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Research Article

Perception of Green HRM among Employees in Selected Private Hospitals in Kolkata ---A study

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Abstract: The adoption of Green Human Resource Management (Green HRM) practices has gained significant importance in healthcare organizations, aiming to integrate environmental sustainability with organizational performance. Green HRM aligns human resource policies with ecological objectives, fostering environmentally responsible behavior among employees. Its effectiveness is strongly influenced by Management and Organizational Culture (MOC), which shapes awareness, attitudes, and participation in sustainability initiatives. Core dimensions of Green HRM include Green Recruitment and Selection (GRS), which attracts environmentally conscious employees, and Green Training and Development (GTD), which equips staff with the skills and knowledge to implement sustainable practices. Green Performance Management and Appraisal (GPMA) evaluates employees' contributions to environmental goals, while Green Reward and Compensation (GRC) incentivizes eco-friendly behavior. Additionally, Employee Empowerment and Participation (EMP) encourages innovation and ownership in addressing environmental challenges. Collectively, these practices enhance Environmental Performance (EP) by promoting resource efficiency and reducing waste. This pilot study investigates employee perceptions regarding the implementation and effectiveness of Green HRM practices in selected private multi-specialty hospitals in Kolkata, namely Apollo, Narayana, Peerless, Manipal, and Tata Medical. A sample of 70 employees, including administrative staff, nurses, and medical professionals, was selected to ensure representation across hierarchical levels. Data analysis was conducted using descriptive statistics, Chi-square tests, correlation, and ANOVA to examine awareness levels, perceptual differences, and the impact of Green HRM practices on environmental performance. The findings aim to provide insights into the role of Green HRM in fostering sustainable healthcare management.

Keywords: Green HRM, Environmental Performance, Healthcare Sustainability, Organizational Culture, Employee Participation, Green Practices.

INTRODUCTION

The healthcare sector plays a crucial role in promoting human welfare but is also one of the most resource-intensive industries, consuming large amounts of energy, water, and materials. This extensive use of resources significantly impacts environmental sustainability. To address this, the adoption of Green Human Resource Management (Green HRM) practices has become increasingly relevant in healthcare organizations. Green HRM integrates environmental objectives into human resource policies and processes to enhance both organizational and ecological performance. The effectiveness of Green HRM largely depends on Management and Organizational Culture (MOC), which shapes employees' environmental awareness and participation in sustainability programs. Key components include Green Recruitment and Selection (GRS), which ensures that employees committed to sustainability are hired, and Green Training and Development (GTD), which provides them with the knowledge and skills to implement eco-friendly practices. Similarly, Green Performance Management and Appraisal (GPMA) evaluates employee contributions to environmental goals, while Green Reward and Compensation (GRC) motivates sustainable behavior through incentives. Employee Empowerment and Participation (EMP) further enhances ownership and innovation in addressing environmental challenges. Collectively, these practices contribute to improved Environmental Performance (EP) by reducing waste, conserving resources, and fostering a culture of sustainability. For example, hospitals employing cogeneration systems have achieved 8–25% energy savings (José Chen-Xu et al., 2024). This pilot study, therefore, examines the perceptions of employees in selected private hospitals in Kolkata regarding the implementation and effectiveness of Green HRM practices in fostering sustainable healthcare management.

LITERATURE REVIEW

Management and Organizational Culture (MOC) play a vital role in promoting sustainable practices within healthcare institutions. According to Akpa, Asikhia, and Nneji (2021), a strong organizational culture positively influences performance by fostering shared environmental values. Similarly, Bagga, Gera, and Haque (2023) emphasized that transformational leadership nurtures a

culture that encourages change management and sustainability projects. In hospitals, a supportive culture integrates environmental considerations into daily operations, enhancing employees' eco-conscious behavior. Green Recruitment and Selection (GRS) align hiring practices with sustainability goals. Bangura and Lourens (2025) stated that green organizations attract candidates who are environmentally responsible, while Fapohunda, Genty, and Olanipekun (2022) found that incorporating environmental criteria in recruitment improves organizational sustainability. Thus, hiring eco-minded individuals ensures a workforce committed to green initiatives.

Green Training and Development (GTD) equip employees with the knowledge and skills needed to adopt eco-friendly practices. Azizie et al. (2025) revealed that green training enhances organizational citizenship behavior toward the environment, while Sarwar and Mustafa (2024) identified green intellectual capital as a mediator between training and improved environmental performance.

Green Performance Management and Appraisal (GPMA) integrate environmental objectives into performance evaluations. Saeed and Abbas (2024) found that assessing pro-environmental behavior motivates employee participation in sustainability programs, and Ayana and Wodajo (2024) observed that hospitals using green performance metrics achieved higher environmental outcomes.

Green Reward and Compensation (GRC) further reinforce sustainable conduct. Das and Dash (2024) and Saka et al. (2021) demonstrated that linking rewards to environmental goals boosts motivation and sustainability across all levels. Finally, Employee Empowerment and Participation (EMP) enhance ownership and innovation in addressing environmental challenges (Notodiprojo et al., 2024; Khalil et al., 2021). Together, these practices significantly improve Environmental Performance (EP)m easured by energy efficiency, waste reduction, and CSR outcomes (Bhat et al., 2024; Sun et al., 2022) demonstrating that effective Green HRM practices foster sustainable healthcare management.

RESEARCH METHODOLOGY

Sample Size

This is because the sample size is crucial to the reliability, representation and generalizability of the results (Abubakar et al., 2024). The research was carried out among 70 employees of the five multi-specialty hospitals (private) in Kolkata- Apollo, Narayana, Peerless, Manipal, and TATA Medical. This sample was representative of both administrative staff and nurses and medical professionals to bring out an interlocutor of the hierarchical levels. The sample was varied, which allowed evaluating the perception of issues associated with management and organizational culture (MOC), green recruitment and selection (GRS), green training and development (GTD), green performance management and appraisal (GPMA), green reward and compensation (GRC), employee empowerment and participation (EMP), and environmental performance (EP).

Sampling Method

A purposive method was used in sampling to identify respondents who had the appropriate experience and knew a lot about Green HRM practices. Purposive sampling is a non-probability method in which the research participants are sampled through some form of knowledge or experience (Nyimbili and Nyimbili, 2024). This strategy meant that the sample comprised individuals who were conversant with organizational sustainability efforts and those who were engaged in practicing environmental friendliness. The method enabled the gathering of valuable data that was variable-specific.

Data Collection Method

The structured questionnaire was used to gather primary data by a cross-sectional survey conducted as a questionnaire. Cross-sectional surveys utilize structured questionnaires as an effective data collection instrument for primary data, which is also standardized (Kuang et al., 2025). It consisted of the questionnaire items that covered the perceptions and awareness of the employees of MOC, GRS, GTD, GPMA, GRC, EMP, and EP. It was created to elicit reactions on a five-point interval scale that allowed an assessment of the attitudes, as well as practices toward Green HRM in the hospitals.

Scale Testing Method

This questionnaire was pre-tested in terms of clarity, validity, and reliability. The consistency of the scales with one another was tested in terms of Cronbach's Alpha, which confirmed consistent measurement of all the variables. The internal consistency of a scale is measured by Cronbach's Alpha, and the value that is deemed acceptable is 0.7 or higher (Izah et al., 2023).

Method of Analysis

The descriptive analysis of data, Chi-square, correlation, and ANOVA involved the comparison of the data. The review evaluated how much the employees know, differences in perceptions, and differences in the practice of the Green HRM practices and the effect it has on the performance of the hospital environment. The research on the relations and the variations in the surveys conducted are conducted using such statistics as descriptive statistics, Chi-square, correlation analysis, and ANOVA analysis; these methods are important to assess the research (Al-Aqbi et al., 2024).

RESULTS AND ANALYSIS

Scale validation

Reliability Tests

Variable name	No of subgroup	Cronbach's Alpha	Result
Management And Organization Culture	5	0.889	Scale is reliable and good

(MOC)			
Green Recruitment And Selection (GRS)	4	0.965	Scale is reliable and excellent
Green Training And Development (GTD)	5	0.937	Scale is reliable and excellent
Green Performance Management And Appraisal (GMPA)	4	0.941	Scale is reliable and excellent
Green Reward And Compensation (GRC)	3	0.939	Scale is reliable and excellent
Employee Empowerment And Participation (EMP)	5	0.965	Scale is reliable and excellent
Environmental Performance (EP)	6	0.869	Scale is reliable and good

Table 1: Cronbach's Alpha test

(Source: Self-Developed)

Table 1 presents the reliability of the scales that were used to measure the seven critical variables in this study by computing Cronbach's Alpha. Cronbach's Alpha is widely regarded as a mainstream indicator of the reliability of the instrumentation of surveys, particularly in the context of social science and management research. The values greater than 0.70 can be said to be acceptable, i.e., that the items in one or another scale all measure the same underlying construct (Izah et al., 2023).

One of the variables is Management and Organization Culture (MOC); this variable possesses five subgroups, and its Cronbach's Alpha value is 0.889. This value implies a high level of reliability, which means that the items applied are effective in assessing the perceptions held by the employees with regard to organizational culture and practices that the management applies in terms of sustainability. Similarly, Green Recruitment and Selection's (GRS) Alpha (0.965) was also a good internal constant. It can be seen that the measures that are available to test the eco-friendly hiring and selection practices are rather coherent and can be evaluated empirically.

The Green Training and Development (GTD) and the Green Performance Management and Appraisal (GPMA) also showed a good level of reliability in their Alpha values of 0.937 and 0.941, respectively. These results imply that the survey questions are always reflective of the experiences and opinions of employees towards training programs and skills development, as well as the performance appraisal procedures in line with green initiatives. Green Reward and Compensation (GRC) variable, which had three subgroups, demonstrated an Alpha of 0.939, which indicated that reward and incentive initiatives concerning sustainable practices can be effectively measured using the questionnaire items.

The maximum reliability of 0.965 was registered by employee Empowerment and Participation (EMP), which has five subgroups. This gives the impression that the survey questions are powerful in portraying the level of engagement, decision-making, and involvement of the employees in the sustainability activities. The Environmental Performance (EP) with the six subgroups gave a slightly low yet acceptable Alpha of 0.869. This means that the items are always measuring environmental sustainability outcomes in the organizations.

Data interpretation and analysis

Descriptive statistics

Statistics

		1. Age	2. Gender	3. Years of Experience
N	Valid	70	70	70
	Missing	0	0	0
Mean		2.39	1.46	2.70
Median		2.00	1.00	3.00
Mode		2	1	4
Std. Deviation		.597	.502	1.172
Range		2	1	3
Minimum		2	1	1
Maximum		4	2	4

Figure 1: Descriptive Statistics for All Demographic Variables

(Source: SPSS)

The population sample of 70 respondents is balanced and representative. The mean, median, and standard deviation of age were 2.39, 2.00, and 0.597, respectively, and represented minor variation in the respondents. The mean of gender distribution was 1.46, the mode was 1(most of the respondents were male), and the standard deviation = 0.502, which is very low, hence the variability is minimal. The professional tenure was quite moderate, with a mean of 2.70 and a median of 3.00, and a standard deviation of 1.172. On the whole, the information shows a reasonable degree of variation to conduct the analysis of perceptions of Green HRM practices effectively.

Statistics

		32. Top management clarify information and values of Environmental Management Throughout the hospital	33. Top management develop punishment system for 2n-compliance in environmental practices	34. Top management actively support environmental practices	35. Team/ departmental budgets Cover Environmental impact	36. Organizational vision/mission statements include environmental concern
N	Valid	70	70	70	70	70
	Missing	0	0	0	0	0
Mean		3.97	3.51	3.94	3.80	3.86
Median		4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	5	5
Std. Deviation		1.035	1.260	1.115	1.303	1.094
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

Figure 2: Descriptive Statistics for All MOC Variables

(Source: SPSS)

Descriptive statistics of MOC variables show that there is a high level of support for top management in environmental initiatives. The mean scores are between 3.51 and 3.97; the median and mode are mostly 4 or 5, indicating positive perceptions. The standard deviations (1.035-1.303) imply fairly low variability, and the entire scale (1-5) demonstrates that the responses spanned all the points included in the Likert scale and thus agreed on various perspectives of the employees.

Statistics

		37. Job description specification includes environmental concerns	38. Jobs positions designed to focus exclusively on environmental management aspects of the organizations	39. Recruitment messages include environmental behavior/ commitment criteria	40. Selecting applicants who are sufficiently aware of Greening to fill job vacancies
N	Valid	70	70	70	70
	Missing	0	0	0	0
Mean		3.56	3.31	3.29	3.29
Median		4.00	3.00	3.00	3.00
Mode		5	5	5	5
Std. Deviation		1.258	1.314	1.416	1.476
Range		4	4	4	4
Minimum		1	1	1	1
Maximum		5	5	5	5

Figure 3: Descriptive Statistics for all GRS Variables

Source: SPSS

Descriptive statistics of GRS variables reveal that the employees have a moderate perception of recruiting practices that are environmentally friendly. The means are between 3.29 and 3.56, with a median of 3, 4 and displaying slightly positive reactions. The 5 modes indicate that there are employees who firmly believe that environmental requirements should be included in work descriptions and selection procedures. Standard deviations (1.258 to 1.476) are moderate, but when the entire range (1-5) is taken, it indicates that there is a wide variety of opinions among respondents.

Statistics

		41. Take into account the needs of environmental issues when training requirement analyzed	42. Environmental training is a priority when compared to other types of company training	43. Following induction programs that emphasize environmental issues/concerns	44. Providing environmental training to the organizational members to increase Environmental awareness	45. All training materials are available online for employee to reduce paper cost
N	Valid	70	70	70	70	70
	Missing	0	0	0	0	0
Mean		3.56	3.76	3.61	3.66	3.49
Median		3.00	4.00	4.00	4.00	4.00
Mode		3	4[a]	5	4	5
Std. Deviation		1.258	1.221	1.300	1.261	1.442
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

a. Multiple modes exist. The smallest value is shown

Figure 4: Descriptive Statistics for all GTD Variables

Source: SPSS

Descriptive statistics of Green Training and Development (GTD) variables show that the overall perception of training based on environmental initiatives is positive. The means are in the range of 3.49 -3.76, and the median is 3,4, indicating the consensus that the training on environmental matters is a priority and available. Modes in the ranges 3-5 denote divergent experience of employees, and the standard deviations (1.221-1.442) are moderate. All the responses are those covering the entire range of the Likert scale (1-5).

Statistics

		46. Hospital incorporates environmental management objectives and targets with the performance evaluation system of the organization	47. Employees know their specific green targets, goals and responsibilities	48. Providing regular feedback to the employees or teams to achieve environmental goals or improve their Environmental performance	49. Roles of manages in achieving green outcomes included in appraisals
N	Valid	70	70	70	70
	Missing	0	0	0	0
Mean		3.50	3.69	3.44	3.56
Median		4.00	4.00	4.00	4.00
Mode		5	5	5	4
Std. Deviation		1.316	1.346	1.461	1.315
Range		4	4	4	4
Minimum		1	1	1	1
Maximum		5	5	5	5

Figure 5: Descriptive Statistics for All GMPA Variables

Source: SPSS

Moderately positive perceptions in integrating the environmental objectives of evaluations have been indicated in descriptive statistics of the Green Performance Management and Appraisal (GMPA) variables. The median scores are between 3.44 and 3.69, with mode and median mostly at 4 or 5, which indicates that the employees appreciate the presence of green targets and feedback systems. Standard deviations (1.315-1.461) indicate that there is a moderate variability, whereas the entire range (1-5) means that responses were distributed across the Likert scale and that tasks varied across employees in their experiences and awareness.

Statistics

		50. Environmental performance is recognized publically (awards, dinner, publicity)	51. The company offers a non-monetary and monetary rewards based on the environmental achievements (sabbatical, leave, gifts, bonuses, cash, premiums, promotion, pool car)	52. Link suggestion schemes into reward system by introducing rewards for innovative environmental initiative/performance
N	Valid	70	70	70
	Missing	0	0	0
Mean		3.30	3.39	3.40
Median		3.50	4.00	4.00
Mode		5	5	5
Std. Deviation		1.468	1.448	1.428
Range		4	4	4
Minimum		1	1	1
Maximum		5	5	5

Figure 6: Descriptive Statistics for all GRC Variables

Source: SPSS

The descriptive statistics of Green Reward and Compensation (GRC) variables show a moderately positive attitude towards the environmentally related incentives. The mean scores are between 3.30 and 3.40, with a median of 3.5-4, which means the employees are aware of the monetary and non-monetary rewards of green achievements. Mode 5 offers some positive consensus between respondents. The moderate variability, as indicated by the standard deviations (1.428-1.468) and the broad range of responses (1-5), indicates that the responses are very varied in all Likert levels.

Statistics

		53. Top managers use team-work to successfully manage and produce awareness of the environmental issues (green champions/ taskforce/ green-team etc.)	54. Involve employee in formulating environmental strategy	55. Providing opportunities to the employee to involve and participate in green suggestion schemes	56. Introducing green whistle-blowing and help-lines	57. Hospital offers workshops or forums for staff to improve environmental behavior and exchange their knowledge
N	Valid	70	70	70	70	70
	Missing	0	0	0	0	0
Mean		3.47	3.64	3.59	3.49	3.59
Median		4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	5	4
Std. Deviation		1.348	1.263	1.409	1.452	1.302
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

Figure 7: Descriptive Statistics for all EMP Variables

Source: SPSS

Descriptive statistics of the Employee Empowerment and Participation (EMP) variables present a general positive attitude regarding participation in the environmental initiatives. They have mean scores of between 3.47 and 3.64, medians and modes of 4 and 5 (most of them), indicating that the employees are engaged in green strategies, suggestion schemes and workshops. The standard deviations (1.263 -1.452) indicate moderate variability, whereas the entire range (1-5) illustrates that there are varied responses based on the extent of empowerment and participation among the staff members of a hospital.

Statistics

		58. Improved hospital performance	59. Improved patient satisfaction	60. Increased CSR activities	61. Proper waste management	62. Increased use of renewable energy and sustainable fuels	63. Reductions in the consumption of electric energy
N	Valid	70	70	70	70	70	70
	Missing	0	0	0	0	0	0
Mean		4.14	4.10	4.10	4.44	3.93	3.99
Median		4.00	4.00	4.00	5.00	4.00	4.00
Mode		5	5	5	5	5	5
Std. Deviation		.889	.995	1.009	.845	1.278	1.186
Range		3	4	4	4	4	4
Minimum		2	1	1	1	1	1
Maximum		5	5	5	5	5	5

Figure 8: Descriptive Statistics for all EP Variables

Source: SPSS

The descriptive statistics of the variables of Environment Performance (EP) state good positive perceptions of the sustainability outcomes of the hospitals. The scale of the mean scores is 3.93 to 4.44, the median and mode are mostly equal to 4 or 5, and they show an improvement in performance, patient satisfaction, CSR activities, and energy management. The standard deviations (0.845-1.278) implies moderate variability, whereas the wide range (1-5) illustrates the experiences of varying employees, which implies widespread awareness of environmental initiatives and their effect on the performance of the organisation.

Level of GHRM awareness among the different groups

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
32. Top management clarify information and values of Environmental Management Throughout the hospital	Between Groups	63.185	14	4.513	23.073	.000
	Within Groups	10.758	55	.196		
	Total	73.943	69			
33. Top management develop punishment system for 2n-compliance in environmental practices	Between Groups	85.986	14	6.142	14.375	.000
	Within Groups	23.500	55	.427		
	Total	109.486	69			
34. Top management actively support environmental practices	Between Groups	79.388	14	5.671	48.859	.000
	Within Groups	6.383	55	.116		
	Total	85.771	69			
35. Team/ departmental budgets Cover Environmental impact	Between Groups	99.617	14	7.115	22.257	.000
	Within Groups	17.583	55	.320		
	Total	117.200	69			
36. Organizational vision/mission statements include environmental concern	Between Groups	75.113	14	5.365	39.565	.000
	Within Groups	7.458	55	.136		
	Total	82.571	69			

Figure 9: ANOVA Analysis for all MOC Variables

Source: SPSS

The ANOVA findings of Management and Organization Culture (MOC) variables have shown that there are significant differences in perceptions among groups on the environmental practices of the top management. The F-values are significant (remember 14.375 to 48.859) and the significance values (Sig.) are 0.000 with all the variables dealing with environmental impact, and inclusion of environmental concerns in the vision/mission statements. This implies that group differences are

significant. The between-groups sum of squares is significantly greater than the within-groups so that group membership here is very influential on employee perceptions. These findings imply that the employees feel that the management commitment and organizational culture are different when it comes to the management of the environment.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
37. Job description specification includes environmental concerns	Between Groups	104.671	16	6.542	75.375	.000
	Within Groups	4.600	53	.087		
	Total	109.271	69			
38. Jobs positions designed to focus exclusively on environmental management aspects of the organizations	Between Groups	106.919	16	6.682	29.110	.000
	Within Groups	12.167	53	.230		
	Total	119.086	69			
39. Recruitment messages include environmental behavior/ commitment criteria	Between Groups	132.952	16	8.310	82.576	.000
	Within Groups	5.333	53	.101		
	Total	138.286	69			
40. Selecting applicants who are sufficiently aware of Greening to fill job vacancies	Between Groups	146.186	16	9.137	118.107	.000
	Within Groups	4.100	53	.077		
	Total	150.286	69			

Figure 10: ANOVA Analysis for all GRS Variables

Source: SPSS

ANOVA outcomes of variables Green Recruitment and Selection (GRS) demonstrate that there is a significant difference in perceptions of the employees of different groups. The F-values of all the variables, such as incorporation of environmental issues into job descriptions, design of environmental-oriented positions, recruitment messages, and selection of applicants with green sensibilities have high F-values (29.110-118.107) and are significant at the level of 0.000. The between-groups sum of squares is significantly higher than the within-groups which has shown that the membership of groups significantly influences perceptions. These outcomes validate that employees find significant differences in the use of green practices during recruitment.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
41. Take into account the needs of environmental issues when training requirement analyzed	Between Groups	97.825	14	6.988	33.576	.000
	Within Groups	11.446	55	.208		
	Total	109.271	69			
42. Environmental training is a priority when compared to other types of company training	Between Groups	99.214	14	7.087	106.578	.000
	Within Groups	3.657	55	.066		
	Total	102.871	69			
43. Following induction programs that emphasize environmental issues/concerns	Between Groups	106.130	14	7.581	39.876	.000
	Within Groups	10.456	55	.190		
	Total	116.586	69			
44. Providing environmental training to the organizational members to increase Environmental awareness	Between Groups	98.976	14	7.070	36.019	.000
	Within Groups	10.795	55	.196		
	Total	109.771	69			
45. All training materials are available online for employee to reduce paper cost	Between Groups	129.641	14	9.260	36.787	.000
	Within Groups	13.845	55	.252		
	Total	143.486	69			

Figure 11: ANOVA Analysis for all GTD Variables

Source: SPSS

The outcomes of the ANOVA of variables of the Green Training and Development (GTD) indicate that the perceptions employees have vary significantly in terms of groups. The variables demonstrate high F-values (33.576-106.578) with their significance of 0.000. The between-groups sum of squares is greater than the within-groups, suggesting that membership in groups has a strong contribution to perceptions. These results prove that different positions of implementation and focus of green training efforts are perceived by employees.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
46. Hospital incorporates environmental management objectives and targets with the performance evaluation system of the organization	Between Groups	107.550	14	7.682	35.357	.000
	Within Groups	11.950	55	.217		
	Total	119.500	69			
47. Employees know their specific green targets, goals and responsibilities	Between Groups	119.969	14	8.569	92.112	.000
	Within Groups	5.117	55	.093		
	Total	125.086	69			
48. Providing regular feedback to the employees or teams to achieve environmental goals or improve their Environmental performance	Between Groups	141.671	14	10.119	99.387	.000
	Within Groups	5.600	55	.102		
	Total	147.271	69			
49. Roles of manages in achieving green outcomes included in appraisals	Between Groups	107.005	14	7.643	34.270	.000
	Within Groups	12.267	55	.223		
	Total	119.271	69			

Figure 12: ANOVA Analysis for all GPMA Variables

Source: SPSS

The results of the ANOVA of Green Performance Management and Appraisal (GPMA) variables show a significant difference in the perceptions of the employees in the groups. The variation in all variables, such as integration of environmental goals with evaluations, green targets awareness, frequency of environmental performance appraisals, as well as managerial roles inclusion and appraisal, is high (34.270-99.387). Variations between groups are significant compared to within-groups, thus indicating that group membership has a very strong influence on perceptions. These results affirm that workers experience a difference in green performance management practices.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
50. Environmental performance is recognized publically (awards, dinner, publicity)	Between Groups	140.783	11	12.798	93.766	.000
	Within Groups	7.917	58	.136		
	Total	148.700	69			
51. The company offers a non-monetary and monetary rewards based on the environmental achievements (sabbatical, leave, gifts, bonuses, cash, premiums, promotion, pool car)	Between Groups	140.669	11	12.788	189.373	.000
	Within Groups	3.917	58	.068		
	Total	144.586	69			
52. Link suggestion schemes into reward system by introducing rewards for innovative environmental initiative/performance	Between Groups	135.967	11	12.361	148.327	.000
	Within Groups	4.833	58	.083		
	Total	140.800	69			

Figure 13: ANOVA Analysis for all GRC Variables

Source: SPSS

The ANOVA scores of the Green Reward and Compensation (GRC) variables indicate high differences in the perceptions of employees in any group. All variables, such as construing the environmental performance awareness to the public, use of non-monetary and monetary rewards, and attaching the suggestion plans to incentive potentials, have high F-values (93.766-189.373) with zero significance. The sum of squares between groups is significantly bigger than within-groups, which means that the membership of the groups has a strong impact on the perceptions. This data supports the conclusion that employees find significant differences between practices of GRC implementation and efficacy in hospitals.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
53. Top managers use team-work to successfully manage and produce awareness of the environmental issues (green champions/ taskforce/ green-team etc.)	Between Groups	119.333	15	7.956	70.316	.000
	Within Groups	6.110	54	.113		
	Total	125.443	69			
54. Involve employee in formulating environmental strategy	Between Groups	102.276	15	6.818	47.233	.000
	Within Groups	7.795	54	.144		
	Total	110.071	69			
55. Providing opportunities to the employee to involve and participate in green suggestion schemes	Between Groups	130.305	15	8.687	70.214	.000
	Within Groups	6.681	54	.124		
	Total	136.986	69			
56. Introducing green whistle-blowing and help-lines	Between Groups	136.048	15	9.070	51.893	.000
	Within Groups	9.438	54	.175		
	Total	145.486	69			
57. Hospital offers workshops or forums for staff to improve environmental behavior and exchange their knowledge	Between Groups	106.448	15	7.097	36.364	.000
	Within Groups	10.538	54	.195		
	Total	116.986	69			

Figure 14: ANOVA Analysis for all EMP Variables

Source: SPSS

As the ANOVA result on the Employee Empowerment and Participation (EMP) variables shows, there indeed are noteworthy differences in the perceptions of groups. Variables such as the use of teamwork exhibit high F-values (36.364-70.316) and it is significant at 0.000. The between-groups sum of squares is significantly greater than the within squares, showing that there is a strong impact of group membership on perceptions. These results affirm that employees have the perception of different perceptions of empowerment and involvement in green practices in hospitals.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
58. Improved hospital performance	Between Groups	44.405	15	2.960	15.724	.000
	Within Groups	10.167	54	.188		
	Total	54.571	69			
59. Improved patient satisfaction	Between Groups	54.500	15	3.633	14.217	.000
	Within Groups	13.800	54	.256		
	Total	68.300	69			
60. Increased CSR activities	Between Groups	43.883	15	2.926	5.980	.000
	Within Groups	26.417	54	.489		
	Total	70.300	69			
61. Proper waste management	Between Groups	32.938	15	2.196	7.260	.000
	Within Groups	16.333	54	.302		
	Total	49.271	69			
62. Increased use of renewable energy and sustainable fuels	Between Groups	99.893	15	6.660	28.205	.000
	Within Groups	12.750	54	.236		
	Total	112.643	69			
63. Reductions in the consumption of electric energy	Between Groups	83.452	15	5.563	22.199	.000
	Within Groups	13.533	54	.251		
	Total	96.986	69			

Figure 15: ANOVA Analysis for all EP Variables

Source: SPSS

Through the ANOVA results in terms of the Environmental Performance (EP) variables, the difference in the employee perceptions was found to be significant between groups. The variables such as hospital performance, patient satisfaction, CSR activities, waste management, use of renewable energy, and electricity used reduction, which have F-values of between 5.980 and 28.205, are all significant with an F-value of 0.000. The between-groups sum of squares is always greater than the within-groups, and this implies that the membership of a group has a strong influence on perceptions. These findings establish that

employees have differing effectiveness of environmental performance initiatives at hospitals.

Null hypothesis testing assumption for the Chi-Square test

Null Hypothesis (H0): There is no significant relationship between hospital management practices (MOC), green recruitment and selection (GRS), and employee training (GTD) with employees' awareness and participation in green initiatives.

32. Top management clarify information and values of Environmental Management Throughout the hospital * 47. Employees know their specific green targets, goals and responsibilities Crosstabulation

Count

		47. Employees know their specific green targets, goals and responsibilities					
		1	2	3	4	5	Total
32. Top management clarify information and values of Environmental Management Throughout the hospital	1	3	0	0	0	0	3
	2	1	1	0	0	0	2
	3	1	1	10	2	0	14
	4	3	3	4	12	4	26
	5	0	0	0	3	22	25
Total		8	5	14	17	26	70

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	95.160[a]	16	.000
Likelihood Ratio	85.173	16	.000
Linear-by-Linear Association	40.160	1	.000
N of Valid Cases	70		

a. 18 cells (72.0%) have expected count less than 5. The minimum expected count is .14.

Figure 16: Chi-Square Test for Null Hypothesis Between Top management clarifying environmental information vs employee participation in green programs

Source: SPSS

The Chi-Square test considers the linkage between the clarification of environmental values by top management (MOC) and the level of awareness by the employees with regard to the green targets (GTD). The Chi-Square of Pearson is 95.160 with a degree of freedom = 16 and significance = 0.000, which means that there is a statistically significant relationship. The strong positive trend is affirmed by the Linear-by-Linear Association (40.160, p = 0.000). Although 72% of the cells had anticipated counts of fewer than 5, the findings indicate that an extra effort by the management is needed. They communicate with the employees greatly contributes to the increase in employee involvement in a hospital.

37. Job description specification includes environmental concerns * 47. Employees know their specific green targets, goals and responsibilities Crosstabulation

Count

		47. Employees know their specific green targets, goals and responsibilities					
		1	2	3	4	5	Total
37. Job description specification includes environmental concerns	1	2	1	1	0	0	4
	2	6	1	5	1	0	13
	3	0	1	5	3	5	14
	4	0	2	3	11	2	18
	5	0	0	0	2	19	21
Total		8	5	14	17	26	70

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	77.079[a]	16	.000
Likelihood Ratio	80.884	16	.000
Linear-by-Linear Association	39.322	1	.000
N of Valid Cases	70		

a. 21 cells (84.0%) have expected count less than 5. The minimum expected count is .29.

Figure 17: Chi-Square Test for Null Hypothesis Between Job description for environmnetal concerns vs. employee participation in green programs

Source: SPSS

Chi-Square test gives an estimate of how the inclusion of environmental concerns in job descriptions (GRS) relates to the awareness of green targets (GTD) in employees. The Pearson Chi-Square value equals 77.079, which has a significant value of 0.000 and a degrees of freedom equals 16 which is statistically significant. A significant positive trend is proved by the Linear-by-Linear Association (39.322, p = 0.000). Even though the count of cells in which the count was expected to be fewer than 5 was 84%, the findings indicate that specifying environmental roles directly in the job description is influential. It is increasing the participation and the receptiveness of employees regarding green initiatives in hospitals.

42. Environmental training is a priority when compared to other types of company training * 47. Employees know their specific green targets, goals and responsibilities Crosstabulation

Count

		47. Employees know their specific green targets, goals and responsibilities					
		1	2	3	4	5	Total
42. Environmental training is a priority when compared to other types of company training	1	5	0	1	0	0	6
	2	0	3	1	0	0	4
	3	3	1	8	2	0	14
	4	0	1	3	14	5	23
	5	0	0	1	1	21	23
Total		8	5	14	17	26	70

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	123.300[a]	16	.000
Likelihood Ratio	100.600	16	.000
Linear-by-Linear Association	49.066	1	.000
N of Valid Cases	70		

a. 20 cells (80.0%) have expected count less than 5. The minimum expected count is .29.

Figure 18: Chi-Square Test for Null Hypothesis Between Environmental training priority and availability vs employee participation in green programs

Source: SPSS

The Chi-Square test is the method of analysing the correlation between the importance of the environmental training (GTD) and awareness of the green targets among employees. The Pearson Chi-Square result is 123.300 significance of 0.000, and the degree of freedom is 16; the result is a statistically significant correlation. The association between the two variables of Linear-by-Linear (49.066, p = 0.000) validates a high positive tendency. 80% of cells comprised expected counts lower than 5. However, the results indicate that placing importance on environmental training would greatly boost the involvement, understanding and involvement of employees in green programs in hospitals.

Alternative hypothesis testing for Chi-Square Test

Alternative Hypothesis (H1): There is a significant association between green performance management, green reward and compensation and employee empowerment, with organizational environmental performance.

49. Roles of manages in achieving green outcomes included in appraisals * 60. Increased CSR activities Crosstabulation

Count

		60. Increased CSR activities				
		1	3	4	5	Total
49. Roles of manages in achieving green outcomes included in appraisals	1	3	3	0	3	9
	2	0	2	1	1	4
	3	0	4	4	8	16
	4	0	3	17	1	21
	5	0	2	1	17	20
Total		3	14	23	30	70

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	63.395[a]	12	.000
Likelihood Ratio	58.959	12	.000
Linear-by-Linear Association	15.287	1	.000
N of Valid Cases	70		

a. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .17.

Figure 19: Chi-Square Test for Alternative Hypothesis Between Incorporation of environmental objectives in

performance appraisal vs organizational environmental performance

Source: SPSS

The two variables under study in the Chi-Square analysis are whether the inclusion of managerial roles in the achievement of green outcomes in appraisal (GPMA) is positively related to augmented CSR activities (EP). The Pearson Chi-Square value is 63.395, and the degrees of freedom are 12, and significant value is 0.000 means that there is no significant relationship. The positive trend is justified by the Linear-by-Linear Association (15.287, p = 0.000). 70% of the cells belong to financial expectations, which are below 5. The findings are that the introduction of environmental responsibilities in the performance appraisals has a significant positive impact on CSR initiatives and the environmental performance of an organization.

55. Providing opportunities to the employee to involve and participate in green suggestion schemes * 60. Increased CSR activities Crosstabulation

Count

		60. Increased CSR activities				
		1	3	4	5	Total
55. Providing opportunities to the employee to involve and participate in green suggestion schemes	1	1	3	0	6	10
	2	2	4	0	2	8
	3	0	3	1	1	5
	4	0	3	20	2	25
	5	0	1	2	19	22
Total		3	14	23	30	70

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	68.080[a]	12	.000
Likelihood Ratio	68.807	12	.000
Linear-by-Linear Association	10.842	1	.001
N of Valid Cases	70		

a. 15 cells (75.0%) have expected count less than 5. The minimum expected count is .21.

Figure 20: Chi-Square Test for Alternative Hypothesis Between Rewards and recognition for environmental contributions vs organizational environmental performance

Source: SPSS

The Chi-Square test investigates the correlation between the provision of employees with a chance to engage in green suggestion schemes (EMP) and the rise of the CSR activities (EP). The result of Pearson Chi-Square test is 68.080 with 12 degrees of freedom and significant at 0.000, which means that it has a statistically significant association. A positive trend is confirmed with the help of Linear-by-Linear Association (10.842, p = 0.001). Although the number of 75% of cells with expected counts of fewer than 5, the results indicate that employee empowerment through their involvement in green initiatives. It is a major contributor to the improvement of the environmental performance as well as the CSR performance of an organization.

58. Improved hospital performance * 60. Increased CSR activities Crosstabulation

Count

		60. Increased CSR activities				
		1	3	4	5	Total
58. Improved hospital performance	2	2	2	0	0	4
	3	0	6	1	4	11
	4	1	2	17	6	26
	5	0	4	5	20	29
Total		3	14	23	30	70

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	54.661[a]	9	.000
Likelihood Ratio	43.185	9	.000
Linear-by-Linear Association	19.586	1	.000
N of Valid Cases	70		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .17.

Figure 21: Chi-Square Test for Alternative Hypothesis Opportunities for participation and empowerment vs

organizational environmental performance

Source: SPSS

Chi-Square analysis explores the association between better performance of the hospital (EP) and better CSR activities (EP) as an indicator of employee empowerment and participation (EMP). The created Pearson Chi-Square distribution is of 54.661 degrees of freedom and 9 degrees of significance with reference to the 0.000 of significance, which demonstrates that the association is statistically significant. Although the positive trend is confirmed by the Linear-by-Linear Association (19.586, p = 0.000). Although 62.5% of the expected counts of 5 or lower were found to be expected in 62.5% of the cells, the findings provide evidence that the increased participation and empowerment of employees. It leads to improved environmental performance of organisations and the Corporate Social Responsibility movement.

DISCUSSION

Organizational Culture, Green HRM Practices, and Employee Buy-in

The findings of the study confirm that organizational culture serves as the backbone of employee engagement in sustainability practices. The dimension of Management and Organizational Culture (MOC) emerged as a highly influential factor across the selected private hospitals in Kolkata. Senior management in these hospitals has adopted a firm stance toward incorporating environmental values into their operations. Employees recognize that their leaders actively communicate the organization's environmental objectives, ensuring that sustainability is not merely a policy but a visible part of everyday decision-making. Green operations have been normalized, and ecological concerns have been embedded in mission statements and routine practices.

Nevertheless, the study also highlights perceptual differences across hierarchical levels. Senior administrators tend to have greater exposure and understanding of sustainability initiatives compared to junior staff. These variations underscore that employee roles influence the extent of engagement in green activities. The creation of awareness and alignment with sustainability goals are facilitated through Green Recruitment and Selection (GRS) and Green Training and Development (GTD). By incorporating environmental expectations into job descriptions and recruitment materials, hospitals can attract candidates whose values align with sustainability objectives. Furthermore, environmental training programs play a vital role in equipping staff with the knowledge and skills to engage in eco-friendly practices.

The Chi-square tests from this study reveal that employees are significantly motivated when clear environmental goals, defined roles, and targeted training programs are in place. These outcomes are consistent with the findings of Akpa et al. (2021) and Bagga et al. (2023), who emphasized the importance of transformational leadership and supportive organizational culture in promoting sustainability. Hence, an environmentally oriented culture, strategic recruitment, and comprehensive training are critical pillars for fostering employee commitment to sustainability program

Integrating Sustainability: Performance, Rewards, and Empowerment

The study also reveals that transactional and motivational processes Green Performance Management and Appraisal (GPMA), Green Reward and Compensation (GRC), and Employee Empowerment and Participation (EMP) play an essential role in sustaining pro-environmental behaviors among employees. While mean scores for these variables are moderately high, significant differences exist among various employee groups. Such disparities may reflect inconsistencies in how performance appraisal, incentives, and empowerment opportunities are implemented or perceived across departments, particularly between administrative and clinical staff.

Despite these variations, the presence of performance-based sustainability evaluations and green incentive systems demonstrates hospitals' commitment to embedding sustainability within their HR processes. Many employees reported participation in green committees, suggestion schemes, and environmental workshops, indicating an emerging culture of collaboration. These findings resonate with Saeed and Abbas (2024), who suggested that performance management, incentives, and empowerment can serve as critical tools to promote pro-environmental behaviors in organizations. Empowerment encourages ownership, while reward systems reinforce commitment to sustainability. Therefore, the integration of green performance evaluation and participative structures can effectively motivate continuous employee engagement in sustainable practices.

Green HRM, Environmental Performance, and CSR

The research establishes a statistically significant association between Green HRM practices and Environmental Performance (EP), affirming that sustainability-focused HR interventions lead to measurable ecological improvements. Employees perceive that their hospitals demonstrate strong performance in areas such as waste management, energy efficiency, and CSR activities. The observed relationships among EP, GRC, EMP, and GPMA provide empirical support for the alternative hypothesis (H2), validating the positive impact of HR mechanisms on environmental outcomes. The study further reveals that environmental appraisals, incentives for eco-friendly performance, and participatory programs significantly enhance overall environmental performance. The evidence suggests that Green HRM initiatives are not symbolic but yield tangible results, supporting earlier work by Ayana and Wodajo (2024), who found that HRM practices aligned with environmental goals enhance organizational eco-performance. Moreover, employee participation, appreciation, and empowerment act as mediators that translate HR policies into measurable environmental and CSR achievements. Collectively, these

findings underscore that HR strategies, when guided by sustainability, can transform organizational behaviour and performance in meaningful ways.

Implications for Sustainable Healthcare Management in Kolkata

This study holds both theoretical and practical significance. From a theoretical standpoint, it fills an important gap in the literature on Green HRM within the Indian healthcare sector, a field with limited prior empirical investigation. The study captures multiple dimensions—organizational culture, recruitment, training, performance management, rewards, and employee participation—thereby offering a holistic view of how HR practices can contribute to sustainability.

Practically, the results emphasize the need for hospitals to formalize and standardize Green HRM practices to ensure consistency across departments and employee categories. While Management and Organizational Culture received strong positive evaluations, areas like recruitment and rewards scored lower, suggesting room for improvement. Hospitals should focus on three critical areas: (1) strengthening green recruitment strategies, (2) developing transparent and motivating reward systems, and (3) enhancing participatory and empowerment programs. Emphasizing open communication, regular feedback, and performance-linked incentives can embed sustainability more effectively into daily operations.

Furthermore, this study identifies best practices such as clear environmental communication, defined role expectations, regular green training, and empowerment mechanisms. These elements can serve as replicable models for hospitals seeking to improve environmental performance and CSR delivery. As the healthcare sector in India grows, integrating sustainability within HRM systems can ensure that hospitals not only deliver quality care but also operate as responsible corporate citizens.

Limitations and Challenges in Implementation

While the findings are significant, the study acknowledges certain limitations. The sample size—70 employees from five private hospitals in Kolkata—limits the generalizability of the results to other regions or public healthcare institutions. Additionally, perceptual differences among employees suggest variations in the uniformity of Green HRM implementation. Differences in job design, departmental priorities, and management styles may create unequal experiences across staff groups.

Another limitation concerns the use of self-reported data, which may be subject to response bias. Some participants may have overstated their awareness or participation in sustainability programs. Moreover, practical challenges such as balancing HR policies with sustainability budgets, designing equitable reward systems, and maintaining consistent employee engagement in green programs continue to constrain full implementation. Future research should expand to a broader population and employ longitudinal or mixed-method designs to capture deeper insights into behavioral and organizational changes over time.

Synthesis of Findings

The overall synthesis reveals that an integrated Green HRM framework—encompassing organizational culture, recruitment, training, performance appraisal, rewards, and participation—significantly influences employee motivation, engagement, and environmental outcomes. Foundational elements like MOC, GRS, and GTD foster sustainability awareness and commitment, while transactional mechanisms like GPMA, GRC, and EMP reinforce motivation and accountability. Together, these factors enhance both environmental performance and CSR engagement.

In summary, the study demonstrates that Green HRM is a strategic enabler of sustainable healthcare management. To maximize its potential, hospitals must strengthen policy uniformity, emphasize equitable reward structures, and maintain active employee participation. By institutionalizing these green HRM dimensions, healthcare organizations can achieve a balance between operational excellence and environmental responsibility—paving the way for a more sustainable and socially accountable healthcare sector in Kolkata and beyond.

CONCLUSION AND FUTURE SCOPE OF RESEARCH

Conclusion

This study has discussed how employees perceive Green Human Resource Management (Green HRM) practices in privately owned multi-speciality hospitals in Kolkata and how their effects relate to organizational environmental performance (EP) and corporate social responsibility (CSR). The results point to the fact that Management and Organizational Culture (MOC) can serve as a fundamental principle when it comes to promoting environmental awareness. Since the devotion and conveyance of sustainability principles by top management can be largely recognized among employees. Green Recruitment and Selection (GRS) and Green Training and Development (GTD) extend this base and make sure that the employees are not only competent but also passionate about taking part in green activities.

Additionally, transactional and motivational mechanisms such as Green Performance Management and Appraisal (GPMA), Green Reward and Compensation (GRC), and Employee Empowerment and Participation (EMP) were seen to have a positive effect on the outcome in the environment. Even though the perception towards these practices was more different among the employee groups, they worked effectively in increasing participation of employees, accountability, and proactive investment of employees in sustainability programs. The above findings indicate that hospital performance, rewards, and participatory opportunity management should be linked to environmental goals to obtain quantifiable sustainability practices.

The research shows that the practice of a Green HRM environment enhances the environmental performance of

the organizations. It involves conservation of proper waste disposal, good energy conservation and improved CSR operations. Sustainability integration heavily depends on the methods employed by human resources in operations within hospitals, on the day-to-day running of the hospitals. The chi-square tests show that employee awareness, rewards, and empowerment have a strong correlation with EP improvements. These results indicate that HR practices are important in ensuring environmental responsibility. It focuses on the holistic approach to intervention, which is the combination of cultural, procedural and motivational HR approaches used in the research. These kinds of comprehensive strategies are necessary towards the attainment of effective long-term sustainability results in healthcare organizations with regard to maintaining consistent employee engagement and organizational eco-performance.

Future Scope of Research

Although the present research ensures valuable insights, there is some scope for future research can be performed. To enhance generalizability and regional differences in the acceptance of Green HRM, first, the sample size may be expanded by adopting more hospitals in the various cities in India or state-owned healthcare institutions. Second, longitudinal studies would help realize how the Green HRM practices might affect the environmental performance and employee behavior in the long term, to provide a clue about long-term sustainability. It is also possible to conduct more research in the future that will examine other moderating or mediating variables that might include organizational size, resource availability, employee tenure, or cultural diversity to examine the effect they have on the effectiveness of Green HRM. A longitudinal comparison of hospitals that have and have not established formal sustainability programs may give more information on the best practices and implementation issues.

By combining methods of qualitative research, including interviews or focus groups, with surveying, with a deeper understanding of employee experiences, motivations, and perceptions, may be an effective solution. This would give a comprehensive insight into internalization and operationalization of Green HRM practices in healthcare contexts. Thus, it is important to note that Green HRM plays an essential part in ensuring sustainable healthcare management, and the research serves as a good basis for new studies that could result in the enhancement of the sustainability of the environment and healthcare organizations in hospitals.

REFERENCES

1. Abubakar, S. A., Tafida, A. M., Umar, S. S., Usman, I. T., Joseph, O. I., & Agana, K. Y. (2024). Challenges and strategies for recruiting representative samples in research and implications for generalizability. African Journal of Social and Behavioural Sciences, 14(7). https://journals.aphriapub.com/index.php/AJSBS/article/download/2895/2666
2. Akpa, V. O., Asikhia, O. U., & Nneji, N. E. (2021). Organizational culture and organizational performance: A review of literature. International journal of advances in engineering and management, 3(1), 361-372.https://www.researchgate.net/profile/Professor-Asikhia/publication/356105838_Organizational_Culture_and_Organizational_Performance_A_Review_of_Literature/links/618bed3907be5f31b762d272/Organizational-Culture-and-Organizational-Performance-A-Review-of-Literature.pdf
3. Al-Aqbi, T. H. H., Rafique, T., Mazahirul, I., Gardazi, S. M. H., Ahmad, W., Gupta, A., ... & Ali, M. M. (2024). Nanomaterials For Environmental Remediation: Advances In Water, Air, And Soil Pollution Mitigation. Nanotechnology Perceptions, 762-790. https://www.researchgate.net/profile/Mazahirul-Syed/publication/388993117_Nanomaterials_For_Environmental_Remediation_Advances_In_Water_Air_And_Soil_Pollution_Mitigation/links/67af1ef4461fb56424d9ae56/Nanomaterials-For-Environmental-Remediation-Advances-In-Water-Air-And-Soil-Pollution-Mitigation.pdf
4. Ayana, I. D., & Wodajo, M. G. (2024). Green human resource management and organizational performance: structural equation model evidence from nekemte comprehensive specialized hospital, ethiopia. International Journal of Management and Fuzzy Systems, 10(1), 1-16.https://www.researchgate.net/profile/Isubalew-Ayana/publication/383295425_Green_Human_Resource_Management_and_Organizational_Performance_Structural_Equation_Model_Evidence_from_Nekemte_Comprehensive_Specialized_Hospital_Ethiopia/links/66c7524a97265406eaa31ffa/Green-Human-Resource-Management-and-Organizational-Performance-Structural-Equation-Model-Evidence-from-Nekemte-Comprehensive-Specialized-Hospital-Ethiopia.pdf
5. Azizie, N. A. M., Hassan, M. A., Shahrulnizam, N. A. A., & Wahab, S. R. A. (2025). The Role of Green Training and Development in Enhancing Organizational Citizenship Behavior for the Environment: A Pathway to Sustainability. International Journal of Research and Innovation in Social Science, 9(2), 1701-1710.https://www.researchgate.net/profile/Najah-Azila-Mohamad-Azizie/publication/389669225_The_Role_of_Green_Training_and_Development_in_Enhancing_Organizational_Citizenship_Behavior_for_the_Environment_A_Pathway_to_Sustainability/links/681381ecd1054b0207e6212b/The-Role-of-Green-Training-and-Development-in-Enhancing-Organizational-Citizenship-Behavior-for-the-Environment-A-Pathway-to-Sustainability.pdf
6. Bagga, S.K., Gera, S. & Haque, S.N., (2023). The mediating role of organizational culture: Transformational leadership and change management in virtual teams. Asia Pacific Management Review, 28(2), pp.120-131.https://www.sciencedirect.com/science/article/pii/S1029313222000355

7. Bangura, S., & Lourens, M. E. (2025). A SCOPING REVIEW OF GREEN RECRUITMENT AND SELECTION STUDIES IN DEVELOPING COUNTRIES: evidence from existing studies.INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT, 6(02), 66-72.https://www.ijbms.net/assets/files/1740470408.pdf
8. Bhat, A. A., Mir, A. A., Allie, A. H., Lone, M. A., Al-Adwan, A. S., Jamali, D., & Riyaz, I. (2024). Unlocking corporate social responsibility and environmental performance: Mediating role of green strategy, innovation, and leadership. Innovation and Green Development, 3(2), 100112.https://www.sciencedirect.com/science/article/pii/S2949753123000802
9. Das, S., & Dash, M. (2024). Green compensation and reward system: A novel approach towards the growth and sustainability of organization. Journal of Advanced Zoology, 45(2), 1213-1219.https://www.researchgate.net/profile/Sujata-Das-8/publication/378602336_Green_Compensation_And_Reward_System_A_Novel_Approach_Towards_The_Growth_And_Sustainability_Of_Organisation/links/65e174b8c3b52a117001ebf2/Green-Compensation-And-Reward-System-A-Novel-Approach-Towards-The-Growth-And-Sustainability-Of-Organisation.pdf
10. Fapohunda, T. M., Genty, K., & Olanipekun, L. (2022). The effect of green recruitment and selection practices on organizational sustainability among selected manufacturing firms in Ogun State, Nigeria. Texas Journal of Multidisciplinary Studies, 4(2770), 174-186.https://www.academia.edu/download/85896872/Fapohunda_Genty_Olanipekun_2022.pdf
11. Hoxha, G., Simeli, I., Theocharis, D., Vasileiou, A., & Tsekouropoulos, G. (2024). Sustainable healthcare quality and job satisfaction through organizational culture: Approaches and outcomes. Sustainability, 16(9), 3603. https://www.mdpi.com/2071-1050/16/9/3603
12. Izah, S. C., Sylva, L., & Hait, M. (2023). Cronbach's alpha: A cornerstone in ensuring reliability and validity in environmental health assessment. ES Energy & Environment, 23, 1057. https://www.espublisher.com/uploads/article_pdf/esee1057.pdf
13. José Chen-Xu, Kislaya, I., Fernandes, R. M., Carvalho, J., Blanco-Rojas, B. J., Omnia El-Omrani, Miotto, E., Katja Čič, Paulo Boto, & Viegas, S. (2024). Interventions for increasing energy efficiency in hospitals. The Cochrane Library, 2024(3). https://doi.org/10.1002/14651858.cd015693
14. Khalil, S. M., Khan, M. I., Shah, S. M. A., Khalil, S. H., Sultan, F., & Ahmad, W. (2021). Investigating the effect of knowledge management on employee performance via employee empowerment and supervisory support. Indian Journal of Economics and Business, 20(4).https://www.ashwinanokha.com/resources/v20-4%20-%2021-153.pdf
15. Kuang, H., Zhu, L., Yin, H., Zhang, Z., Jing, B., & Kuang, J. (2025). The impact of individual factors on careless responding across different mental disorder screenings: Cross-sectional study. Journal of Medical Internet Research, 27, e70451. https://www.jmir.org/2025/1/e70451/
16. Malik, S. Y., Hayat Mughal, Y., Azam, T., Cao, Y., Wan, Z., Zhu, H., & Thurasamy, R. (2021). Corporate social responsibility, green human resources management, and sustainable performance: is organizational citizenship behavior towards environment the missing link?. Sustainability, 13(3), 1044. https://www.mdpi.com/2071-1050/13/3/1044
17. Notodiprojo, K. R. S., Hamidah, H., & Saptono, A. (2024). Empowerment, Emotional Intelligence, and Innovation's Impact on Organizational Citizenship Behavior Among BPJS Health Employees. Asian Journal of Management, Entrepreneurship and Social Science, 4(01), 397-404.http://www.ajmesc.com/index.php/ajmesc/article/download/623/401
18. Nyimbili, F. & Nyimbili, L., (2024). Types of purposive sampling techniques with their examples and application in qualitative research studies. https://www.researchgate.net/profile/Leah-Nyimbili/publication/378433792_Citation_Nyimbili_F_and_Nyimbili_L_2024_Types_of_Purposive_Sampling_Techniques_with_Their_Examples_and_Application_in_Qualitative_Research_Studies/links/65d8eb95c3b52a1170f26078/Citation-Nyimbili-F-and-Nyimbili-L-2024-Types-of-Purposive-Sampling-Techniques-with-Their-Examples-and-Application-in-Qualitative-Research-Studies.pdf
19. Saeed, A., & Abbas, H. (2024). Impact of green performance management on pro-environmental behavior: mediating roles of environmental knowledge and green lifestyle. Journal on Innovation and Sustainability RISUS, 15(2), 83-95.https://revistas.pucsp.br/risus/article/download/64054/45494
20. Saka, N., Olanipekun, A. O., & Omotayo, T. (2021). Reward and compensation incentives for enhancing green building construction. Environmental and Sustainability Indicators, 11, 100138.https://www.sciencedirect.com/science/article/pii/S2665972721000398
21. Sarwar, A., & Mustafa, A. (2024). Analysing the impact of green intellectual capital on environmental performance: the mediating role of green training and development. Technology Analysis & Strategic Management, 36(11), 3357-3370.https://www.researchgate.net/profile/Adnan_Sarwar5/publication/370570562_Analysing_the_impact_of_green_intellectual_capital_on_environmental_performance_the_mediating_role_of_green_training_and_development/links/6466f4b770202663165962b3/Analysing-the-impact-of-green-intellectual-capital-on-environmental-performance-the-mediating-role-of-green-training-and-development.pdf?origin=journalDetail&_tp=eyJwYWdlIjoiam91cm5hbERldGFpbCJ9
22. Sun, X., El Askary, A., Meo, M. S., & Hussain, B. (2022). Green transformational leadership and

environmental performance in small and medium enterprises. Economic Research-Ekonomska Istraživanja, 35(1), 5273-5291.https://hrcak.srce.hr/file/436711