is positively related with operational employees' job performance in large garment factory in Galle district.

H3: Temperature as a one of physical working conditions is positively related with operational employees' job performance in large garment factory in Galle district.

H4: Air Quality as a one of physical working conditions is positively related with operational employees' job performance in large garment factory in Galle district.

Method

Study Design

The objective of the study is to find out the impact of physical working condition on the job performance of the operational employees in garment industry in Galle district. Hence, this research aims to establish the relationship between these independent variables and the dependent variable. Therefore, the type of investigation of this study was experimental. The study was conducted in natural environment. This research took over three weeks for the collection of data and otherwise the data for the research were collected within a particular time period and there was no subsequent extension. Hence the research was cross sectional in nature and purely based on primary data.

Validity and Reliability of the Instrument

The inter item consistency reliability was examined with Cronbach's Alpha test. The results of Cronbach's Alpha were given in Table 01, which implies that the instrument employed in this study was reliable.

Table 01: Cronbach's Alpha Coefficients

Instrument	Cronbach's Alpha
Employee performance	0.777
Physical working condition (overall)	0.944
Lighting	0.737
Temperature	0.711
Air quality	0.741
Noise	0.770

The content validity of measuring instrument is the degree to which a measurement device appears to accurately measure variables. So, the content validity of the instrument was ensured by the conceptualization and operationalization of the variable on literature and indirectly by the high internal consistency reliability of the instrument as denoted by Alpha.

The construct validity of the variables of the study was ensured by the fact that the correlation and regression analysis support the hypotheses formulated linking the relationship between the independent variable and the dependent variable.

Measures

The independent and dependent variable were measured using structural questionnaire with five point Likert type scales which were completed by the operational employees according to their experience. Job performance, temperature, air quality, lighting and acoustic conditions were measured using 1-5 scale (1-strongly disagree and 5- strongly agree).

Techniques of Data Analysis

The data collected from the 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 and multivariate analyses.

Result

To investigate the responses for dependent and independent variable of the operational employees of garment factory, univariate analysis was used. The result of the univariate analysis is given in Table 02.

Table 02: Descriptive Statistics

	PWC	JP
Valid	100	100
Missing	0	0
Mean	1.58	1.74
Median	1.58	1.71
Std. Deviation	.24	1.00
Variance	.059	.602
Skewness	.167	.362
Std. Error of Skewness	.241	.759
Kurtosis	-1.2	.241
Std. Error of Kurtosis	.48	.280
Minimum	1.25	.478
Maximum	2.00	1.00

As indicated by Table 03 the mean value of the distribution of PWC was 1.5 and job performance as 1.74. The skewness measure the asymmetry of distribution. Also, Kurtosis measure the extent to which observation cluster around a central point. The Skewness of PWC and job performance of the distribution were 0.167 and 0.362 which indicated that the data recorded for the physical working condition and job performance are approximately normally distributed.

Using the Pearson's product moment correlation with one tailed test of significance, the correlation analysis was made to investigate any relationship between physical working condition and employees' job performance.

Table 3: Correlation between physical working condition and employees' job performance

Pearson Correlation	0.979**
Sig. (1-tailed)	0.000

** . Correlation is significant at the 0.01 level (1-tailed).

Pearson correlation between physical working condition and job performance of operational employees is 0.979, which are positive. It shows that there is a positive relationship between physical working condition and job performance of the operational employees in garment Industry. Also, the found relationship as correlation is statistically significant at 0.01 levels (1-tailed).

Table 04: Correlation between physical working condition and employees' job performance

Variable	Pearson Correlation	Sig. (1-tailed)
Lighting	0.962**	0.000
Noise	0.911**	0.000
Temperature	0.964**	0.000
Air quality	0.976**	0.000

** . Correlation is significant at the 0.01 level (1-tailed).

According to Table 04, Pearson correlation between every dimension of physical working condition and job performance of operational employees are more than 0.5, which are positive. It shows that there is a positive relationship between every dimension of physical working condition (Lighting, temperature, and noise and air quality) and job performance of the operational employees in garment Industry. Also, the found relationship as correlation is statistically significant at 0.01 levels (1-tailed).

As a multivariate analysis, the multiple regression analysis was in order to investigate the simultaneous impacts of all the independent variables on the dependent variable. The result of regression the four independent variables (Air Quality, Noise, Temperature and, Lighting condition) against the dependent variable (Job performance) are show in the Table 03.

Table 5: Result of the multiple regression analysis

Multiple R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.F
0.981a	0.962	0.960	0.12057	593.381	.000a

The square of multiple R is 0.962, which indicate that 96.2% of the variation in job performance is explained by the four independent variables in jointly. The F value is 593.381, which is significantly at 1% ($p=0.000$), which suggest that the four independent variable have significantly explained 96% of the variation in the job performance.

Discussion and Conclusion

This study considered the relationship among noise, temperature, air quality and lighting condition and employee performance. For this researcher used correlation analysis and it indicates strong positive relationship among every independent (noise, temperature, air quality and lighting condition) and dependent variables (job performance). Those finding indicate that organization can enhance their operational employees' performance by increasing physical working condition within organization.

The found positive relationship between job performance and physical working condition is established by the research finding of Brill (1992), Smith (1991), Stallworth and Kleiner (1996), Kamalrulzaman et al. (2011).

According to, the results of Pearson's product Movement Correlation analysis between physical working condition and job performance operational employees in garment industry, the correlation coefficients was 0.979 which was significant at 1% ($p=0.000$). As per results of the simple regression analysis between the workplace physical working condition and job performance, the regression coefficient (b) was 0.979, which was significant at 1% ($\text{Sig.T}=0.000$).

Therefore, according to the results of both tests, researcher find that there is a positive relationship between workplace physical working condition and job performance of operational employees in garment industry.

Furthermore, according to the result of multiple regression analysis the square of multiple R is 0.962, which indicate that 96.2% of the variation in job performance is explained by the four independent variables in jointly.

Final result of the study reveals that workplace noise, temperature, Air quality and lighting condition are positively impact on operational employees' job performance. In conclusion, physical working condition of the organization positively impact on their employees' job performance.

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