

EXAMINING THE INFLUENCE OF GREEN HRM ON EMPLOYEE ENGAGEMENT AND RETENTION PROGRAMS WITH REFERENCE TO SELECTED IT FIRMS OF BENGALURU

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Abstract

Green Human Resource Management (GHRM) represents an emerging dimension in organizational development that combines environmental consciousness with human resource policies and practices. It emphasizes the integration of eco-friendly principles into various HR functions such as recruitment, training, performance appraisal, and employee engagement. In the present era of globalization and sustainability, organizations are focusing on adopting green initiatives not only to fulfil environmental responsibilities but also to promote employee well-being and organizational growth. GHRM encourages employees to participate in environmentally responsible behaviours, thereby creating a culture of commitment, innovation, and social responsibility within the workplace. It also contributes to enhancing employee engagement by linking personal values with organizational goals and by promoting a sense of purpose at work. However, the influence of such practices on long-term employee retention continues to be an area of growing research interest. This paper aims to explore the conceptual relationship between GHRM, employee engagement, and retention programs with special reference to selected IT firms in Bengaluru, emphasizing the importance of sustainable HR strategies in achieving both organizational effectiveness and environmental balance.

Keywords: Employee Engagement, Green Human Resource Management, Retention, Sustainability.

Introduction

Human Resource Management is the policies and practices involved in carrying out the “people” or human resource aspects of a management position, including recruiting, screening, training, rewarding, and appraising (Gary Dessler, 2008).

Human Resource Management is an approach in managing people to meet the needs of the organization. It believes the humans as assets that can be effectively utilized to maximize productivity.

- **Green Human Resource Management**

Green Human Resource Management emphasizes the unification of environmental management and HR policies and practices. Eco – friendly approaches are widely practiced in the functions of HRM like recruitment, training and performance appraisal and employee engagement. Besides aligning the organizational goals with the sustainable goals of environment, companies try to mitigate the ecological footprints by creating awareness about environment among its employees.

In the current era, organizations besides ensuring the adoption of sustainable practices are focusing on the long – term objectives to meet the future needs of the business. At the same time, social well-being and growth of the employees are not compromised.

The incorporation of environmental considerations into Human Resource Management (HRM) can be traced to the 1990s, particularly with Wehrmeyer’s (1996) influential text *Greening People*, which provided the initial foundation. The concept of “Green HRM,” however, began to evolve into a distinct scholarly domain through the contributions of Renwick et al. (2008) and was further solidified by Wehrmeyer (2017). Collectively, these works underscore the argument that sustainability can only be realized when organizations proactively involve employees in environmental initiatives and cultivate green-oriented competencies through purposefully designed HRM strategies.

- **Employee Engagement**

According to Stuart Sinclair (2020), Organisations want to get employee engagement right in order to improve motivation, enthusiasm and buy in to their overall aims, objectives and strategy. The general consensus, gained from research undertaken since the 1990s, is that an effective employee engagement programme will increase work performance and the company's bottom line. This work has built over time to form today's employment engagement ideas and insights.

Kahn classified the three dimensions of employee management as (1) Physical Engagement:

This explains about the amount of physical and mental effort of the employee need to be invested in the job. (2) Cognitive Engagement: In order to attain to this stage, the employee needs to understand the core vision and mission of the organisation. They should deliver the performance according to the business needs. (3) Emotional Engagement: A healthy interpersonal relationship is much required among the employees to promote the sense of belongingness in the organization.

- **Employee Retention**

Employee retention is the effort made by organization to keep the employees over time without leaving. Employees are made to feel valued, motivated and satisfied to pursue their career for a long term in the organization.

High retention signals that employees are engaged, loyal, and aligned with the company's goals, whereas low retention often points to dissatisfaction, poor engagement, or lack of growth opportunities.

- **Impact of Green HRM on Employee Engagement and Employee Turnover Rate**

Implementing Green Human Resource Management (Green HRM) practices can significantly boost employee engagement and lower turnover rates. By incorporating eco-friendly and sustainable approaches into HR activities such as hiring, training, appraisals, and rewards, organizations foster a sense of purpose and shared responsibility among employees. When employees recognize that their organization prioritizes sustainability and ethical practices, they develop stronger emotional connections, greater motivation, and higher commitment toward their work. This heightened engagement not only improves overall performance but also encourages employees to remain with the organization, resulting in a more stable and dedicated workforce while advancing the company's sustainability objectives.

Review of Literature

The research study by Nguyen Khanh Hai Tran (2023) investigates how Green HRM (GHRM) and Green Leadership influence Green Work Engagement (GWE), with Green Organizational Culture (GOC) as a mediator. GHRM and leadership positively affected engagement, both directly and indirectly through Green Organizational Culture. Findings highlight the contagion effect from leaders to culture to employees. The study extends sustainability HRM theory to emerging economies.

Anjali Gupta and Sapna Jangra (2024) examines GHRM's effect on Work Engagement (WE) in manufacturing sector. GHRM enhanced Work Engagement directly and indirectly, with

Managerial Support and HRM Performance Attributions partially mediating relationships. Sustainable HR practices improved both engagement and motivation.

Dr. M. Icourt Maharasi & Dr. S. Emily (2025) analyses GHRM's impact on job satisfaction and organizational performance. Managerial support strengthens the positive effect of GHRM on Work Engagement. HRM performance attributions serve as an explanatory mechanism linking GHRM to engagement. The study confirms that sustainable HR practices benefit not only environmental performance but also employee well-being and motivation.

Salim Amor Al-Hajri (2020) examines the effect of GHRM on employee retention via work engagement. GHRM significantly enhanced work engagement, which in turn drove retention, while direct effects on retention were insignificant. Findings highlight the importance of engagement as a mechanism for retention. GHRM alone does not directly retain employees. Instead, it works through enhancing employee engagement, which then drives retention.

Elif Baykal and Osman Bayraktar (2022) explores GHRM practices on work engagement with psychological ownership as a mediator. GHRM practices significantly boost employee engagement. Psychological ownership enhances dedication, vigour, and absorption in work. Psychological ownership fully mediates the link between GHRM and work engagement, highlighting employees' sense of belonging and responsibility as key drivers.

Kanwar Pravir Singh and Dr Krishna Nath Pandey (2020) investigate the influence of Green HRM practices on employee engagement. Green Recruitment & Selection, Green Employee Relations, Green Induction, Green Reward Management, Green Training & Development are considered as significant predictors of employee engagement. Green Performance Management showed limited effect on overall employee engagement, though it influenced Vigour and Absorption marginally. Green Training & Development did not significantly impact Dedication. Rheet Rijal (2023) investigates the impact of GHRM on employee environmental commitment. Green training negatively influenced commitment, while rewards positively affected it; culture also had a negative effect. Findings suggest gaps between intended policies and employee perceptions.

Problem Statement

With rising global emphasis on sustainability, organizations are increasingly adopting GHRM practices such as eco – friendly functions of HRM. Although these initiatives are designed to advance sustainability, their influence on employee engagement and retention is always uncertain. While employees often show stronger commitment when their organization reflects environmental values, many companies struggle to turn GHRM policies into real outcomes.

This discrepancy can lead to mixed results in terms of engagement and retention. Thus, the problem is to examine how far GHRM practices can simultaneously strengthen sustainability objectives and enhance employee engagement program and its impact on retention strategies.

Objectives

- To explore the Green HRM adopted carried out in the organization.
- To analyze the impact of Green HRM initiatives on employee engagement levels.
- To evaluate the role of Green HRM in improving employee retention and reducing turnover.

Research Methodology

The present study adopts quantitative research as well as descriptive approach based on the stated objectives to analyse and interpret the relationship between the variables of Green Human Resource Management (Green HRM) practices and employee engagement and also retention in selected IT firms of Bengaluru. The study adopted the simple random sampling technique to ensure unbiased representation and minimize sampling errors. A total of 270 employees occupying middle and lower – level positions in IT organizations practicing sustainability – oriented HR policies were selected as respondents. Prior to inclusion in the sample, participants were asked whether they were aware of Green Human Resource Management (GHRM) practices, and only those who responded affirmatively were considered for the study to ensure informed and contextually relevant responses. Data were collected through a structured questionnaire and personal interviews designed to measure dimensions of employee engagement like dedication, vigour, and absorption as well as retention indicators such as reduced turnover rate. The methodology provides a reliable framework for generating empirical evidence to support the study objectives and draw meaningful conclusions.

Scope of the Study

The study aims to understand the role of the Green Human Resource Management practices in relation to employee engagement and retention programs of selected IT companies in Bengaluru, within the framework of sustainability. The variables included for the study of employee engagement and employee retention such as dedication, vigour, absorption and reduced turnover rate. The focus is on software employees from lower to middle level positions and also includes HR employees in IT firms that practices Green HRM. The study does not consider or compare organizations that do not implement Green HRM practices.

Limitations

This study is focused on selected IT firms in Bengaluru region. Since data is collected through self – reported questionnaire, there may exist bias from participants. Finally, this study is limited to organizations that implements Green HRM practices.

Data Analysis

Table 1: Demographic representation of the Respondents (n=270)

Particulars	Number of Respondents	Percentage
Gender		
Male	190	70.4%
Female	80	29.6%
Age		
Below 25	50	18.5%
25 – 34	65	24.1%
35 – 44	90	33.3%
45 – 54	50	18.5%
55 and above	15	5.6%
Mean	36.8	
Educational Qualification		
Diploma	20	7.4%
Graduate	105	38.9%
Post Graduate	130	48.1%
Certifications	15	5.6%
Experience		
Less than 1 Year	45	16.7%
1 – 3 Years	35	13%
4 – 6 Years	25	9.3%
7 – 10 Years	20	7.4%
More than 10 Years	145	53.7%
Mean	7.88	

The study comprised 270 respondents, of whom 70.4% were male and 29.6% were female, indicating majority of male in the sample. The majority of respondents belonged to the 35–44 years age group (33.3%), followed by 25–34 years (24.1%) representing a predominantly middle-aged workforce. In terms of educational qualification, 48.1% were postgraduates and 38.9% were graduates, reflecting a highly educated participants in the

group. Only a small percentage have diploma (7.4%) or professional certifications (5.6%). The majority of the group constituting 53.7% have work experience more than 10 years, suggesting

a mature and experienced workforce. And 16.7% had less than 1 year, 13% had 1–3 years of experience, 4–6 years constitute to 9.3%, and 7.4% has 7–10 years of experience. Overall, the demographic distribution indicates that most respondents are well-qualified and experienced, contributing credible insights into Green Human Resource Management (GHRM) practices.

Table 2 : Effects of GHRM Factors on Employee Engagement and Retention

Sl No	Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean Score
GHRM Practices							
1	Organization considers environmental values in recruitment	24.07%	33.33%	27.78%	9.26%	5.56%	3.61
2	Provides sustainability-focused training programs	22.22%	38.89%	24.07%	9.26%	5.56%	3.63
3	Employees encouraged to adopt sustainable performance goals	16.67%	51.85%	14.81%	12.96%	3.70%	3.65
4	Green initiatives enhance employee participation	25.93%	57.41%	12.96%	3.70%	0.00%	4.06
5	Sustainability integrated into HR practices	20.37%	42.59%	24.07%	11.11%	1.85%	3.69
Impact of GHRM on Employee Engagement							
6	Green HR policies increase work meaningfulness	16.67%	59.26%	18.52%	3.70%	1.85%	3.85
7	Sustainability	16.67%	44.44%	31.48%	3.70%	3.70%	3.67



	initiatives motivate extra effort						
8	Eco-friendly activities improve employee energy	33.33%	44.44%	18.52%	0.00%	3.70%	4.04
9	Employees deeply involved in green- aligned tasks	20.37%	46.30%	25.93%	3.70%	3.70%	3.76
10	Roles contribute to organizational sustainability goals	27.78%	57.41%	14.81%	0.00%	0.00%	4.13
Impact of GHRM on Employee Retention							
11	Eco-friendly HR practices enhance retention	22.22%	38.89%	27.78%	7.41%	3.70%	3.69
12	Sustainable HR practices promote long-term career security	20.37%	44.44%	27.78%	3.70%	3.70%	3.74
13	Green HR policies reduce turnover intentions	9.26%	29.63%	42.59%	12.96%	5.56%	3.24
14	Eco-friendly initiatives enhance job satisfaction	14.81%	61.11%	22.22%	0.00%	1.85%	3.87
15	Green HRM fosters positive work environment	27.78%	50.00%	18.52%	0.00%	3.70%	3.98

The analysis of 15 factors reveals a predominantly positive perception of Green Human Resource Management (GHRM) practices among respondents. Most employees agreed that their organizations consider environmental values in HR processes like recruitment and provide sustainability-oriented training. Majority of the employees either agree or strongly agree for engagement factors, such as “Green initiatives enhance participation” (83.3%) and “Roles contribute to sustainability goals” (85.2%), indicating strong alignment between GHRM and employee motivation.

Respondents also perceived that green policies make work more meaningful and increase enthusiasm, reflecting the motivational impact of sustainability. Regarding retention, a majority agreed that eco-friendly HR practices enhance retention (61.1%) and career security (64.8%), though neutrality was higher for turnover-related questions.

Overall, the data indicate that GHRM practices contribute significantly to employee engagement, satisfaction, and organizational commitment. The high proportion of agreement across questionnaire supports the view that sustainability-driven HR strategies foster a positive and purpose-driven workplace culture, thereby enhancing both engagement and retention outcomes.

The analysis also revealed that the mean scores across the fifteen items ranged from 3.24 to 4.13, indicating an overall high level of agreement among respondents. This suggests that employees generally hold positive perceptions toward their organization’s green HR practices. Factors such as “Roles contribute to organizational sustainability goals” (Mean = 4.13) and “Green initiatives enhance employee participation” (Mean = 4.06) obtained the highest mean scores, demonstrating strong endorsement of sustainability integration and participatory green initiatives. Conversely, comparatively lower mean values, such as “Green HR policies reduce turnover intentions” (Mean = 3.24), suggest that while employees appreciate green HR initiatives, these factors may have a limited influence on retention-related outcomes.

Hypothesis Testing

Objective: To analyze the impact of Green HRM initiatives on employee engagement levels.

H1: There is a significant relationship between Green Human Resource Management (GHRM) practices and employee engagement.

Table 3: Chi – Square Analysis for goodness of fit

Results				
	Agree	Neutral	Disagree	Row Totals

GHRM	180 (189.00) [0.43]	56 (57.50) [0.04]	34 (23.50) [4.69]	270
Employee Engagement	198 (189.00) [0.43]	59 (57.50) [0.04]	13 (23.50) [4.69]	270
Column Totals	378	115	47	540 (Grand Total)
The χ^2 statistic is 10.3184. The p -value is 0.005746. The result is significant at $p < 0.05$.				

H0 : There is no significant relationship between GHRM practices and Employee Engagement.	Chi – Square Test at 0.05 level of significance.	The chi-square statistic is 10.3184 . The p -value is 0.005746 . The result is significant at $p < 0.05$.	As $p < 0.05$, Null Hypothesis is rejected.	H1 : There is a significant relationship between GHRM practices and Employee Engagement.
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The Chi-square test was conducted to examine the relationship between Green Human Resource Management (GHRM) practices and employee engagement. The calculated Chi-square value is 10.31, with a p -value of 0.0057, which is less than 0.05, indicating statistical significance. This means there is a meaningful association between GHRM practices and employee engagement.

The observed and expected frequencies show that respondents' agreement levels were higher than expected, suggesting that green HR initiatives positively influence engagement. The low neutral and disagreement responses further support this trend.

Therefore, the null hypothesis is rejected, confirming that GHRM practices significantly affect employee engagement. The findings suggest that organizations adopting sustainable HRM policies experience higher employee motivation, participation, and alignment with environmental goals, reinforcing the positive link between GHRM and engagement.

Objective: To evaluate the role of Green HRM in improving employee retention and reducing turnover.

H2: There is significant relationship between Green Human Resource Management (GHRM) practices and employee retention.

Table 4: Chi – Square Analysis for goodness of fit

Results				
	Agree	Neutral	Disagree	Row Totals
GHRM	180 (176.00) [0.09]	56 (65.50) [1.38]	34 (28.50) [1.06]	270
Employee Retention	172 (176.00) [0.09]	75 (65.50) [1.38]	23 (28.50) [1.06]	270
Column Totals	352	131	57	540 (Grand Total)
The χ^2 statistic is 5.0604. The p -value is 0 .079645. The result is <i>not</i> significant at $p < 0.05$.				

H0 : There is no significant relationship between GHRM practices and Employee Retention.	Chi – Square Test at 0.05 level of significance	The chi-square statistic is 5.0604. The p -value is 0.079645. The result is <i>not</i> significant at $p < 0 .05$.	As $p > 0.05$, Null Hypothesis is failed to reject.	H0 : There is no significant relationship between GHRM practices and Employee Retention.
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The Chi-square test was conducted to determine the association between Green Human Resource Management (GHRM) practices and employee retention. The obtained Chi-square value ($\chi^2 = 5.06$) with a p -value of 0.0796 indicates that the relationship is statistically insignificant at the 5% level of significance. This implies that variations in GHRM implementation do not have a significant influence on employee retention among the respondents.

Despite the lack of statistical significance, the descriptive results show that the majority of respondents agreed with statements related to both GHRM practices and employee retention. This suggests a generally positive perception toward sustainable HR initiatives, even though the direct link between the two variables is not strongly established. The lack of a significant relationship may be due to factors such as limited awareness, inconsistent execution of green

policies or the presence of stronger influences like compensation, career opportunities, and job satisfaction, leadership affecting retention outcomes.

The moderate proportion of neutral and disagreeing responses further indicates that employees may not fully perceive the practical impact of GHRM on their decision to stay in the organization. Although the statistical test does not confirm a significant relationship, the findings highlight the growing importance of GHRM as a supportive element in building sustainable workplace practices. Future studies with larger and more diverse samples may reveal stronger associations and deeper insights into how green HR initiatives can enhance long-term employee commitment and retention.

Conclusion

The present study aimed to examine the relationship between Green Human Resource Management (GHRM) practices and key employee outcomes namely, engagement and retention using chi-square statistical analysis. The findings revealed a significant relationship between GHRM practices and employee engagement ($\chi^2 = 10.31$, $p = 0.0057$), indicating that organizations implementing environmentally sustainable HR policies tend to experience higher levels of employee motivation, involvement, and alignment with organizational goals. This suggests that green initiatives such as eco-friendly training, green recruitment, and sustainability-driven performance appraisals can positively influence how employees connect and commit to their work.

Conversely, the relationship between GHRM practices and employee retention was found to be statistically insignificant ($\chi^2 = 5.06$, $p = 0.0796$). While descriptive data indicated positive employee perceptions toward green practices, the results imply that GHRM alone may not be a decisive factor in retaining employees. Retention could be more strongly influenced by traditional HR factors such as compensation, career growth, and job satisfaction. However, the positive inclination toward sustainability among respondents highlights GHRM's potential as a supplementary factor that can enhance the overall organizational climate and employer brand. Overall, the study concludes that GHRM practices play a crucial role in fostering employee engagement but have a limited direct impact on retention within the sampled organizations. The findings emphasize the need for management to integrate green HR initiatives with broader retention strategies to achieve holistic sustainability and workforce stability. Future research could expand on these results by exploring mediating variables such as organizational culture, leadership support, and employee awareness to better understand how green HR policies translate into long-term organizational commitment.

Future scope of the study

The present study has been confined to selected IT organizations in Bengaluru, focusing on the relationship between Green Human Resource Management (GHRM) practices, employee engagement, and retention rate. Although the findings provide meaningful insights, there remains considerable scope for further exploration and enhancement.

Future studies can extend the research to other metropolitan cities to make comparative analyses across different regional and organizational contexts. This would help determine whether similar patterns of employee engagement and retention exist across diverse work environments and cultural settings.

Additionally, the present study considered a limited set of variables. Future research could include other dimensions such as green leadership, organizational sustainability culture, environmental performance, and employee well-being to gain a more holistic view of GHRM's impact. Sample size could be increased and including multiple industry sectors such as manufacturing, education, healthcare, and finance could further strengthen the generalizability of the findings.

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