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Green Human Resource Management and Employee Performance in an Emerging Economy: Mediating Role of Job Satisfaction and Industry Type as Moderator

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ABSTRACT

Green Human Resource Management (GHRM) has turned out to be a critical organisational strategy for managing environmental sustainability and conforming top employee performance. The purpose of this study is to analyse the relationship between Green HRM practices and employee performance in an emerging economy (Pakistan) while investigating the mediating role of job satisfaction, and the moderating role of industry type. This study has utilised a quantitative research approach to evaluate this interrelationship. The target population of this study includes employees working in different industries that implement GHRM practices. These industries include banking (service industry) and pharmaceutical and FMCG (Manufacturing industry). It ensures diversity in organisation practices and employee roles. The survey was filled by 400 respondents from these diverse industries employees. The data was analysed using Partial Least Squares-Structural Equation Modelling (PLS-SEM) analysis in SMART PLS. The findings revealed that both green recruitment and green compensation have a positive and significant impact on employee performance, whereas green performance has an insignificant impact on employee performance. Job satisfaction was also indicated to have a significant mediating role in the relationship between green compensation and employee performance and also between green performance and employee performance. Job satisfaction does not mediate the relationship between green recruitment and employee performance. Furthermore, the industry type did not have any moderating impact. The study contributes to understanding GHRM's role in increasing employee performance, elaborating green recruitment and compensation as important drivers. Practically, it helps emerging economies to adopt tailored GHRM strategies, focusing on job satisfaction. Cross-industry findings support policy development for sustainable HR practices regardless of sectors.

INTRODUCTION

GHRM has turned out to be a critical organisational strategy for managing environmental sustainability and conforming top employee performance (Yong *et al.*, 2020). That is why GHRM addresses environmental concerns through the green culture in human resource policies of recruitment, performance appraisal, and compensation. Hameed *et al.* (2020) as Pakistani environment gets more and more challenging it becomes pertinent to understand relationship between GHRM and employee performance. Precisely, this study examines the moderating influence of type of industry and the mediating role of job satisfaction for GHRM strategies and employees' performance, and these findings offer substantial theoretical and practical contributions to the GHRM literature.

GHRM is defined as the process of utilizing environmentally sustainable HR practices, which include green recruitment, green training, green performance appraisal and other environmentally sustainable activities to manage and develop human resources while improving organizational performance of the company (Mousa & Othman, 2020). They have established moderate success in enhancing work commitment and productivity through sustainability norms that correspond with organizational

beliefs.

The reason as to why GHRM should be implemented in Pakistan is based on the fact that the country faces severe environmental issues that include pollution, water rationing and deforestation among others (Shaikh & Mahesar, 2024). Furthermore, job satisfaction is postulated to moderate this relationship because of its importance to the enhancement of performance; moreover, the indistinct character of industrial type as a consequence of distinctions in industrial practices and pressures explains its moderated role as well. This research seeks to fill these gaps by examining these relations in a vortex.

Company and stakeholders are demanding more adherence to environmentally friendly practices, despite a staggering number of organizations failing to incorporate GHRM efficiency, both environmentally and employee performance (Truong *et al.*, 2024). One major concern is that there is little fit between GHRM strategies and employee drivers which leads to low employee performance and job satisfaction. For example, green policies can be frowned at as non-essential or inconsequential by the employees and thus, they do not dedicate their energies. Besides, GHRM practices significantly differ in effectiveness in one industry or another because of the

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environmental regulation and operational constraints, and organizational culture differences (Aggarwal & Agarwala, 2023). As in many other developing countries, environmental challenge such as pollution and scarcity of resources require immediate attention in Pakistan, however, in many institutions, GHRM strategies are not properly developed to commemorate the requirement of different sectors, thus lead to erratic results.

The purpose of this study is to analyse the relationship between Green HRM practices and employee performance in the context of Pakistan while investigating the mediating role of job satisfaction, and the moderating role of industry type. It seeks to advance knowledge of how sustainable HR practices, which are HR solutions to industry-specific issues, improve employees' productivity and facilitate other sustainability initiatives. This research is important to undertake due to increasing issues of environmental responsibility and workforce productivity in various sectors of Pakistan. This study contributes to the literature on Green HRM by considering the moderating factor of industry type as well as the mediating factor of job satisfaction to prove how Green HRM may contribute positively to organizational performance. It generates recommendations to help the HR managers who want to develop organisational solutions for encouraging employee participation and performance in matters achieving organisational sustainability objectives. Further, it will help the theory of Green HRM to develop by providing the much-needed insight into the subject and pave way for formulation of tailor-made solutions depending on the industry demands.

LITERATURE REVIEW

Overview of Green Human Resource Management (GHRM)

GHRM and human resource management practices integrate together to produce environmentally friendly behaviours related to staffing techniques, training, performance appraisal and reward methods (Malik *et al.*, 2021). It is a systemic concept designed to promote green culture in organisations and align them with overall sustainable management goals of HRM. GHRM also ensures that organisations do not only conform to environmental standards but also enhances employees' commitment, performance and organisation performance as well (Roscoe *et al.*, 2019).

In the last decade, GHRM has received much attention globally. A bibliometric analysis of GHRM research increases the publications by 200% in the period covering 2015-2020 in order to demonstrate an increasing interests of scholars in this domain (Pooja & Bhavani, 2025). A circular economy initiative in Europe for sustainable practices envisages that the measures would generate about 700000 jobs by 2030. Equally, the ILO estimates that green economy could create 24 million more employments worldwide by the same year which makes GHRM practices to be economically beneficial in generating employment (Van der Ree, 2019).

The adoption of GHRM corporate strategies is shaped by legal requirements and environmental pressures. Study by Chen *et al.* (2024) revealed that the manufacturing industries in different states including China have undergone appreciable changes to adopt green ideas. Shah and Soomro (2023) points out that companies that have adopted GHRM practices in China received added benefits of 15% increase in operation efficiency besides enjoying a boost in innovation. Likewise, the concepts of green recruitment and training in the hospitality sector have shown better results in terms of satisfaction and retention of the employees, increased by 10%.

Presently, the application of GHRM in Pakistani organisations is in its infancy but is receiving a growing level of recognition especially in industries that contribute to environmental degradation such as textiles and manufacturing (Zafar, 2023). Research also shows that firms that adopted green HRM practices had increased overall employee performance by 12% and enhanced organisational sustainability commitment.

The adoption of GHRM has numerous advantages that include; enhanced thresholds of organisational employee engagement. Employees are willing to participate in an organisation's objectives in case they consider the employer an environmentally-friendly one (Gill *et al.*, 2021). For instance, green training and performance management systems were positively correlated with enhanced performance by 20% based on a survey carried out in 2022 (Al-Alawneh *et al.*, 2024). Also, companies implementing GHRM practices may find improved branding, and get the attention of talented employees who care about the environment. This trend is most noticeable in millennial and Gen Z employees, as 70% of them believe the environmental policies are being implemented by the employer.

Nonetheless, adoption of GHRM comes with some challenges viewing the fact that most organisation will go for generic rather than human capital-oriented approach, especially where the environment is restrictive in terms of resources (Boon *et al.*, 2018). In contrast, most SMEs have limited financial and technical capital to support the effective execution of efficient green HRM strategies. Also, change or organisational culture resistance and ignorance among the company's employees and managers can also counter these efforts (Tasoulis *et al.*, 2024). As a means of overcoming these barriers, complete emphasis must be placed on the way that organisations are structured by focusing on ways of establishing culture that sustains training on environmental issues. Governments and industry associations can also fulfil this role by providing motivation towards the use of green practices through commendations and support programs.

Employee Performance and Its Determinants

There are few things in the organisation more important than performance of its employees in the context of organisational effectiveness. The term is defined as how well employees embrace their responsibilities and bear

obligations to provide productivity and efficiency in the organisation (Atatsi *et al.*, 2019). To sustain success and introduce long-term organisational objectives amidst a competitive and ever-changing business structure, it is crucial to maximize the performance of organisational members. The factors of performance are many and complex and can be grouped as organisational factors, personal factors, and environmental factors.

Performance may refer to measures of employee productivity including achievements of laid down tasks, quality of the work produced, the level of punctuality, and compliance to organisational requirements (Thierry, 2018). Performance, in addition to personal contributions, encompasses groups, ideas, overview with organisational goals, and objectives. Not only do outstanding performers excel in achieving individual objectives but also generate organisational competitiveness, creativity, and the ability to adjust to new circumstances (Ferreira *et al.*, 2020).

Organisational, individual and external interacting factors impact on the performance of the employees. Leadership, HR practices, and work environment were identified as organisational determinants that explain levels of performance. According to Graves *et al.* (2019), managerial leadership helps promote commitment and enthusiasm among the employees. Proper employee involvement dramatically improves organisational performance through functional HR processes such as selection, development and control of employees' behaviour. A friendly and stimulating organisational culture also ensures that employees give their best in an organisation (Ogbeibu *et al.*, 2018). At the individual level the knowledge includes job satisfaction, skills required when performing the job, competencies and motivation. In essence, meaningfulness, perceived Organisational value and fit between personal and work-related requirements relate with performance. Other reasons that lead individuals to perform include, personalized motive, non-personalized motive, incentive, stimulation, promotion, recognition, awards, and development chances. On the other hand, external factors such as economic outlook, competition, and culture define performance relations in terms of job stability, intensity, and organisation stability (Akpa *et al.*, 2021). All these determinants lie in a system thus making organisational contribution to organisational success a very dynamic process.

GHRM practices integrate sustainability in HR management objectives without a direct positive correlation to HR functions or employee performance (Amjad *et al.*, 2021). It was established that by promoting a green culture within an organisation, employees are more inspired. For instance, green training programs enhances skill acquisition with an additional enhancement of environmental goals creating a sense of responsibility and thereby enhancing job satisfaction and commitment levels. A study by Roscoe *et al.* (2019) showed that an organisation with effective GHRM had enhanced performance by 20% than an organisation with no effective GHRM policies.

Performance is not a simple concept and is used in this paper to refer to overall organisational, individual, and external factors. The subsequent self-organizing variable includes job satisfaction, motivation, and skills, which help determine how much an employee can assist an organisation (Ogbeibu *et al.*, 2018). While practicing such growing trends as GHRM, it is possible to expand the lists of opportunities provided by implementing sustainability into the practices of the human resource management, thus creating the competitive advantages for the organisation and contributing to the accomplishment of the global goals for sustainability (Amjad *et al.*, 2021).

Mediating Role of Job Satisfaction

Organisational job satisfaction mediated the effect of GHRM practices on employee performance. Irabor and Okolie (2019) highlighted that job satisfaction refers to a worker's evaluation of workplace culture and climate, having regard to their level of satisfaction of workplace policies, working conditions and prospects for career advancement. This mediating role is important because it suggests that satisfied employees are more likely to demonstrate enhanced motivation, elevated levels of engagement and optimum organisational performance which are crucial organisational performance objectives of the HRM practices (Alsomaidae 2023; Quader, 2024). Green recruitment, sustainable performance evaluation and environmental friendly reward systems are GHRM practices that intend to match organisational responsibilities with sustainable initiatives. According to Susanto (2023), they help create a positive image in the eyes of stakeholders regarding the organisation's responsibility towards society and environment, which in turn boosts employees' satisfaction. It has been found that organisational sustainability is positively associated with perceived role meaning, to imply a higher level of commitment towards organisational roles by employees (Cheema *et al.*, 2020). The degree to which employee values correspond to job values enhances job satisfaction, hence a positive impact on its performance.

The study by Baluyos *et al.* (2019) state that job satisfaction is related to the performance improvement. Research shows that GHRM practice implemented at workplace enhance organisational climate which helps in minimizing stressful environment and optimize the level of job appropriation by encouraging measure. For instance, the green training schemes facilitate a reinforcement of knowledge and competencies on matters of ecological management so as to foster their usefulness to the corporate goals (Quader, 2024). It makes them empowered, which leads to job satisfaction that will determine their performance results. Further, the mediation of job satisfaction means that the psychological process explaining the GHRM-employee performance has received attention. This means that if employees receive high levels of satisfaction at the workplace, they tend to demonstrate healthy workplace behaviours, which entail staking out higher productivity, innovativeness, and cooperation (Baluyos *et al.*, 2019).

On the other hand, job dissatisfaction has negative implications on a firm, which include disengagement, intentions of leaving and reduced organisational commitment, all of which counteract the effectiveness of GHRM practices (Susanto, 2023).

Moderating Role of Industry Type

Industry type has relation with both Green Human Resource Management (GHRM) practices and employee performance; it is quite suitable in the context of Pakistan. Pakistan industries are different in terms of pollution index, government regulation policies and constrain in availing natural resources so the factors affecting the implementation of GHRM are moderate (Hassan *et al.*, 2019). These variations need to be explored to ensure that green initiatives can be targeted at organisations to have the best effect.

Manufacturing sector of Pakistan comprises of around 13% of the GDP and provides approximately 15% employment to the total labor force of the country but it is heavily cost-effective in terms of energy utilization, emissions and waste generation (Khan *et al.*, 2023). Industries, especially in textile, energy and chemicals sectors, are forced to integrate GHRM practices due to global sustainability standards' increasing concern with environmental compliance. For instance, textile which contributes up to 60% of the total exports of Pakistan is integrating more sustainable practices to thus adapt to market requirements (Mehar, 2022). Other programmes under GHRM include green performance management through environmental training of its employees in relation to sustainable goals; this fosters satisfaction and improved results among employees.

On the other hand, the industries or sectors like IT, banking, telecommunications etc that forms 58% of the economic growth in Pakistan, have relatively small issues with environment (Nizam *et al.*, 2020). Hence, these sectors emphasize on simple solutions of GHRM to give a sustainable solution such as virtual recruitment and paperless system. However, these initiatives are relatively cheaper to implement, the perceived improvements in employee performance is weaker as compared to high impact industries. For example, Ahmed *et al.* (2021) revealed that 72% of the employees of the banking sector consider GHRM practices as non-strategic activities, which indicates that there is a gap in the execution of these programmes.

Besides, it revealed that the regulatory environment and culture play a central role in the adoption of GHRM across the firms in Pakistan. The study by Stavropoulos *et al.* (2018) also shows that National Environment Quality Centres (NEQs) provide more stringent environmental regulations for manufacturing industries than services sectors, hence encouraging more manufacturing industries to adopt environmental friendly practices. Nevertheless, lack of resources and awareness reduces the ability of small industries to integrate strategic GHRM approaches (Kodua *et al.*, 2022). For example, more than ninety

percent of the firms in Pakistan's industry sector are categorized as SMEs, and often they cannot contribute significantly enough on the impact of green practices on the performance of their human assets due to their constrained financial and technical capabilities.

Hypothesis Development

H1: Green recruitment has a positive impact on employee performance.

H2: Green performance management has a positive impact on employee performance.

H3: Green compensation has a positive impact on employee performance.

H4: Green recruitment positively influences job satisfaction.

H5: Green performance management positively influences job satisfaction.

H6: Green compensation positively influences job satisfaction.

H7: Job satisfaction has a positive impact on employee performance.

H8: Job satisfaction mediates the relationship between green recruitment and employee performance.

H9: Job satisfaction mediates the relationship between green performance management and employee performance.

H10: Job satisfaction mediates the relationship between green compensation and employee performance.

H11: Industry type moderates the relationship between green recruitment and employee performance.

H12: Industry type moderates the relationship between green performance management and employee performance.

H13: Industry type moderates the relationship between green compensation and employee performance.

Research Model/Conceptual Model

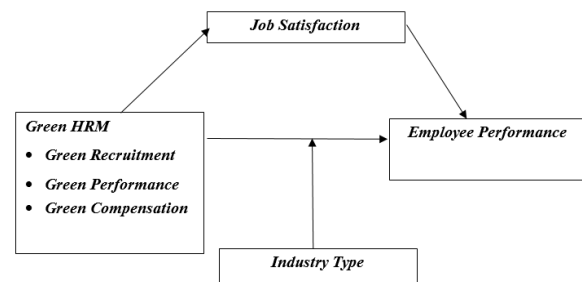


Figure 1: Conceptual Model

MATERIALS AND METHODS

Methods and Materials

This study has utilised quantitative research approach to evaluate the impact of GHRM on the employee performance whereas job satisfaction serves as the mediator and industry type as moderator. The research has adopted causal relationship research design to evaluate direct and indirect relationship among the variables. The

research framework is structured to evaluate the impact of GHRM practices on employee performance mediated through job satisfaction and moderated from industry type. The design is selected for its ability to provide complex relationships and provide insights about the interaction between these variables. Sekeran and Bougie (2016) indicated that researches that evaluate the cause and effect relationship are suitable to be conducted using the quantitative approach. Therefore, this approach seems to be most suitable for the research.

The target population of this study includes employees working in different industries that implement GHRM practices. These industries include banking, pharmaceutical and FMCG sectors. It ensures diversity in organisation practices and employee roles. The sample size of the research was targeted to be 385 respondents to ensure robust analysis. The questionnaire were sent to 750 respondents out of which 427 respondents has filled the survey. However, after cleaning for the missing data 400 responses were left to be evaluated.

Research Instrument

Green Recruitment

Green recruitment instrument outlined by Haldorai *et al.* (2022) has been used to evaluate the extent to which organisation utilises environmental concerns, knowledge and attitudes into recruitment process. It involves statements focusing on the organisation commitment to select candidates with strong environmental awareness and values. The instrument provide valuable insights about how green practices are integrated into recruitment strategies helping organisation to evaluate their efforts to attract environmentally conscious employees.

Green Compensation

Green compensation scale proposed by Haldorai *et al.* (2022) measured how organisation has incentivised employees for their contribution to environmental sustainability. It includes statement to evaluate rewards given to employees to suggest improvements in environmental programs attaining environmental goals and taking proactive steps in environmental management.

Green Performance

Green performance scale developed by Haldorai *et al.* (2022) indicated how organisation can integrate environmental goals into employee performance evaluations. It includes statement related to the implementation of environmental objectives for all employees, evaluating individual contribution to environmental management and potential consequences for employees failing to meet environmental performance expectations. It helps in measuring the degree of environmental performance incorporated into employee evaluation and its impact on career progression, reinforcing sustainability as key performance factor.

Employee Performance

Job performance scale was designed to measure both task performance and contextual performance. The scale evaluates the effectiveness of employees in completing their core job responsibilities and contribute to the overall work environment. It involves items evaluating productivity, quality of work and goal achievement along with behaviours supporting organisation culture and teamwork.

Job Satisfaction

The job satisfaction survey (JSS) or comparable validated scale was designed to measure different aspect of job satisfaction which include work condition, compensation and career development opportunities. The scale measures employee feelings about work environment, salary and overall satisfaction. It provides insights about how these factors can impact on the satisfaction (Reponte & Doble, 2025).

Industry Type

The industry type is taken as categorical variable in the demographic profiling which includes two options that is manufacturing or service industry. The respondent working in any of the manufacturing industry would select 1 while service industry employee would select 2. This has helped in evaluating the differences across industry types.

Data Analysis

The study has undertaken the data cleaning as the crucial initial step to study the impact of GHRM on the employee performance with job satisfaction as mediator and industry type as moderator. The responses were screened for missing, incomplete or inconsistent data. There was not such data found and hence there were no remedies taken for these steps. The data was further analysed using structural equation modelling (SEM) using SMART PLS. It includes the confirmatory factor analysis to evaluate the reliability and validity of the instrument. Further, path analysis was used to confirm the hypothesis testing.

RESULTS AND DISCUSSIONS

Descriptive Statistics

Table 1 above shows the descriptive statistics of the variables. It shows that green recruitment has the mean value of 3.49 with standard deviation of 0.915 which means that green recruitment practices are moderate to high. Furthermore, green performance has the mean value of 3.52 with standard deviation of 0.817 indicating that green performance is moderate to high. Furthermore, green compensation has the mean value of 3.57 showing moderate to high green compensation for the given sample. Employee performance has the mean value of 3.70 showing that the employees have relatively higher performance. Job satisfaction has the mean value of 3.82 with standard deviation of 0.679 showing higher satisfaction in average respondents.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Green Recruitment	400	1	5	3.493	0.915
Green Performance	400	1	5	3.521	0.817
Green Compensation	400	1	5	3.573	0.867
Employee Performance	400	1	5	3.703	0.770
Job Satisfaction	400	1	5	3.829	0.679

Table 2: Multi-collinearity

	VIF
Green Compensation -> Employee Performance	1.935
Green Compensation -> Job Satisfaction	1.724
Green Performance -> Employee Performance	1.504
Green Performance -> Job Satisfaction	1.452
Green Recruitment -> Employee Performance	1.861
Green Recruitment -> Job Satisfaction	1.853
Job Satisfaction -> Employee Performance	1.297

Multi-Collinearity

Table 2 shows multi-collinearity statistics. A variance inflation factor (VIF) value below 5 or 10 shows that the multi-collinearity does not exist in the model while value above threshold shows higher multicollinearity. The

table above shows that VIF values are less than 5 for all variables, showing that the issue of multicollinearity does not exist.

Confirmatory Factor Analysis

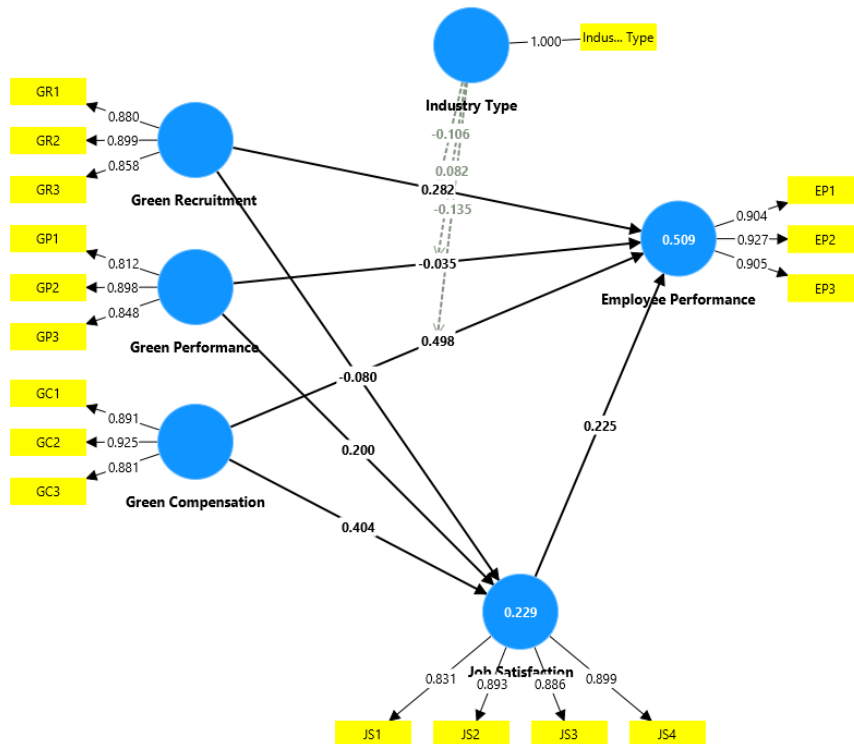


Figure 2: Measurement Model using Confirmatory Factor Analysis showing Outer loadings, P-values, and R-Square

Outer Loadings

Table 3 below shows the outer-loading value for each construct and its indicators. The outer loading value is used to evaluate the validity of the indicators to measure the constructs. The study conducted by Latan *et al.*

(2017) indicated that the value of outer loadings must be above 0.6 to ensure the validity of the factor. The table indicates that all the factors are above 0.6 indicating that no indicators are required to be dropped and hence it is valid.

Table 3: Outer Loadings

Construct	Indicator	Outer loadings
Employee Performance	EP1	0.904
	EP2	0.927
	EP3	0.905
Green Compensation	GC1	0.891
	GC2	0.925
	GC3	0.881
Green Performance	GP1	0.812
	GP2	0.898
	GP3	0.848
Green Recruitment	GR1	0.880
	GR2	0.899
	GR3	0.858
Job Satisfaction	JS1	0.831
	JS2	0.893
	JS3	0.886
	JS4	0.899

Construct Reliability and Validity

Table 5 above shows the construct’s reliability and validity. For testing the reliability of the constructs, Cronbach’s alpha and composite reliability have been applied. The results are reflected in Table 1 for the reliability showing internal consistency. Kline (2015) has reflected that Cronbach’s Alpha and composite reliability must be higher than 0.7. Table 4 shows that variables have higher internal consistency, confirming reliability since employee performance Cronbach’s alpha is 0.899, green compensation Cronbach’s alpha is 0.881, green performance has Cronbach’s alpha of 0.812, green

recruitment Cronbach’s alpha is 0.853 and Job satisfaction Cronbach’s alpha of 0.9. The composite reliability of employee performance is 0.899, and green compensation is 0.881, green performance is 0.812, green recruitment is 0.853, and job satisfaction is 0.900.

Furthermore, the table also reflects the convergent validity that describes the extent of relatedness which is illustrated through Average Variance Extracted (AVE) having threshold value of 0.5 (Hair *et al.*, 2017). The results indicated in Table 5 shows that AVE values are higher than 0.5 and hence data contain convergent validity.

Table 4: Construct Reliability and Validity

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Employee Performance	0.899	0.899	0.832
Green Compensation	0.881	0.882	0.808
Green Performance	0.812	0.815	0.728
Green Recruitment	0.853	0.855	0.773
Job Satisfaction	0.900	0.901	0.771

Discriminant Validity

Table 5 above indicates discriminant validity of the

variables. Discriminant validity is also deemed a large aspect as related to data validity that has to be ensured.

Table 5: Discriminant Validity

	Employee Performance	Green Compensation	Green Performance	Green Recruitment	Job Satisfaction
Employee Performance					
Green Compensation	0.733				
Green Performance	0.470	0.557			
Green Recruitment	0.616	0.719	0.631		
Job Satisfaction	0.521	0.503	0.408	0.317	

On this regard, HTMT ratio is applied for which assists in identifying distinctiveness between various variables of the study to prevent multicollinearity problem (Wong, 2011). It has elaborated that in order to make much sense the HTMT ratio has to be below 0.85. This discriminant validity is highlighted in table 6 above

using the HTMT ratio. This means that all the value are below this threshold of 0.85. Thus, data has not violated the assumption of discriminant validity in the present study.

Path Analysis

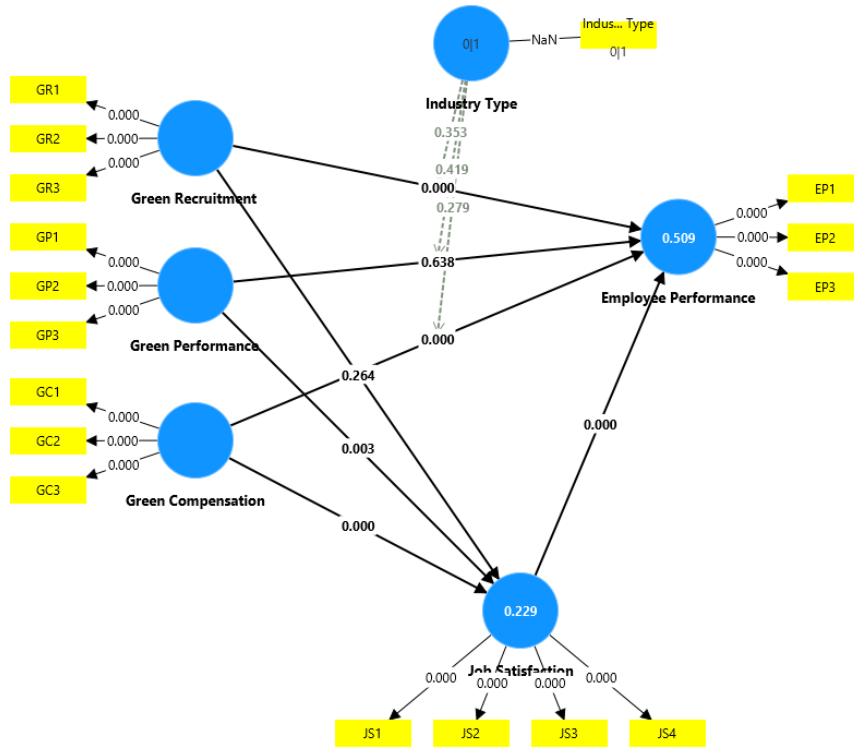


Figure 3: PLS Bootstrapping showing P-values and R-Square

Table 6: Hypothesis Testing using Path Analysis

	Path Coefficient	T statistics	P values
Green Compensation -> Employee Performance	0.498	5.441	0.000
Green Performance -> Employee Performance	-0.035	0.470	0.638
Green Recruitment -> Employee Performance	0.282	3.623	0.000
Green Performance -> Job Satisfaction	0.200	3.013	0.003
Green Compensation -> Job Satisfaction	0.404	6.047	0.000
Green Recruitment -> Job Satisfaction	-0.080	1.118	0.264
Job Satisfaction -> Employee Performance	0.225	3.808	0.000
Industry Type x Green Recruitment -> Employee Performance	-0.106	0.930	0.353
Industry Type x Green Performance -> Employee Performance	0.082	0.808	0.419
Industry Type x Green Compensation -> Employee Performance	-0.135	1.082	0.279
Green Compensation -> Job Satisfaction -> Employee Performance	0.091	2.893	0.004
Green Performance -> Job Satisfaction -> Employee Performance	0.045	2.430	0.015
Green Recruitment -> Job Satisfaction -> Employee Performance	-0.018	1.033	0.301

Table 6 below shows the path analysis for the model to test the hypothesis. It shows that green compensation (B= 0.498, P= 0.00) positively and significantly impacts employee performance. Furthermore, green performance (B= -0.035, P= 0.638) has a negative and insignificant impact on employee performance. Green recruitment

(B= 0.282, P= 0.000) positively and significantly impacts employee performance. Green performance (B= 0.200, P= 0.003) positively impacts job satisfaction. Furthermore, green compensation (B= 0.404, P= 0.00) positively influences job satisfaction. It also indicated that green recruitment (B= -0.080, P= 0.264) has a negative

and insignificant impact on job satisfaction. Furthermore, job satisfaction (B= 0.225, P= 0.00) positively impacts employee performance.

Furthermore, the moderating effect of industry type between green recruitment and employee performance is negative and insignificant (B= -0.106, P= 0.353). The industry type positively and insignificant moderates the relationship between green performance and employee performance (B= 0.082, P= 0.419). Further, industry type also negatively and insignificantly moderates the relationship between green compensation and employee performance. Hence, industry type does not moderate

the relationship between green HRM and employee performance.

Additionally, job satisfaction mediates the relationship between green compensation and employee performance positively and significantly (B= 0.091, P= 0.004). Further, it positively and significantly impacts the relationship between green performance and employee performance. Further, job satisfaction negatively and insignificantly mediates the relationship between green recruitment and employee performance.

Hypothesis Assessment

Table 7: Hypothesis Testing using Path Analysis

Hypothesis	Decision
H1: Green recruitment has a positive impact on employee performance.	Accept
H2: Green performance management has a positive impact on employee performance.	Reject
H3: Green compensation has a positive impact on employee performance.	Accept
H4: Green recruitment positively influences job satisfaction.	Reject
H5: Green performance management positively influences job satisfaction.	Accept
H6: Green compensation positively influences job satisfaction.	Accept
H7: Job satisfaction has a positive impact on employee performance.	Accept
H8: Job satisfaction mediates the relationship between green recruitment and employee performance.	Reject
H9: Job satisfaction mediates the relationship between green performance management and employee performance.	Accept
H10: Job satisfaction mediates the relationship between green compensation and employee performance.	Accept
H11: Industry type moderates the relationship between green recruitment and employee performance.	Reject
H12: Industry type moderates the relationship between green performance management and employee performance.	Reject
H13: Industry type moderates the relationship between green compensation and employee performance.	Reject

Discussion and Recommendation

The study has aimed to evaluate the impact of GHRM practices on the employee performance, job satisfaction, and the mediating and moderating roles of job satisfaction and industry type respectively. Through these objectives, the study contributes valuable insights about the effectiveness of GHRM practices and their implications for organisational sustainability and employee performance. The conclusion from this study are based on the analysis of the relationship between GHRM practices like green recruitment, green performance and green compensation, job satisfaction, employee performance and moderating role of industry type. The research findings aligns with the hypothesis outlined in the study providing significant implications for both theory and practices in GHRM realm.

The study demonstrated that green recruitment and green compensation significantly and positively impact on employee performance, validating that HR practices focused on sustainability and environmental values positively impact on employee outcomes. Particularly,

green recruitment ensures that employees align with organisation sustainability goals resulting in higher commitment and performance. Green compensation motivated the employees further by providing rewards linked to environmental contributions, increasing performance. On the other hand, green performance reflected negative and insignificant relationship with employee performance. It indicates that green performance management system might not always translate into immediate improvements in employee performance potentially considering mismatch in expectation or implementation.

The impact of GHRM on job satisfaction was also a significant aspect of the study. It found that green compensation and green performance significantly and positively impact on the job satisfaction. Employees that receive rewards for engaging in green practices report higher satisfaction since they perceive these rewards as recognition of their contribution to the organisation's sustainability effort. Similarly, green performance also contributes to job satisfaction by linking employees

green initiatives with their performance evaluation. However, green recruitment has been insignificant for job satisfaction indicating that while recruitment based on sustainability values align employees with organisation goals, it does not improve job satisfaction.

Job satisfaction was also indicated to have a significant mediating role in the relationship between green compensation and employee performance and also between green performance and employee performance. It suggests that employees who are satisfied with green compensation and performance practices highly demonstrate higher performance levels. In contrast, job satisfaction does not mediate the relationship between green recruitment and employee performance, showing that factors other than job satisfaction can influence performance outcomes in this context.

The industry type has been considered as the moderating factor between GHRM practices and employee performance. However, findings indicated that industry type did not moderate significantly in these relationships. It indicates the impact of GHRM practice on employee performance is relatively consistent across various industries, which indicates that sustainability-oriented HR practices are universally related across organisation contexts. Despite expectations that industries like manufacturing might show stronger effect due to higher focus on sustainability, the lack of moderating effect points to the increasing focus and recognition of GHRM practices in different sectors as well.

Therefore, this study elaborates the critical role of GHRM practices on impacting both job satisfaction and employee performance. Green recruitment and green compensation as found to have positive impact on employee performance, whereas green performance did not have much impact. The mediating role of job satisfaction was confirmed for both green compensation and green performance that underlines significance of employee satisfaction to translate green practices into increased performance outcomes. However, industry type was not a significant moderator here, reflecting that the positive effect of GHRM practices is widely used in other sectors.

Recommendations

The analysis showed that Green Recruitment has a positive relationship with the performance level of the employees; however, it has no correlation with their satisfaction levels. It is recommended that organisations ensure that their recruitment patterns link the values of all candidates to sustainability strategies and thereby guarantee that people working in organisations come to work with the natural inclination towards environmental objectives. A key strategy that companies ought to follow is the recruitment of personnel with a passion of fulfilling sustainability and environmental responsibilities. Still, it must be noted that increasing the level of employee performance does not necessarily guarantee job satisfaction and, therefore, possibly Green Recruitment's

most significant limitation. To this end, organizations may enhance job satisfaction by adopting more effective communication regarding sustainability engagement and by providing proper expectations regarding the sustainability implementation in the workplace. The study also finds out that Green Compensation enhances positive reaction to performance and job satisfaction. Companies ought to incorporate green rewards into compensation package where employees are rewarded for their contribution to sustainable activities or for accomplishing certain amount of environmental performance. To that extent, compensation-rewarding green performance not only encourages sustainable behavior among Line Managers but also enhances their job satisfaction. Other examples of green compensation may include incentives for saving energy, recycling, or adopting any other act that would show support and increase organizational commitment towards sustainability as much as improve employee satisfaction. While Green Performance was insignificant and negative in its impact on employee performance in this research, it remains a factor that organisations can perform better in terms of. It's important that organizations implement performance management systems that communicate over arching expectations of the environment within the company and the frequent feedback given on green activities. For green performance management to be effective there is need to ensure that the employee is able to relate his performance to goals of sustainability. In addition, the performance standards should indicate what employees need in terms of tools, training, or support to deliver on these standards. Through integrating green goals in the measure and evaluation systems, it becomes possible to increase the motivation of employees in the field of sustainability performance and their organizational accomplishments.

Limitations

There are certain limitations prevalent to this study while providing useful insights about the context. First of all, the number of respondents 400 can hardly be considered sufficient to obtain a representative of industries, regions, and cultures, so the generalization of the results may be questionable. A more diverse and larger population might give further insight with regard to Green HRM practices on various fields or industries. Moreover, the study adopted a cross-sectional research design hence limiting the possibility of showing the causality between Green HRM practice and the employee outcomes. The study could have given more conclusive results if it were done cross-sectionally, or better still a longitudinal one. The use of self-report data also put forward another limitation since the results suffer from social desirability or response bias where participants always tend to present higher level of satisfaction or performance than their actual. Finally, it is important to note that Green HRM and employee performance data used in this research indicate that industry type had relatively weak two-way interaction with

Green HRM and the performance indicators, This could be due to the fact that the available industry type range in the data set may not be large enough for a generalizable assessment of the degree to which differences in industry type moderate the relationship between Green HRM and employee performance. It is necessary to continue the future research to eliminate the mentioned weaknesses and obtain more clear results related to the topic.

Future Research Directions

Future research in the area of GHRM can explore various directions to expand on the findings of the research. Firstly, a longitudinal study can be beneficial to evaluate the long term impact of GHRM on employee performance and job satisfaction since this study used cross-sectional design. Longitudinal design can help in establishing causal relationship and provide clear understanding about impact of GHRM on employee performance over time. Furthermore, the future studies can evaluate the moderating role of other contextual factors like organisational culture, leadership style or organisation size. These factors can potentially influence GHRM effectiveness and provide nuanced insights about these practices work in different organisation settings. Thirdly, industry-specific studies can provide a deep understanding of the way GHRM practices are implemented and perceived in different sectors. Research can investigate the unique challenges facing the industries like services, manufacturing, or technology and how these impact on the adoption of GHRM practices. Finally, exploring the employee perceptions and experiences through qualitative methods like interviews or focus groups can provide rich insights about GHRM perception of employees and its effect on different dimensions. It would complement quantitative findings and providing holistic view of the issues.

CONCLUSION

This research evaluated the influence of GHRM practices on job satisfaction and employee performance and also their mediating role and moderating influence of industry type. The results showed that green compensation and green recruitment have a positive influence on employee performance and green compensation significantly emerged as an influential factor by connecting rewards with sustainability results. Conversely, green performance management had negligible impacts on performance, with implications of difficulty in expectation alignment and implementation. Job satisfaction played a significant mediating role in the links between green compensation, green performance, and employee performance, highlighting its significance in the conversion of sustainable HR practices to improved results. Industry type failed to moderate these links, which implies that the effect of GHRM practices is uniform across industries. In general, the research emphasizes the importance of integrating sustainability into HR practices in order to increase employees' satisfaction and performance,

confirming the worldwide applicability of GHRM to organisational success.

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