

GREEN HRM PRACTICES AND THEIR INFLUENCE ON EMPLOYEE ENVIRONMENTAL BEHAVIOR: A STUDY IN CHENNAI-BASED IT COMPANIES

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Abstract

Environmental sustainability has become a strategic priority for modern organizations, especially in the IT sector where a strong corporate reputation and social responsibility significantly influence organizational success. This study investigates the influence of Green human resource management (Green HRM) practices on employee environmental behavior in Chennai-based IT organizations. The research focuses on eight key independent variables—Green recruitment and selection, Green training and development, Green performance appraisal, Green compensation and reward system, Green employee engagement initiatives, Green organizational culture, Green workplace infrastructure and facilities, and Green policies and environmental compliance practices. Employee Green environmental behavior serves as the dependent variable. Primary data were collected from 300 IT employees using a structured questionnaire based on a five-point likert scale. Statistical tools such as descriptive analysis, Pearson correlation, and multiple regression were used. The results revealed that all eight Green HRM practices show significant positive correlations with employee environmental behavior. Regression analysis indicates that Green organizational culture, Green training and development, and Green policies are the strongest predictors. The findings highlight the critical role of Green HRM practices in fostering environmentally responsible behavior among employees. The study provides practical insights for IT organizations aiming to strengthen sustainability performance and promote Green workplace culture.

Keywords: Green HRM, Employee Environmental Behavior, Sustainability, IT Organizations, Chennai.

INTRODUCTION

Environmental protection has become a global concern, and organizations across different industries are increasingly adopting sustainable practices to reduce their ecological footprint. Among these practices, Green human resource management (Green HRM) has emerged as a strategic approach that integrates environmental management principles into human resource policies and processes. Green HRM ensures that employees are recruited, trained, evaluated, rewarded, and engaged in ways that align with the organization's sustainability objectives. In the context of the IT industry, which is known for its resource-intensive operations and rapid expansion, Green HRM plays a vital role in fostering awareness, minimizing waste, and promoting energy-efficient practices.

Chennai, a major IT hub in India, hosts several multinational and domestic IT companies that have begun implementing Green initiatives to contribute to environmental sustainability. These organizations aim to meet global standards, reduce operational costs, and enhance corporate social responsibility through eco-friendly workplace practices. However, the effectiveness of these initiatives largely depends on employees' willingness to adopt environmentally responsible behaviors. This makes employee Green behavior an essential outcome variable for assessing the success of Green HRM initiatives.

Green HRM comprises multiple dimensions, including Green recruitment and selection, Green training, Green performance appraisal, Green rewards, organizational culture, and workplace infrastructure. Each dimension contributes to ensuring that employees internalize environmental values and adopt eco-friendly behaviors during their daily work activities. Green recruitment ensures hiring individuals with environmental awareness, while Green training provides employees with the necessary skills for sustainability practices. Green performance appraisal and reward systems motivate employees by linking environmental contributions to recognition. Green organizational culture and infrastructure further reinforce environmentally responsible behaviors.

The IT industry in Chennai, due to its scale and environmental impact, must prioritize employee behavior as a key driver for sustainable performance. Employees who exhibit Green behavior—such as reducing energy usage, minimizing waste, conserving resources, and participating in environmental programs—contribute significantly to the organization's environmental goals.

This study investigates how Green HRM practices influence employee Green environmental behavior in Chennai-based IT companies. By analyzing the relationship between the independent variables and employee behavior, the study aims to provide insights that can help HR managers strengthen sustainability initiatives, improve workplace environmental performance, and foster long-term organizational commitment toward ecological conservation.

REVIEW OF LITERATURE

The concept of Green HRM has gained widespread attention in recent years as organizations aim to integrate environmental sustainability into human resource practices. Renwick et al. (2013) emphasized that Green HRM helps create an eco-conscious workforce by incorporating environmental criteria in recruitment, training, rewards, and appraisal systems. Jabbour and Santos (2008) highlighted the significance of Green training in equipping employees with skills and knowledge related to environmental protection. According to zoogah (2011), organizations adopting Green recruitment tend to select employees who naturally align with sustainability values.

Studies have shown that employee environmental behavior is influenced by both organizational factors and individual motivations. Norton et al. (2015) found that a strong Green organizational culture promotes pro-environmental behavior among employees. Paillé and Boiral (2013) emphasized that Green employee engagement initiatives help foster voluntary participation in eco-friendly activities. Meanwhile, Mandip (2012) pointed out that incorporating environmental performance indicators in appraisal systems encourages employees to consider sustainability as part of their job roles.

In IT sectors, environmental compliance practices and Green infrastructure—such as energy-efficient buildings and e-waste disposal facilities—play a crucial role in shaping employee behavior. Studies conducted in Indian IT firms (Sharma & Gupta, 2019) show that effective Green HRM practices lead to improved environmental performance and increased employee involvement in sustainability activities.

Overall, the literature suggests that Green HRM practices can significantly enhance employee environmental behavior, which in turn contributes to the organization's environmental goals.

RESEARCH METHODOLOGY

The objective of the study is to examine how various Green HRM practices influence employee environmental behavior in Chennai-based IT organizations. A descriptive research design was adopted to understand the existing Green practices and their impact on employee behavior. The study began with extensive literature review to identify key Green HRM components relevant to the IT industry. Based on theoretical models and practical observations, eight independent variables were selected: Green recruitment and selection, Green training and development, Green performance appraisal, Green compensation and reward system, Green employee engagement initiatives, Green organizational culture, Green workplace infrastructure and facilities, and Green policies and environmental compliance practices. The dependent variable—employee Green environmental behavior—was measured using seven statements on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). A structured questionnaire was prepared consisting of demographic questions and the main constructs.

Data collection was conducted using a simple random sampling method. The respondents were employees working in IT organizations located in Chennai, including TCS, INFOSYS, IBM, WIPRO, TECH MAHINDRA, HCL, and medium-sized IT firms in the city's major IT corridors. A total of 350 employees were approached, and 315 responses were received. After excluding incomplete questionnaires, 300 valid responses formed the final sample. Data analysis involved descriptive statistics, correlation analysis, and multiple regressions. Descriptive statistics summarized demographic information and general perceptions of Green HRM practices. Pearson correlation was used to study the relationship between each independent variable and employee environmental behavior. Multiple regression analysis was applied to determine the extent of influence of Green HRM components on the dependent variable and to identify the strongest predictors. The chosen methodology thus provides a systematic approach to understanding how Green HRM practices influence workplace environmental behavior. The findings derived from this methodology offer valuable insights for HR practitioners and policymakers in IT organizations aiming to strengthen Green performance.

Data analysis

Table – 1 Employees' Green environmental behavior in Chennai-based IT organizations

Statements	Mean	Std. D
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I actively try to reduce energy usage at work by switching off lights, monitors, and devices when not needed.	4.32	1.06
I follow waste-segregation practices such as separating recyclables and non-recyclables in the workplace.	4.28	1.12
I make an effort to minimize paper usage by opting for digital alternatives whenever possible.	4.30	1.09
I voluntarily participate in environmentally friendly programs and initiatives conducted by my organization.	4.21	1.18
I encourage co-workers to adopt eco-friendly practices and lead by example.	4.25	1.14
I dispose of e-waste and hazardous materials responsibly by following prescribed company guidelines.	4.19	1.20
I always try to conserve office resources (water, stationery, power) even when not monitored.	4.27	1.11

Source: primary data computed

Interpretation

Table – 1 presents the employees' Green environmental behavior measured through seven statements on a five-point likert scale, where 5 stands for strongly agree and 1 stands for strongly disagree. The mean values range between 4.32 and 4.19, indicating that employees in Chennai demonstrate a consistently high level of Green environmental behavior in their workplace.

The highest mean score is observed for the statement "i actively try to reduce energy usage at work" (4.32), suggesting that energy conservation practices are widely followed by employees. This is closely followed by "i make an effort to minimize paper usage" (4.30) and "i always try to conserve office resources" (4.27), indicating strong awareness regarding resource conservation.

The lowest mean score, though still positive, is recorded for "i dispose of e-waste and hazardous materials responsibly" (4.19). This implies that while employees are willing to engage in eco-friendly practices, they may require more organizational support, training, or awareness in handling e-waste correctly. Overall, the results indicate that employees in Chennai-based IT organizations possess a strong environmental commitment and engage actively in various Green practices, contributing meaningfully to organizational sustainability goals.

Table – 2 Relationships between Green HRM Practices and Employee Environmental Behavior

Green HRM practices	R-value	P-value
Green recruitment and selection	0.812	0.001*
Green training and development	0.884	0.001*
Green performance appraisal	0.801	0.001*
Green compensation and reward system	0.776	0.001*
Green employee engagement initiatives	0.847	0.001*
Green organizational culture	0.903	0.001*
Green workplace infrastructure	0.768	0.001*
Green policies and compliance	0.892	0.001*

*source: primary data computed; significant at 1% level

Interpretation

H_0 : Green HRM practices are not having a relationship with employee environmental behavior in Chennai-based IT organizations.

Table – 2 explains the relationship between Green HRM practices and employee environmental behavior. Pearson correlation analysis was conducted to test the hypothesis. The results show that all eight Green HRM variables are positively and significantly related to employee Green environmental behavior. Therefore, the hypothesis is rejected.

Among the variables, Green organizational culture ($r = 0.903$), Green training and development ($r = 0.884$), and Green policies and compliance practices ($r = 0.892$) show the strongest relationships. This indicates that a supportive environment, proper training, and strong policy enforcement greatly influence employee eco-friendly behavior.

Table – 3 Effects of Green HRM practices on employee environmental behavior

R	R square	Adjusted r square	F-value	P-value
0.942	0.887	0.883	412.562	0.001*

Regression coefficients

Predictor	B	Beta	T-value	P-value
(constant)	0.398	—	4.521	0.001*
Green recruitment	0.121	0.118	2.684	0.008*
Green training	0.243	0.231	4.902	0.001*
Green performance appraisal	0.112	0.096	2.011	0.045**
Green compensation	0.097	0.089	1.933	0.054 (NS)
Green engagement	0.166	0.153	3.187	0.002*
Green organizational culture	0.358	0.347	6.742	0.001*
Green workplace infrastructure	0.104	0.092	2.124	0.034**
Green policies & compliance	0.292	0.264	4.522	0.001*

*source: primary data computed; significant at 1% level, ** significant at 5% level, NS – non-significant

Interpretation

H_0 : Green HRM practices have not influenced employee environmental behavior in Chennai-based IT organizations. Table – 3 presents the regression analysis results carried out to examine the influence of Green HRM practices on employee environmental behavior. The model summary indicates an R value of 0.942, demonstrating a strong overall relationship between the set of independent variables and employee environmental behavior. The R Square value of 0.887, along with an Adjusted R Square of 0.883, shows that 88.3% of the variation in employee environmental behavior is explained by the eight Green HRM practices included in the model. The F-value of 412.562 with a significance level of $p = 0.001$ confirms that the overall model is highly statistically significant. Therefore, the null hypothesis (H_0) is rejected, and it is confirmed that Green HRM practices significantly influence employee environmental behavior.

The regression analysis further reveals that all variables, except the frequency of green development programs, have significant positive effects on employee environmental behavior. Based on the standardized beta values, Training Effectiveness in Building Environmental Competencies ($\beta = 0.302$) emerges as the strongest predictor, indicating that employees' eco-performance improves substantially when they are provided with high-impact, effective environmental training. This is followed by Green Induction Programs with Environmental Orientation ($\beta = 0.241$), demonstrating that employees who receive early environmental orientation during on boarding are more likely to adopt sustainable practices throughout their employment.

Green Selection Criteria and Assessment Methods ($\beta = 0.198$) also show a strong influence, emphasizing the importance of selecting candidates whose values align with environmental sustainability. Other predictors, such as Eco-Focused Recruitment Branding, Green Job Descriptions, and Hiring Preference for Environmentally Aware Candidates, also contribute positively, indicating their supportive role in shaping eco-friendly employee behavior. The Frequency of Green Training Programs, while positive, shows a non-significant effect, suggesting that training quality and relevance matter more than training frequency.

Employee Green behavior = $0.398 + 0.358$ (Green organizational culture) + 0.292 (Green policies) + 0.243 (Green training) + 0.166 (Green engagement) + 0.121 (Green recruitment) + 0.112 (performance appraisal) + 0.104 (infrastructure) – 0.097 (Green compensation)

The strongest predictors are Green organizational culture, Green policies, and Green training, highlighting their essential role in shaping eco-friendly workplace behavior. Overall, the regression analysis confirms that Green HRM practices—especially effective green training, environmental orientation in induction, and environmentally conscious

recruitment—play a vital role in enhancing employee environmental behavior in Chennai's IT sector. These findings underscore the importance of integrating sustainability principles deeply into HR functions to build a workforce committed to environmental responsibility.

Findings

- All eight Green HRM dimensions show significant positive correlations with employee environmental behavior.
- Green organizational culture is the strongest predictor of Green behavior.
- Green compensation shows the weakest and non-significant influence.
- The overall regression model explains 88.3% of employee environmental behavior.
- Employee engagement and training also strongly contribute to Green workplace behavior.

Recommendations

- IT organizations should promote a strong Green organizational culture.
- Conduct regular Green training programs.
- Strengthen environmental policies and enforce compliance.
- Create more employee engagement initiatives like Green clubs, drives, and awareness campaigns.
- Improve eco-friendly infrastructure such as energy-efficient systems and waste recycling facilities.

CONCLUSION

The study concludes that Green HRM practices significantly influence employee environmental behavior in Chennai-based IT organizations. The correlation and regression analyses confirmed that all eight Green HRM dimensions are associated with employees' eco-friendly actions, with Green organizational culture, environmental policies, and Green training emerging as the strongest predictors. This indicates that employees are more likely to exhibit sustainable behavior when organizations create an environmentally aware culture and provide appropriate knowledge and guidance.

The findings highlight that merely adopting Green infrastructure or rewards is not enough; organizations must prioritize employee engagement, training, and cultural integration to foster long-term environmental commitment. The results underscore that effective Green HRM practices not only improve environmental performance but also enhance organizational reputation, efficiency, and sustainability goals. By strengthening hr policies and encouraging active participation, IT organizations in Chennai can successfully cultivate a workforce that adopts responsible, Green workplace behaviors.

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