A STUDY ON EMPLOYEES' OPINION TOWARDS GREEN HUMAN RESOURCE MANAGEMENT PRACTICES IN INFOSYS - AT BANGALORE

N.SATHIYA ∗ **J.UMALATHA** ∗∗ **C.SARAVANASELVI** ∗∗∗

INTRODUCTION:

The Green HRM is necessary in the current 21st Century on a daily basis, it is reported that because of the excess consumption of natural resources as a raw material by the industries and other commercial organization there is tremendous pressure on the natural resources of planet Earth. The situation is so alarming that the scientist and the environmentalist are discussing the issues of ecological imbalances and the bio-diversity. In every International Conference on environment, the nations are discussing about the carbon credits, global warming and the changes in the climate resulting into earthquakes, frequent floods and vanishing of certain species and animals.

In the environmental literature, the concept of green management for sustainable development has various definitions; all of which generally, seek to explain the need for balance between industrial growth for wealth creation and safeguarding the natural environment so that the future generations may thrive (Daily & Huang, 2001). Nevertheless, the issue of how an individual organization or entire society achieves sustainability from the green management movement is still debatable and unclear. Thus, research on how business may structure their facilities to enhance for sustainability through green management initiatives seems paramount.

Statement of the Problem

These wastes end up polluting the environment and wasting resources, hence the operations costly and unsustainable. The extent of environmental degradation

∗ *Faculty of Commerce, Sona College of Arts and Science, Salem-5, Tamil Nadu*

∗∗ *Ph.D Research Scholar, PG & Research Department of Commerce, Sri Vijay Vidyalaya College of Arts and Science, Nallampaali, Dharmapuri, Tamil Nadu.*

∗∗∗ *Ph.D Research Scholar, PG & Research Department of Commerce, Sri Vijay Vidyalaya College of Arts and Science, Nallampaali, Dharmapuri, Tamil Nadu.*

in Bangalore is evidenced by statistical data released by NUMBEO, data shows that Air quality is 38.75%, drinking water quality is 41.25, garbage disposal satisfaction is 38%, quality of greens and parks is 53% and towns which are comfortable to spend time in is 47.5% (NUMBEO,2016). It is the mandate of HR being the custodian of all employees to initiate best practices to bring everybody onboard. Despite environmental issues being pertinent, very few organizations have established green oriented training programs for ensuring environmentally oriented workforce whose operations should be appraised and monitored by well-established performance management systems. Despite human resource and environmental studies worldwide, very few studies have been conducted in Bangalore in this area. It is against this backdrop that the current study was necessary. The study is therefore, intended to establish the influence of Green Human Resource practices on environmental sustainability of Infosys, Bangalore.

Objectives of the Study

The general objective of the study was to establish the influence of Green Human Resource practices on environmental sustainability at Infosys, Bangalore.

The specific objectives of the study were-

[1] To establish the relationship between green employee sourcing and environmental sustainability at Infosys, Bangalore

[2] To determine the relationship between green occupational health and safety and environmental sustainability at Infosys, Bangalore

[3] To analyze the relationship between green employee training and development and environmental sustainability at Infosys, Bangalore and

[4] To establish the relationship between Green performance management and environmental sustainability at Infosys, Bangalore

Research Hypotheses

Ho1: Green employee training and development has no significant influence on environmental sustainability at Infosys, Bangalore.

Ho2: Green performance management has no significant influence on environmental sustainability at Infosys, Bangalore.

Review of Studies

The independent and dependent variables were broken down into indicators. The indicators on green human resource management practices and environmental sustainability are discussed in this subsection.

Green Employee Sourcing and Environmental Sustainability

According to Anthony (1993), sustainable development issues must be integrated into the recruitment process. This involves monitoring the long-term competency requirements for the company, providing new employees with information about sustainable development policies and commitments, using recruitment procedures that support the equitable representation of applicants and recruits in terms of gender, age, racial and ethnic groups, sexual orientation, disabled people and other relevant groups (Brio, 2007).

Green Occupational Health and Safety Management and Environmental Sustainability

The green health and safety management is really beyond the scope of traditional health and safety management function of HRM. It really includes the traditional health and safety management and some more aspects of environmental management of an organization. The key role of green health and safety management is to ensure a green workplace for all. Green workplace is defined as a workplace that is environmentally sensitive, resource efficient and socially responsible (Phillips, 2007). As reported by (Phillips, 2007; Stringer, 2009). In order to improve health and safety of employees, some companies have really created strategies to maintain a conducive environment to prevent various health problems. These aspects can be considered as some examples for green health and safety management practices of the organizations. Some proactive companies in environmental management found that management of environment helps in improvements in the health of employees and local communities, enhancing the image of the company as a desirable employer and corporate citizen (Stringer, 2009).

Green Employee Training and Development and Environmental Sustainability

Denton (1999) reports that Green orientation programs for the newly hired employees should be an integral part of the training and development process. They should inform the employees about the green procedures and policies including the vision/mission statement of the company the sustainability-oriented benefits, company-wide initiatives like reducing greenhouse gases, creating green products etc. According to Denton (1999) Training is a key intervention to manage waste in terms of both prevention and reduction, and occurs through organizations training teams of front-line employees to produce a waste analysis of their work areas. Wehrmeyer, and Vicker staff (1997) reports that training methods like Job rotation provides a useful way to train green executives or future board members in EM, and is seen as a crucial part of successful environmental programs.

Performance Management System (GPMS) and Environmental Sustainability

According to Wehrmeyer (1996), Performance management (PM) in environmental management (EM) presents the challenges of how to measure environmental performance standards across different units of the firm, and gaining useful data on the environmental performance of managers. One way in which PM systems can be successfully initiated in an organization is by linking the performance evaluations to the job descriptions mentioning the specific green goals and tasks. For instance, Performance Appraisal (PA) can cover such topics as environmental incidents, usage of environmental responsibilities, reducing carbon emissions and the communication of environmental concerns and policy (Wehrmeyer, 1996). HR systems such as e-HR can be introduced to be able to help management and employees track their own carbon emissions (Beechinor, 2007). There is also a need to bridge any differences in corporate rhetoric and action, and develop HR systems in PA and reward so that environmental management initiatives are not seen simply as a management fad (Milliman & Clai, 1996).

METHODS:

Research Design

Kothari (2004) describe a research design as a plan and a structure of investigation conceive to find answers to research questions. This study adopted descriptive research design that utilized both quantitative and qualitative approaches. It was a case study of Infosys, Bangalore.

Population of the Study

A population can be defined as the total collection of elements about which inference is made and refers to all possible cases, which are of interest for the study or the entire group of individuals under consideration in any field of inquiry and have common attributes (Mugenda & Mugenda, 2003). The target population constituted all permanent employees working in Infosys, Bangalore which constituted 275 employees.

Sample Size and Sampling Procedure

The following formula developed by Yamane (1967) was used to determine the sample size for the study;

$n = N/ (1+N (e2))$

$n = 275 / (1+275 (0.0052)) = 163$

This yields a sample size of 'n' 163

Table 1 - Sample Distribution.

No	Department	Population(N)	Sample(n)	Proportion (%)
1.	Finance	27	16	9.81
2.	Marketing	15	9	5.45
3.	IT	162	96	58.91
4.	Operation Management	58	35	21.09
5.	Human Resource	13	7	4.73
	Total	275	163	100

The employees were sub divided categorically according to the departments using stratified sampling. The number of employees sampled in every stratum (department) was determined proportionally. 163 employees were drawn from

different department including production, human resource, finance, purchasing and supplies and marketing departments as shown in table 1. The sampled employees were then selected using simple random sampling to get representatives from every stratum.

Data Collection Instrument and Data Procedure

Primary data was collected using structured questionnaires. Questionnaires. The questionnaires items were developed to collect data on each research indicator in line with specific research objectives. The questionnaire was in form of likert scale where respondents evaluated different statement about independent and dependent variable. A scale of 1-5 was used. The researcher to all the respondents administered the questionnaires. The respondents were given one week to fill the questionnaires after which they were collected for analysis.

Pilot Test

The information generated during pilot study was used for Testing reliability and Validity of research instrument used in the study. Cronbach alpha coefficient was computed and compared with the threshold of 0.7. The calculated Cronbach alpha coefficient was 0.8 which is above the threshold of 0.7 hence the research instrument was reliable enough. Validity test on the other hand was conducted through brainstorming with colleagues in human resource management discipline as well as consulting research experts and experienced scholars from the university.

Data Processing and Data Analysis

The collected data was first checked for completeness and comprehensibility. The data was then coded and analyzed using the SPSS. Both descriptive analysis (mean, frequencies and standard deviation) and inferential analysis (Pearson correlation) were carried out. The descriptive analysis was used to explain the aspects of green human resource management and environmental sustainability. Correlation analysis was used to test the relationship between green human resource management practices and environmental sustainability. The research findings were then presented using frequencies; percentages displayed in tables whose interpretation will facilitate conclusions and

recommendations.

This section should contain the description of the context and setting of the study, the research design, the explanation of the research methods and procedures used to carry out the research, what data and materials were used and how the data was analysed. Generally, it should offer enough information for the reader to understand and reproduce the research.

RESULTS AND DISCUSSION:

Response Rate

Out of the 163 questionnaires issued, 114 were returned and useable for the study accounting for accounting for 70% response rate. This percentage is adequate for data analysis as agued out by Babbie (1973) and Kidder (1981) who held that response rate of 50% is acceptable in social research surveys.

Descriptive Data Analysis

The aim of the descriptive statistics was to describe the general distributional properties of the data, to identify any unusual observations that may cause problems for later analysis to be carried out on the data.

The results in Table 2 indicates that majority (66.2%) of the respondents had worked in the organization for between 6 to 15 years indicating that there is high staff turnover in the organization. The results also indicate that most (48.2%) of the respondents were Professionals. It is also clear from the results that majority (60.5%) of the respondents were male while 39.5% were female implying that the organization human resource department has met the one third gender rule stipulated in the constitution .

Table 2. -Demographic Information of the Respondents.

Variables	Category(in years)	Frequency	Percentage (%)
Work Experience	Up to 5	15	13.8
	6 to 10	33	31.2
	11 to 15	39	35
	Above 15	27	20
Educational Qualification	Technical	13	11.4
	Professional	55	48.2
	Graduates	46	40.3
Gender	Male	69	60.5
	Female	45	39.5

Table 3. -Summary of correlation analysis. LL

		GES	GOH	GET	GPM	NEMA	ES
	Pearson Correlation	1	.151	.093	-.077	-.058	.266
GES	Sig(2-taied)		.187	.079	.856	.892	.064
	N	114	114	114	114	114	114
	Pearson Correlation	.151	1	-.399	-.049	.042	.471[**]
GOH	Sig(2-taied)	.187		.482	.909	.922	.009
	N	114	114	114	114	114	114
	Pearson Correlation	.093	-.399	1	.527	.075	.423
GET	Sig(2-taied)	.079	.482		.179	.859	.023
	N	114	114	114	114	114	114
	Pearson Correlation	-.077	-.049	.527	1	-.389	-.373
GPM	Sig(2-taied)	.856	.909	.179		.341	.007
	N	114	114	114	114	114	114
	Pearson Correlation	-.058	.042	.075	.389	1	.735[**]
NEMA	Sig(2-taied)	.892	.922	.859	.341		.001
	N	114	114	114	114	114	114
	Pearson Correlation	.266	.471[**]	.423	-.373[**]	.735[**]	1
ES	Sig(2-taied)	.064	.009	.023	.007	.001	
	N	114	114	114	114	114	114

**.correlation is significant at the 0.01 level (2-tailed).Independent Variables: Green Employee sourcing (GES), Green Occupational Health (GOH), Green Employee Training (GET), Green Performance Management (GPM), and Intervening Variable: National Environmental Management Authority (NEMA).Dependent variable: Environmental Sustainability (ES)

Correlation Analysis

The results in Table 3 show the Pearson's correlation between Green Human Resource Practices variables and environmental sustainability of at Infosys in Bangalore. Green Employee Sourcing was weakly positively correlated with environmental sustainability but the relationship was insignificant since p> 0.05 (r=0.266, p= 0.064, ? = 0.01) while green employee training was moderately positively correlated with the environmental sustainability (r= 0.423, p=0.023, ? = 0.01) but insignificant since p>0.05. Green performance management system was significant and negatively correlated with environmental sustainability (r= - 0.373, p= 0.007, ? = 0.01). Green occupational health and safety was significant and positively.

Hypothesis Testing

Ho1 Green employee training and development has no significant influence on environmental sustainability at Infosys, Bangalore.

The study also sought to test whether Green employee training and development does not significantly affect environmental sustainability at Infosys, Bangalore as shown in table 4

Table 4. -Pared sample t-test Green Employee Training - Environmental Sustainability.

| | | | Paired Differences | | | | | | |
| | | | | | 95% Confidence Interval of the Difference | | t | df | Sig. (2-tailed) |
		Mea	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	GET-ES	.3023	.3788985	.0466392	.2092361	.3955258	6.483	113	.0560

According to table 4 the significance was 0.560 with a value of 6.483. The level of significance was higher than 0.05 and this means that green employee training shows no statistically significant relationship with environmental sustainability. Hence, the null hypothesis was accepted. Hence, general environmental training is not critical to ensuring environmental sustainability.

Ho2 Green performance management has no significant influence on environmental sustainability at Infosys, Bangalore.

Finally, the study sought to test whether Green performance management does significantly influence environmental sustainability at Infosys, Bangalore as shown in table 5.

Table 5. - Pared sample t-test Green Performance Management - environmental sustainability.

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 2	GPM- ES	-.014069	.3274994	.0403124	-.0945787	.0664401	-.349	113	.028

Finally, the results on the test of this hypothesis found that there was a significant association between Green performance management and the environmental sustainability at Infosys, Bangalore. . This is evidenced by a significance level of 0.028 that was lower than 0.05 hence the null hypothesis was rejected suggesting that that green performance management was crucial to the success of the environmental sustainability.

CONCLUSION(S):

Green employee sourcing has minor influence on environmental sustainability. When Management of Infosys insisted on recruiting and selecting employees who are eco-concerned, the company was able to improve its environmental sustainability. This is evidenced by positive correlation, which was not statistically significant, and the acceptance of null hypothesis.

Green occupational health has major influence on environmental sustainability. When the Firm implemented green occupational health and safety programs, the firm was able to improve its environmental sustainability to a great deal as shown by moderately positive correlation, which was statistically significant. The null hypothesis was also rejected showing green occupational health has a major influence on environmental sustainability of Infosys in Bangalore.

Green employee training has minor influence on environmental sustainability: When the firm offered training and development programs on green aspects of

the organization and environmental consciousness, it was able to improve its environmental sustainability. This is evidence by positive correlation coefficient that was not statistically significant and the acceptance of null hypothesis suggesting that the trainings offered where not specific enough to equip employees to act as eco-friendly champions and environmental super stars.

Green Performance management has a major influence on environmental sustainability: Improving Green performance management programs to be biased towards environmental could promise environmental sustainability at Infosys in Bangalore. This is evidenced by significant relationship between green performance management and environmental sustainability.

REFERENCES:

1. ALFRED, A. M., & ADAM, R. F. (2009). Green management matters regardless.

i.   The Academy of Management Perspectives, 23(3), 17-26.

2. ANTHONY, S., (1993), Environmental Training Needs Analysis, Training Officer, 29(9).

3. BABIE, E., R., (1971), Survey research methods. Wadsworth, Belmont, USA.

4. BEECHINOR, F., (2007), How to reduce your carbon footprint, People Mgmt., 23rd August.

5. BRIO, J. A., FERNANDEZ, E., & JUNQUERA, B., (2007), Management and employee involvement in achieving an environmental action-based competitive advantage: An empirical study, The Inter. J. of H R M, 18(4).

6. DENTON, D. K., (1999) Employee involvement, pollution control and pieces to the DIMBA, B., A., & PETER K., O., (2009). "The effect of strategic human resource management practices on performance of manufacturing multinational companies in Kenya: Moderating role of employee cultural orientations and mediating role of employee motivation."

7.   KOTHARI, C. R. (2004). Research Methodology-Methods and Techniques. New Delhi: New Age International (P) Limited Publishers.

8.   KIDDER, L. H, (1981), Rerearch methods in social relations. Rinehart & Winstone. New-York, USA.

9.   MILLIMAN, J. & CLAIR, J., (1996), Best Environmental HRM Practices in the US, in Wehrmeyer, W. (ed) (1996), op cit., 49- 73. Prasad, R. S (2013). Green HRM- Partner in suitable competitive growth. Apeejay Journal of Management Sciences and Technology, 1(1), 15-18.

10. MUGENDA& MUGEDA(2003). Green HRM: People management commitment to environmental sustainability. Research Journal of Recent Sciences, ISSN, 2277, 2502.

11. STRINGER, L. (2009). The Green Workplace: Sustainable Strategies that Benefit Employees, the Environment, and the Bottom Line. New York: Palgrave Macmillan.