

**The employee green inputs and its impact on green job performance of operational level employees:  
A study based on selected leading computer hardware company in Colombo district**

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**1. Introduction**

Within the contemporary business and Human Resource Management (HRM) context of Sri Lanka, enterprises struggle to persist and succeed in the highly volatile and dynamic business environment by adopting most innovative business and environmental trends. Due to rapid development and fluctuations in the natural environment, organizations have to adopt more sustainable eco-friendly business and Human Resource Management practices and accomplishments. According to worldwide consensus, it has initiated to appear around the need for proactive ecological management. Moreover, modern society is functioning in a world where the environment is struggling to persist. Messy weather patterns and natural disasters across the globe emphasize the necessity of employing eco-friendly and sustainable Green Human Resource Management practices.

According to Prasad (2013), the term green human resources management is used to denote the involvement of organization towards HR policies and practices that are aligned with comprehensive corporate ecological schedule of protection and preservation of natural resources. Waste management and energy management, reduced carbon emission and Corporate Social Responsibility (CSR) activities to protect the environment, online job advertising-recruitment and selection, recyclable documentation are the research areas in existing green human resource management practice.

Employees need positive environmental attitudes and competencies, which are important to improve employee environmental performance (Opatha and Arulrajah, 2014). Zoogah (2011) stated that environmental training improves the environmental knowledge, skills and attitude of employees. Environmental attitude was stated as mindset of employees towards environmental issues. (Heberlein, 1981: Kaiser et al., 1999). Therefore, organizations should improve the cognitive, affective and behavioral aspects of environmental attitude to the employees.

Green results refer to outcomes, which are environmentally friendly. Alternatively, it can be defined as the extent to which the particular employee has produced green outcomes (Opatha and Arulrajah, 2014). Therefore, “employee green performance of job can be defined as the extent to which a particular employee has engaged in behaviors (actions and activities) and produced results in respect of greening during a particular period of time” (Opatha, 2013, Opatha and Arulrajah, 2014).

However, the concept of green human resources management is one of the important research areas that needs further research and explorations. When we observe the contemporary business and human resource management context in Sri Lanka, they recognize the importance of green human resource management and they implement green human resource management practices with eco-friendly environment practices simultaneously.

### **Problem of the study**

Despite the fact that there is a growing interest among academia and practitioners in respect to green aspects of Human Resource Management, there is a considerable gap in the theoretical as well as empirical knowledge about environmental related job performance of an employee in an organization. A systematic review of literature reveals that less attention has been paid in valuing, developing, measuring and making use of employee green performance of job by the organizations even though this phenomenon exists in practice. At the same time, no or very little research has focused on employee green performance of jobs at the individual level within an organization. We believe that this is a serious omission with respect to the research area.

Therefore, the research problem addressed under this study is to investigate the extent to which green attitude and green competence affect green job performance of operational level employees a leading computer hardware company in Western province. Having considered the above literature and research problem, research questions can be derived to make the problem straightforward. “What is the aggregate effect of employee green practices on green job performance of operational level employees in the selected leading computer hardware company?”

### **Objectives of the study**

After considering the above literature and research problem, subsequent research objectives can be derived to address the research problems.

1. To describe the impact of green attitudes on green job performance of operational level employees in the selected leading computer hardware company.
2. To describe the impact of green competencies on green job performance of operational level employees in the selected leading computer hardware company.
3. To find the aggregate effect of employee green inputs on green job performance of operational level employees in the selected leading computer hardware company.

The main objective is to find the impact of employee’s green inputs on operational level employees green job performance of the selected leading computer hardware company in Colombo district.

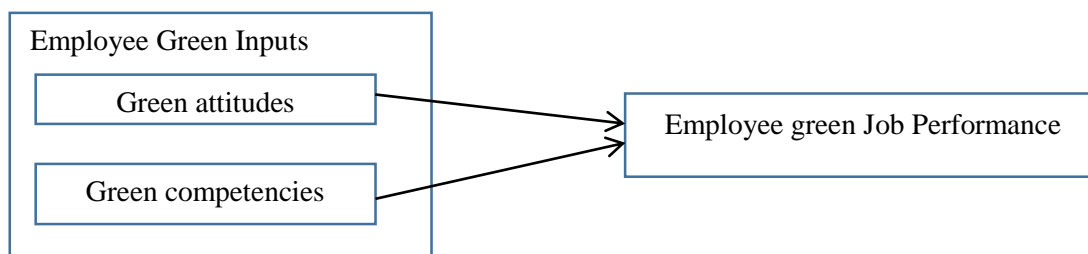
## **2. Literature review**

Green HRM is the side of HRM that is concerned with transforming normal employees into green employees so as to achieve environmental goals of the organization and finally to make a significant contribution to environment sustainability (Opatha and Arulrajah, 2014). The purpose of green HRM is to create, enhance and retain greening within employees of the organization so that he or she gives maximum contribution to the organization (Opatha and Arulrajah, 2014). Successful performance of green HRM functions will lead to create green employee inputs (such as green attitudes and green competencies) and employee green performance of job (green behaviors and green results). Green innovations and green outcomes are green results which result in creating a new concept called employee green performance of job (Opatha and Arulrajah, 2014). At the same time, employee green performance of job can be measured using the above-mentioned key dimensions and elements under each key dimension. The summation of green performance of job done by all employees in the organization creates green organizational performance.

## **3. Research framework and Hypotheses development**

The following figure illustrates independent variables of research (green attitudes and green competencies) and dependent variable includes employee green job performance.

Figure 1: Conceptual framework



Source: Opatha and Arulrajah, 2019

### Hypotheses are

**Hypothesis 1(H1):** “There is an impact of green attitude on green job performance of operational level employees’ in the selected leading computer hardware company in Colombo district”.

**Hypothesis 2(H2):** “There is an impact of green competencies on green job performance of operational level employees’ in the selected leading computer hardware company in Colombo district”.

**Hypothesis 3(H3):** “Green attitude and green competence will jointly explain a significant percentage of the variability of job performance of operational level employees of the selected leading computer hardware company.”

### 4. Methods

The researcher has selected operational level employees in the leading computer hardware company in Colombo district as the population of this research. The total population of the research consists of 130 managerial level employees. The researchers used Krejcie and Morgan (1970) sample size determination table to select the sample of 97 respondents. Questionnaire consisted of question statements with five-point Likert scale.

The questions for measuring green attitudes were abstracted from illustration of right attitude of greening developed by Opatha and Arulrajah in 2014. It contained 21 questions which measured various aspects of green attitudes of operational level employees. Dimensions of green attitudes included beliefs about greening, reactions to green attitude and behavior towards greening. The questions for measuring green competencies were also abstracted from standard questionnaire developed by Gendall, Smith, and Russell (1995), Shen and Saijo (2008) and Fraj and Martinez (2007). It contained 14 questions, which measured various aspects of green competencies of operational level employees. Dimensions of green competencies included attitudes and inclination towards greener activities and green knowledge and skills accumulated through previous experience.

The questions for measuring green job performance were also abstracted from standard questionnaire developed by Opatha, (2016). It contained 29 questions, which measured various aspects of green job performance of operational level employees. Dimensions of green job performance included green personal behavior, green work behavior, green organizational citizenship behavior, green interpersonal citizenship behavior and green official behavior.

## Validity and reliability

Table 1: Cronbach coefficients of variables

	Instrument	Cronbach's Alpha
1.	Green attitudes	0.813
2	Green competencies	0.819
3	Green job performance	0.811

## 5. Results

The frequency distribution analysis was made individually for the variables of green attitudes, green competencies and green job performance of operational level employees in selected leading computer Hardware Company in Colombo District.

The standard deviation associated with the three components of green attitudes, green competencies and green job performance are 0.10965, 0.18004 and 0.17039 respectively, and that means that most of the numbers are close to average. The mean value associated with green attitude is 4.0471 and that means that center of the data is closer to four. The mean value associated with green competencies is 4.1281 and that means that center of the data is closer to four. The mean value associated with green job performance is 3.4849 and that means that center of the data is closer to three.

Table 2: The relationship of green attitude, green competencies with employee green job performance

	Green attitudes	Green competencies
Correlation	.779**	.784**
Sig.(1=tailed)	.000	.000

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

Pearson correlation between the two variables of operational level employees is 0.779, this shows that there is a positive relationship between green attitudes and green job performance. The found relationship is statistically significant at 0.001 level. (1-tailed). Thus, there is statistical evidence to claim that green attitudes and green job performance are positively related.

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### *Multivariate Analysis*

The square of the multiple R is 0.780 (green attitude and green competencies), which indicates that 60.8% of the variation in the employee green job performance is explained by the two independent variable namely green attitude and green competencies. The F value is 72.134, which is significantly at 1% ( $p=0.000$ ). This suggested that two independent variables have significantly explained 61% of variation in the operational level employee green job performance. The R square value of table is 0.608 and it indicates that 0.608 (61%) and how much the dependent variable accounted for the independent variable. Therefore, managerial employees' performance accounted in green inputs (green attitude and green competencies) from 61%.

Table 3: Results of multiple regression analysis

	Multiple R	R square	Adjusted R square	Standard error of the estimate	F	Sig. F
Green attitudes and green competencies	0.780	0.608	0.600	0.10782	72.134	0.000

The strength of the influence that each of the independent variable (green attitude and green competencies) had on the dependent variable (employee green job performance) were determined by the multi regression coefficient of the independent variables. The influence of each independent variable is shown in the table below.

Table 4: Influence of the independent variables on employee green job performance

Independent variables	Standard Beta	Standard error of Beta	T	Sig t
Green attitude	0.780	0.100	12.011	0.000
Green competencies	0.026	0.061	0.395	0.000

As shown in the above table, all independent variables (green attitude and green competencies) have strong significant effect on the dependent variable of employee green job performance ( $p > 0.005$ ) of operational level employees of selected leading computer hardware company in the Colombo District.

## 6. Findings, Discussion and Conclusion

It was found that there is a positive relationship between green attitudes and green job performance of operational level employees in a leading computer hardware company in the Colombo District. The correlation between these variables was 0.779, which is significant at 0.000 level. 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, green attitudes was found to have a positive impact on green job performance with the strength of b value of 0. 779. The multiple regression analysis also revealed that green attitude had strong effect on green job performance (the Beta value of 0.78 at Sig. t = 0.000). Hence, green attitudes were found to be a predictor of green job performance.

It was found that there is a positive relationship between green competencies and green job performance of operational level employees in a leading computer hardware company in the Colombo District. The correlation between these variables was 0.784., which is significant at 0.000 level. 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, green competencies were found to have a positive impact on green job performance with the strength of b value of 0. 784. The multiple regression analysis also revealed that green competencies had a strong effect on green job performance (the Beta value of 0.026 at Sig. t = 0.000). Hence, green competencies were found to be a predictor of green job performance.

Based on the findings of the above research study, the following recommendations were made which could be extremely important to improve employee green job performance on operational level employees in the selected leading computer hardware company in the Colombo District. Employee green inputs (green

attitudes and green competencies) on operational level employees' green job performance is an important phenomenon that contributes to the overall success and progress of the success of an organization. With the findings of the research, it is obvious that there is a significant impact of employee green inputs (green attitudes and green competencies) on operational level employee green job performance.

According to Kirkwood and Walton (2014), individual and organizational green performance could be enhanced by introducing recycling programs, having environmental policies in place, reusing, waste minimization, using energy conservation, minimizing water consumption and carbon dioxide generation. Apart from them, they suggested that having a supply chain committed to green issues and environment management system, conducting life cycle analysis and energy auditing are important for energy consumption and are crucial in achieving the highest green job and organizational performance.

Therefore, as leading computer hardware companies in Colombo District, organizations can consider the above mentioned green HRM practices to improve individual and organizational green job performance. By following the above-mentioned green HRM practices, organization will be able to increase employee green attitudes and green competencies that ultimately resulted in improving individual and organizational green job performance.

## **7. Limitation and Future Research Suggestions**

The study is limited to investigate the influence of green attitude and green competence on the green job performance of the operational level employees in a leading computer hardware company in Western Province-Sri Lanka. There may be other factors also determining the green job performance of operational level employees in Western province. This is one limitation of the research. There is an assumption: all variables affecting the green job performance of the employees are constant or not effect except the employee green inputs. (Green attitude and green competence) Therefore, this research study was limited to investigate the employee green inputs and job performance of the sample employees. Another important limitation was that this analysis was a cross section in nature. Additional research is suggested to carry out longitudinal in order to evaluate the impact of the variables over time. Longitudinal studies using quantitative and qualitative techniques are required in order to understand the changes in the three variables over time. The cross-section leads to avoiding the correct perception of the employees. Therefore, the real feelings of the respondents may be deviated on the cross-sectional time. Methodological limitations may be there. The researcher used the scientific methods to follow the research. However, according to the nature of the research phenomena, qualitative approach should be used. Methodology of the research may de deviating real feelings of the employees under the research concepts.

The findings and the conclusions of the research are based on the above limitations and the constraints. Due to time constraints, researchers used small sample and for general ability of the results, it can be proposed that the present conceptual model can be tested with larger sample sizes. At the same time, researchers used only two independent variables (green attitudes and green competencies) to find out the impact of them on green job performance and there may be other factors affecting green job performance, therefore future researchers can investigate those variables also in their research studies. Apart from them, this research study was conducted at an individual employee level and it can be suggested that future researches can be conducted at organizational and institutional levels also.

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