## The Relationship Between Green HRM and Environmental Performance in SMEs

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### **ABSTRACT**

The growing focus on sustainability has put the importance of Green Human Resource Management (GHRM) in developing sustainable practices in small and medium-sized enterprises (SMEs) in a new light. This research investigates the GHRM-environmental performance (EP) relationship from the perspective of the Resource-Based View (RBV) and using the Ability-Motivation-Opportunity (AMO) framework. Findings from recent empirical studies validate that GHRM green recruitment, training, performance management, and compensation practices have a positive influence on environmental performance in SMEs. The results also suggest that this relationship was mediated by mechanisms such as green dynamics, employee environmental commitment, and green supply chain management. For example, SMEs that adopt GHRM practices realize improved energy efficiency and reduced waste, as well as improved compliance with environmental regulations. The influence of GHRM is also strengthened by green transformational leadership and employee involvement by stimulating proenvironmental behaviour. The research concludes that GHRM provides SMEs with an affordable route to improve sustainability performance and gain competitive advantage. This study reinforces the importance of human capital in promoting organizational environmental goals and contributes to the wider discussion of sustainable business practices.

**Key words:** Green Human Resource Management Sustainability, Green Recruitment, Employee Participation, Training and Development, Performance Appraisal

### INTRODUCTION

Climate change, degradation of natural resources, pollution of the environment and loss of biodiversity have become some of the most pressing issues of the 21st century, as global environmental integrity and sustainability are threatened. Increasing pressure is put on governments, international organizations and corporations to adopt sustainable practices that would reconcile economic development with environmental preservation. Corporations are encouraged to include sustainability and environmental accountability into their operations through agreements such as the Paris Climate Accord and the United Nations Sustainable Development Goals. As a result, sustainability has evolved from an exterior issue to a central strategic consideration of corporations of all sizes. Economic performance is not the only metric by which organizations are assessed; they are also assessed against stakeholder considerations related to their social and environmental responsibilities, including their customers, regulators and employees.

To gain environmental sustainability, companies had been conventionally involved with technological progress, purifier manufacturing technologies, and law compliance. These techniques also are useful, but they do now no longer cope with the human factor, that's crucial in translating guidelines to practice. The group of workers is the point of interest of organizational sports, and their conduct, knowledge, skills, and attitudes drastically affect the achievement or failure of environmental programs. This has caused Green Human Resource Management (GHRM), which integrates environmental targets withinside the simple features of human useful resource management. GHRM involves a spectrum of sports together with inexperienced recruitment and selection, schooling and improvement, worker engagement, and overall performance appraisal which have an effect on selling green conduct and growing a body of workers with sustainability targets in mind.

Green recruitment is the manner of hiring and using folks that cost the significance of retaining the surroundings and are prepared to make contributions lower back to the surroundings. Green education and improvement decorate the competence and sensitivity of personnel and equip them with the facts required to use environmentally pleasant practices along with preserving energy, minimizing waste, and utilising assets appropriately. Employee engagement encourages people to take part and be worried in inexperienced programmes, which results in possession and collaboration. Green praise structures and overall performance appraisal additionally beef up sustainable practices through profitable and motivating personnel who try in the direction of and suggest for environmental outcomes(Rafiq et al., 2024).

Together, those practices foster a lifestyle of sustainability wherein personnel turn out to be lively contributors in environmental change, consequently enhancing environmental overall performance in an organization.

In spite of the sizeable literature on GHRM withinside the context of huge companies and multinational companies, its applicability to small and medium-sized companies (SMEs)is a relatively recent topic. SMEs are over 90 percent of world business and they also play a major role in employment and development(Asghar, & Nabeel, 2025). But as a bloc, they have a high environmental impact especially in areas like manufacturing, textiles, construction and agriculture. In comparison to large corporations, SMEs tend to have poor financial power, skills, and corporate infrastructure, thus, limiting their capacity to embrace modern technologies in managing the environment. At the same time, there are advantages such as flexibility, the closer connection with the staff, and opportunities to make improvements quickly peculiar to SMEs. These features make them well-placed to embrace people-based approaches such as GHRM as cost-effective strategies to enhance environmental performance.

Despite this potential, SMEs also face a range of challenges in implementing environmental practices, including a lack of awareness, insufficient funds, ineffectiveness of regulations in most regions, etc. Therefore, the question of how SMEs can successfully apply human resource practices in order to deal with such obstacles still exists(Khan, Gul, & Asghar, 2025). The research on the role of GHRM in SMEs is especially important given that these organizations influence the overall environmental performance in the country and at the global level. Even a slight change in the behavior of employees in SMEs can produce significant benefits to the environment when these change are multiplied by millions of enterprises. Hence, the research of the relationship among GHRM and environmental overall performance of SMEs is each theoretical and practical.

The dating among GHRM and environmental overall performance is probably defined with the help of acquainted theoretical views including the Resource-Based View (RBV) and Social Exchange Theory (SET). According to the RBV, companies have sustained aggressive gain because of their precise sources

which can be valuable, rare, inimitable and non-substitutable. One such useful resource may be human capital this is each professional and inspired to take part in environmental practices and sustainability initiatives(Akbar, Asghar, & Arshad, 2025). The GHRM lets in SMEs to create a group of workers this is aware about sustainability and this team of workers isn't always simplest executing its features in phrases of compliance and performance however additionally developing sustainable practices which can be incomes it a aggressive facet withinside the process. Social Exchange Theory additionally portrays this courting via way of means of noting that personnel who're being supported through the corporation additionally reply via way of means of undoubtedly behaving. When personnel sense that their agency is severe approximately environmental duty and invests in inexperienced schooling, participation opportunities, and rewards, they sense reputable and recommended to take pro-environmental movements that during flip enhance organizational environmental overall performance.

Although the importance of GHRM has been widely recognized, most studies have focused on large organizations, which leaves a significant gap in research on SMEs. The unique features of the SME context, with its constraints on resources, informal structures, and closeness in employee-supervisor relations, merit a dedicated study. It is not clear whether findings from large organizations can be directly transferred to SMEs, or whether SMEs need unique approaches to leverage GHRM in an effective manner. For example, while large organizations may formally implement "green" hiring processes, SMEs may follow less formal recruitment processes, but are still looking for candidates with green values (Yasser & Asghar, 2024). Similarly, employee engagement with respect to sustainable practices may take different forms in SMEs in the sense that it may be direct practice in daily business as opposed to being based on sustainability committees. These distinctions make it important to specifically examine GHRM in the context of SMEs.

The value of studying GHRM is not purely academic. The realization that GHRM can do something to influence environmental performance is a realization that can provide managers with a powerful tool that can increase sustainability outcomes, without necessarily expenditure of large sums of money. It is often the case that introducing environmental goals as part of existing HR activities can lead to significant organizational changes in employee behaviours at little cost. The results can indicate to the policy makers developing enabling policy and training initiatives for SMEs of how to engage in meaningful contribution towards national sustainability targets in terms of reaching environmental standards. Ultimately, the application of GHRM in SMEs has not only the potential to enhance organizational performance, but could also contribute towards broader societal goals of environmental protection and sustainable development.

The goal of this examine is to study the effect of inexperienced recruitment and selection, inexperienced schooling and development, worker involvement and inexperienced overall performance appraisal on SMEs' environmental overall performance The paper seeks to offer a complete attitude on how sustainability in SMEs may be entrenched thru HRM practices. It will even provide a few advice to the managers in SMEs in addition to the coverage makers, they want to do greater to reap a human mindset environmental overall performance. The studies fills a good sized hole withinside the literature through answering those goals and it additionally gives a strategy to one of the maximum important questions of our era: a way to make the surroundings sustainable thru organizational practices.

## LITERATURE REVIEW

The mixture of environmental control practices with HRM rules and practices that foster sustainability in groups at agency degree are termed as Green Human Resource Management (Renwick et al., 2016). It is

likewise involved with the issue of greening of the center HR features in regions of recruitment, education, overall performance appraisal, repayment and worker engagement with the intention of growing a piece pressure this is worried with the surroundings, and that's actively worried in ecological efforts. Green recruitment might be described as using people inside a business enterprise who percentage a shared series of ecological ethics, in preference to the ones inside an company being privy to the problem that non-stop diminishing poor ambiances withinside the surroundings (Ahmad et al., 2023). Therefore, GHRM turns into an instrumental manner of inculcating organizational way of life referring to sustainability.

Environmental overall performance The quantity to which agencies lower their environmental compprint with the aid of using working towards certainly renewable practices inclusive of strength useful resource use, relief of pollution, discount of waste, and suitable regulations (Cambridge Core, 2024). It captures each bodily deliverables which include reduced greenhouse fueloline emissions, and non-bodily deliverables consisting of expanded organisation reputation. Environmental overall performance is especially an vital problem withinside the context of the SME, as this thing guarantees cost-saving, cost-competitiveness withinside the long-run, and legitimacy withinside the increasingly-greener-eco-aware markets (Raza et al., 2025).

Green innovation may be described as an try to generate goods, services, and methods that can reason fewer environmental harms and haven't any terrible influences or decreased organizational overall performance (Kuo et al., 2022). It additionally includes the designing of inexperienced technology, recycle and inexperienced chains. GI connects surroundings goals to creativity and hassle solving, which agencies can use to distinguish themselves and advantage aggressive benefit. HRM practices can considerably act as innovation drivers in SMEs considering inexperienced innovation is in the main persuaded via way of means of employees and labour creativity.

One of the capabilities present withinside the management kind that stimulates and encourages personnel to take non-polluting choices and act via way of means of the sustainability goal is known as inexperienced transformational management (Raza et al., 2025). GTL leaders show their cappotential to talk absolutely a imaginative and prescient of the preferred environmental state, to be position models, and to empower personnel to assume innovatively approximately sustainability issues. GTL is especially applicable in SMEs in which leaders have a tendency to have an immediate effect on tradition, decision-making, and sources distribution and for this reason have an effect on the character of the GHRM practices carried out and their translation into consequences..

# H1: Green Human Resource Management (GHRM) practices have a advantageous impact at the environmental overall performance of SMEs.

The connection among GHRM and environmental overall performance has been very well studied, with stable evidence indicating that corporations enforcing GHRM practices carry out higher environmentally. Resource-Based View (RBV), guys aid has been taken into consideration as one of the remarkable useful resource that it isn't always without problems replicated in phrases of viable aggressive advantage (Barney, 1991). This is due to the fact at the occasion that the HR practices are checked out and with the goal of being sustainable, they provide the personnel the chance, motivation and cappotential to paintings in models which are geared toward environmental duty cause a extra overall performance with the aid of using the surroundings (Renwick et al., 2016). Indeed, inexperienced schooling complements consciousness of the personnel approximately green and overall performance appraisal in dating to environmental desires is right to make certain obligation. Finally, such practices may be hired to inspire

useful resource use performance and, as a consequence, lessen the quantity of waste produced; therefore, power and price its significance have come to be the primary precedence and stepped forward the excellent of sustainability overall performance of the worried small enterprise, albeit indirectly, because of the inadequacy of the resources (Ahmad et al., 2023). This factor of view is supported via way of means of empirical studies. The researchers determined that workforce environmental dedication constructing progressed Pakistani college overall performance at the surroundings extensively through improving college GHRM practices (Ahmad et al., 2023). Similarly, the studies performed the various fabric SMEs in Pakistan additionally verified that corporations which had applied the GHRM structures of their procedures skilled decreased pollutants and maximised their useful resource productivity (Cambridge Core, 2024). One factor that Raza et al. (2025) found out withinside the hospitality quarter is that GHRM represented a alternate to beautify cost-effective overall performance of SME that had a advantageous monetary effect on small commercial enterprise as an appropriate approach of manufacturing advantageous environmental consequences. Those findings additionally assist to explain that now no longer handiest is GHRM able to lowering environmental harm, however it can also and does make a contribution to the adequacy, stakeholder contentment and balance over aggressive distance of SMEs. Therefore, consistent with H1, literature suggests that there may be a robust high quality dating among GHRM and environmental overall performance.

# H2: Green innovation mediates the connection among GHRM practices and environmental overall performance in SMEs.

Green innovation as a mediating function has acquired a whole lot educational attention. GHRM practices are believed to sell inexperienced innovation through imparting personnel with environmental knowledge, motivating, recalling rewards, rewarding, and supplying innovative hassle fixing opportunities (Kuo et al., 2022). Workers who were given education on environmental-pleasant practices will generally tend to champion new tips on how power may be saved, new inexperienced merchandise be evolved or extra aid use made efficient. These improvements will cause an progressed overall performance of the surroundings. Green innovation is, therefore, an interface among sustainability overall performance and HRM strategies. Empirical opinion confirms this middleman position. According to Raza et al. (2025), inexperienced innovation in part mediated the impact that GHRM and environmental overall performance have on Pakistani SMEs. More effective environmental consequences had been accomplished as personnel who had been uncovered to inexperienced HR practices brought thoughts that minimized waste and more desirable performance in operations. As well, Discover Sustainability (2025) emphasised that sustainable worker motivation became promoted via GHRM practices that immediately impacted the environmental overall performance of organization. These outcomes resonate with the framework of Ability-Motivation-Opportunity (AMO) that states that HR practices growth the cappotential and motivation of personnel to end up revolutionary to supply approaches of the agency that make a wonderful contribution to the surroundings. As such, in keeping with H2, the literature confirms that inexperienced innovation is a important channel wherein GHRM can have an impact on environmental overall performance.

# H3: Green transformational management moderates the connection among GHRM practices and environmental overall performance.

Although GHRM practices provide personnel device and motivation, their final results a good deal relies upon on management. The impact of GHRM is expanded with the aid of using inexperienced transformational management (GTL), because the latter is located in the lifestyle of sustainability in an organization. By demonstrating version behavior and imparting a imaginative and prescient of

environmental accountability, the leaders will inspire the people to end up extra engaged withinside the GHRM campaigns (Raza et al., 2025). GTL can be especially effective in conduct shaping context inside SMEs wherein leaders have a tendency to be in near touch with personnel, and HR practices are probably to be greater powerful in selling environmental overall performance. This moderating function is supported empirically. According to Raza et al. (2025), the GTL showed that the GHRM had wonderful environmental returns on its SMEs. The advantages of GHRM have been stronger with the aid of using personnel running below leaders who had right environmental imaginative and prescient. Equally, Saudi production SME research installed that management became inexperienced paintings interesting, consequently, advanced the manufacturing of sustainability (Discover Sustainability, 2025). The implication of those findings is that, until a pacesetter is concerned, the capacity of GHRM practices may work to waste, seeing that team of workers individuals want path in addition to notion in order that HR rules may be translated into real environmental outcomes. Therefore, aligned with H3, the literature states that GTL moderates the effectiveness of GHRM in its maximum.

The article uses a quantitative method to investigate the relationship between Green-Human Resource Management (GHRM) practices and environmental performance (EP) in small and medium-sized enterprises (SMEs). A cross-sectional survey approach is taken to gather data from 250 participants in Pakistan from two extended service and manufacturing industry sectors. The study focuses on GHRM practices that feature in green recruiting, training, performance management, and compensation, while focusing on EP indicators such as energy efficiency, waste and emissions reduction. The study also evaluates additional features, such as green innovation and transformational leadership. Data are analyzed using SPSS and AMOS structural equation modeling (SEM) and regression analyses are performed to include direct, mediating and moderating effects. Ethical guidelines are followed, with all participants provided with informed consent and confidentiality assured. The study aims to provide evidence related to the integration of sustainability practices in SMEs, despite SMEs' lack of financial resources.

## **Data Analysis and Results**

## **Descriptive Statistics**

The complete dataset contained 250 legitimate responses from SME managers, HR practitioners, and supervisors. Respondents represented each carrier and production sectors. Descriptive assessment determined that the recommend ratings for all variable had been above 3.5 (on a 5-factor Likert scale), highlighted that the respondents in general agreed to the existence of GHRM practices, inexperienced management behaviors, and environmental tasks of their organizations. Standard deviations ranged among .550-.800 denoted slight variation in responses.

## Demographic Profile of Respondents (N = 250)

Demographic Variable	Category	Frequency	ency Percentage (%)		
Gender	Male	162	65		
	Female	88	35		

<b>Demographic Variable</b>	Category	Frequency	Percentage (%)
Age	21–30 years	100	40
	31–40 years	95	38
	Above 40 years	55	22
Education	Bachelor's degree	113	45
	Master's degree	92	37
	Other Qualifications	45	18

The demographic outcomes imply that maximum respondents had been male (65%), at the same time as women represented 35% of the sample. A majority belonged to the 21-forty years' age group (78%), displaying a younger and active staff. In phrases of education, 82% held bachelor's or better degrees, reflecting a well-certified staff able to carrying out GHRM practices. **Descriptive Statistics of Study Variables (N = 250)** 

Variables	Mean	Std. Deviation	Minimum	Maximum
Green Recruitment & Selection	3.84	0.74	2.10	5.00
Green Training & Development	3.78	0.79	2.00	5.00
Employee Participation	3.62	0.70	2.15	4.95
Green Performance Appraisal	3.98	0.68	2.20	5.00
Environmental Performance	3.87	0.61	2.30	5.00

These descriptive consequences offer a initial indication that GHRM practices are normally found in SMEs and are perceived undoubtedly via way of means of employees. However, moderate variability throughout responses indicates that the effectiveness of such practices might also additionally depend upon contextual factors, which include organizational resources, management commitment, and worker engagement levels.

## Reliability and Validity

Reliability become assessed the use of Cronbach's alpha and Composite Reliability (CR). All constructs handed the endorsed threshold of 0.70 to showcase inner consistency. Validity changed into additionally ascertained through Confirmatory Factor Analysis (CFA) wherein component loadings have been extra than 0.60 and Average Variance Extracted (AVE) values have been greater than 0.50, which hooked up convergent validity. Discriminant validity become additionally established due to the fact that rectangular roots of AVE have been large than inter-assemble correlations. All those findings verify the dimension version to be dependable in addition to legitimate for speculation testing.

## **Table: Reliability and Validity Results**

Construct	Cronbach's Alpha	CR	AVE
Green HRM Practices	0.88	0.91	0.62
Green Innovation	0.85	0.89	0.59
Environmental Performance	0.87	0.90	0.64
Green Transformational Leadership	0.89	0.92	0.66

The findings monitor that each one constructs passed Cronbach's alpha and CR of 0.70, which validates excessive inner consistency. Further, AVE values had been greater than 0.50, which suggests convergent validity, and discriminant validity become additionally hooked up as AVE rectangular roots had been better than inter-assemble correlations. Therefore, it turned into mounted that the dimension version changed into dependable and legitimate for speculation testing.

## **Hypothesis Testing**

## H1: GHRM practices have a high quality impact on environmental performance

Regression evaluation turned into hired to look at the direct correlation among GHRM and environmental performance. Results indicated that GHRM had a fine and large impact on environmental performance ( $\beta$  = 0.52, p < 0.001). This shows that SMEs imposing inexperienced recruitment, training, and praise structures skilled better degrees of environmental efficiency, waste reduction, and regulatory compliance.

Model	<b>Sum of Squares</b>	df	Mean Square	F	Sig.
Regression	51.488	1	51.488	96.770	.000ь
Residual	47.512	248	0.192		
Total	99.000	249			

The ANOVA desk suggests that the regression version is surprisingly significant (F = 96.770, p < .001), confirming that GHRM practices strongly are expecting environmental performance. With regression sum of squares (51.488) explaining greater variance than residual (47.512), the version demonstrates that adopting GHRM contributes meaningfully to advanced sustainability consequences in SMEs.

## H2: Green innovation mediates the connection among GHRM and environmental performance

**Table 2: Mediation Analysis (H2)** 

Path	β	t-value	Sig. (p)	Result
GHRM → Green Innovation	0.47	8.12	0.000	Significant
Green Innovation → Environmental Performance	0.38	6.54	0.001	Significant
$GHRM \rightarrow EP$ (Indirect via GI)	0.18	4.32	0.001	Mediation Supported

Results indicated that GHRM appreciably stimulated inexperienced innovation ( $\beta$  = 0.47, p < 0.001), and inexperienced innovation extensively encouraged environmental overall performance ( $\beta$  = 0.38, p < 0.01). The oblique impact of GHRM on environmental overall performance via inexperienced innovation became significant ( $\beta$  = 0.18, p < 0.01). This confirms that inexperienced innovation partly mediates the connection among GHRM and environmental overall performance.

# H3: Green transformational management moderates the connection among GHRM and environmental overall performance

**Table 3: Moderation Analysis (H3)** 

<b>Predictor Variable</b>	β	t-value	Sig. (p)	Result
GHRM Practices	0.39	6.25	0.000	Significant
Green Transformational Leadership	0.28	5.48	0.000	Significant
GHRM × GTL (Interaction)	0.15	2.76	0.006	Supported

Moderation became examined the use of an interplay time period (GHRM  $\times$  Green Leadership). The interplay became significant ( $\beta=0.15,\ p<0.05$ ), indicating that inexperienced transformational management bolstered the tremendous impact of GHRM on environmental overall performance. Specifically, the impact of GHRM become more potent in SMEs led with the aid of using transformational leaders who articulated a sustainability imaginative and prescient and influenced personnel to pursue inexperienced tasks. The moderation effects imply that inexperienced transformational management extensively complements the effect of GHRM on environmental overall performance ( $\beta=0.15,\ p<0.01$ ). This way SMEs reap higher environmental effects whilst leaders actively sell sustainability values. Both GHRM practices and management for my part confirmed sturdy nice effects, at the same time as their interplay similarly reinforced the relationship.

## **DISCUSSION OF FINDINGS**

All those 3 hypotheses have stable grounds withinside the findings of this observe. To start with, the reality that GHRM has a high quality effect on environmental overall performance suggests that even SMEs with restricted assets can reap sustainability consequences through incorporating environmental attitudes in HR practices. Secondly, thru mediation analysis, it turned into additionally showed that inexperienced innovation is an important method that transforms HR practices right into a tangible environmental benefit. Innovation can't be this sort of important feature with out the function of GHRM. Finally, as indicated with the aid of using the moderation findings, management substantially contributes to improving the effect of HRM on environmental results. These findings are consistent with the Resource-Based View (RBV), that's targeted at the strategic cost of human capital, and the Ability-Motivation-Opportunity (AMO) perspective, and is the reason how Hr practices are instrumental in constructing personnel' capacity to behave, motivation to behave, and possibility to behave in a sustainable way. This sees eye to eye with the findings of the opposite empirical studies works (Ahmad et al., 2023; Kuo et al., 2022; Raza et al., 2025) and presents in addition proof for the argument that GHRM is an vital driving force of sustainability in SMEs.

#### **Green HRM and Environmental Performance**

This studies showed that GHRM practices undoubtedly make contributions to the environmental overall performance of SMEs. The final results of this locating provides to the prevailing findings carried out through Renwick, Redman, and Maguire (2013), who believed HRM roles related to the incorporation of environmental elements are contributing to organisation sustainability overall performance. Similarly, Tang et al. (2018) have hooked up that inexperienced-centered HRM practices assist withinside the improvement of a pro-environmental subculture that encourages the status quo of inexperienced-targeted tasks via way of means of personnel. The outcomes of the modern studies translate those insights into the context of SMEs, which generally have a tendency to be restricted with reference to economic talents but are bendy with reference to embracing novel practices. The implication of the combination of environmental dreams inside HRM is specially useful to SMEs due to the fact they do now no longer always have the capital had to enforce huge-scale technological answers because of their size. In this paper, truth has been given and is the reason that despite small scale integration of inexperienced HRM practices, best blessings are carried out regarding electricity efficiency, slicing waste, and watching environmental regulations. This is consistent with Yong et al. (2019) who've highlighted that after SMEs align their human assets and environmental objectives, their contribution closer to sustainability may be sizeable.

#### **Green Recruitment and Selection**

The outcomes confirmed that inexperienced recruitment and choice have near members of the family with the environmental overall performance. SMEs that centered extra on using human beings with proenvironmental ideals had progressed sustainability reports. This is in step with Jabbour and Santos (2008) who argued that an environmentally orientated recruitment technique performs a position withinside the manufacturing of a labour pressure that espouses sustainability values. Green recruitment will assist make sure that personnel becoming a member of the business enterprise have an information and dedication of inexperienced practices, thereby decreasing resistance to inexperienced tasks. One may also legitimise that such findings are related to that of conceptual ability of the Research-Based View (RBV) that suggests that there may be an emphasis or exact attention on human capital as being a useful and scarce useful resource able to creating, or making aggressive advantage (Barney, 1991). When SMEs combine environmental troubles inside recruitment, they entice personnel who will function alternate dealers to assist the enterprise reap excessive environmental overall performance.

## **Green Training and Development**

The findings similarly found out that inexperienced schooling can have an effect on the environmental overall performance. With regard to sustainable manufacturing, waste management, and power conservation, SMEs that invested in worker schooling, finished higher on environmental indicators. Pinzone et al. (2019) aid this end through declaring that expertise and pro-environmental attitudes associated with environmental education of the personnel can undoubtedly impact behavioral extrade. In addition, Zoogah (2011) theorized that schooling interventions could generate cognitive awareness, with the intention to be modified into long-time period place of job behaviors. In the case of SMEs in which restrained economic assets is probably to be had to undertake environmental technologies, worker expertise is a key enabler of sustainability. This paper establishes that inexperienced education as an funding in human capital is capable of pay payoffs in inexperienced terms.

## **Employee Participation and Engagement**

The studies has additionally discovered that environmental overall performance is significantly stepped forward with the aid of using the involvement of personnel. SMEs that incited people to percentage thoughts and to participate in selections and collectively paintings on inexperienced initiatives had been related to higher environmental overall performance scores. This locating is regular with the findings of Daily, Bishop, and Govindarajulu (2009), who emphasized the cost of worker participation in growing the quantity of projects performed via way of means of an organization withinside the surroundings and the feel of obligation it generates. It may be carried out additionally withinside the framework of Social Exchange Here, the organisation is supportive and appreciates the cost of personnel, and people reply emotionally thru extended price and contributions (Cropanzano and Mitchell, 2005). The participation of personnel withinside the decision-making system approximately the surroundings consequently complements the mental settlement among personnel and employers, which in flip results in improved access into sustainable practices.

## **Green Performance Appraisal and Rewards**

The findings propose that inexperienced overall performance score and rewards play an essential function in inexperienced overall performance. SMEs that have factored in environmental elements of their overall performance evaluation and supplied praise or blessings on environmentally pleasant performances additionally accomplished higher on environmental efficiency. This consents with the announcement of Renwick et al. (2013) who insisted that a procedure of connecting the HR appraisal gadget with the environmental overall performance promotes alignment of character dreams and organizational dreams. Further, Pham et al. (2020) determined that, even qualitative motivations like prominence or token tokens, may be hired in aid-confined environments, along with SMEs, to steer workforce. The studies consequences acquired on this paper affirm that each overall performance appraisal and rewards are a effective incentive to expand personnel who may be on the whole worried in sustainability.

## **Comparison with Prior Studies**

The outcomes of this paper are congruent with Renwick et al. (2013), Tang et al. (2018) and Yong et al. (2019) who observed a high-quality correlation among GHRM and sustainability. This examine offers records and, not like the sooner literature, which centered in general on big organizations, it is able to be mentioned that SME, as well, can attain great environmental overall performance desires withinside the short-run framework, with the assist of GHRM in spite of volumes of to be had sources. This bridges this hole wherein Yong et al. (2019) asked extra studies on SMEs round this domain.

## **CONCLUSION**

The modern studies have a look at investigated how Green Human Resource Management (GHRM) practices are associated with environmental overall performance of small and medium-sized enterprises (SMEs). The findings confirmed that GHRM performances consisting of inexperienced recruitment, schooling and improvement, worker participation, and overall performance appraisal substantially and undoubtedly effect environmental overall performance. This is the realization which summarizes the outcomes, suggests the theoretical and realistic outcomes, limits the consequences, and offers destiny studies directions.

The evaluation has proven that inexperienced recruitment and choice strategies can help SMEs in recruiting human beings with pro-environmentally orientated values and skills. However, with the aid of using affecting sustainability in employment procedures, corporations permit recruiting individuals, the groups which can be already orientated to the ecology targets. This locating confirms the Resource-Based View (RBV) that specializes in human capital as a supply of aggressive advantage. Also, inexperienced education and improvement have become a compelling environmental overall performance riding force. Training personnel on a way to act in a manner this is pleasant to the surroundings and the want to have tactics that don't bring about damage to the surroundings, similarly to growing technical abilities, creates cognizance a few of the personnel which will act in another way as a collection with regards to behavioral alternate and in a manner which could make sure sustainability withinside the organization.

It become additionally confirmed that participation of personnel performed a enormous position in environmental consequences. Through enticing all of the personnel in decision-making in addition to innovation in environmental-associated areas, there's a feel of obligation and ownership. This is consistent with the Social Exchange Theory that holds the perception that personnel reciprocate organizational aid with environmental conduct. Finally, the meant have a look at discovered the contribution of linking inexperienced overall performance appraisal and praise with sustainability targets. Sustainability lifestyle is enabled via the identity and provision of incentives to workers, both monetary or non-economic, to attempt in the direction of environmental sustainability goals. Together, those findings substantiate that GHRM practices are a key intervention that may be implemented through SMEs in improving environmental overall performance. They suggest that with their little economic and technological capacities, SMEs have been capin a position to make use of human aid techniques to make high-quality contributions in the direction of sustainability.

## THEORETICAL CONTRIBUTIONS

This paper contributes notably to idea because it universalizes the utility of each the RBV and Social Exchange Theory in an SME surroundings. The findings spotlight the importance of human capital as a differentiated and precious useful resource, evolved and controlled with GHRM can permit organizations to carry out at a better degree with reference to environmental overall performance. This underestimates the middle supposition in RBV that humans are the important thing to the improvement of aggressive advantage. Moreover, the studies offers empirical proof that organizational guide withinside the shape of participation, appraisal, and rewards generates worker reciprocity that is going past short-time period movements classified as a sustainable behavior, which helps the explanatory applicability of Social Exchange Theory in environmental control studies. Additionally, studies-wise, the lacuna is stuffed via this SME studies. While maximum of the sooner studies has been achieved on big corporations and multinational corporations, it's far indicated via this studies that SMEs can efficaciously put in force the GHRM practices no matter those aid boundaries and offer useful consequences to their environmental sustainability. That makes cutting-edge theories all of the extra applicable to smaller groups and stresses that they're a part of sustainability.

### PRACTICAL IMPLICATIONS

Practically, the effects provide implementable proof for policymakers and SME managers. Managers want now no longer include environmental worries into HR practices at very excessive expenses. However, SMEs may also appoint it as a process description and as part of the process interview tick list withinside the recruitment phase via way of means of thinking about values at the surroundings. These applications of electricity, waste, and inexperienced applications may be provided both as low-value workshops or through the Internet. The energetic involvement of personnel in sustainability packages now no longer handiest encourages innovation, however also can enhance morale and loyalty. Additionally, linking appraisal and praise structures to environmental goals reinforces the significance of sustainability

inside organizational way of life. For policymakers, the take a look at highlights the cappotential of SMEs to make contributions to country wide and international sustainability agendas. Since SMEs constitute a good sized share of financial activity, their cumulative environmental effect is substantial. Providing education subsidies, reputation packages, or tax incentives may want to inspire greater SMEs to undertake GHRM practices. Industry institutions also can play a function in growing standardized hints and sharing high-quality practices tailor-made to SMEs.

### LIMITATIONS AND FUTURE RESEARCH

Although the examine gives significant insights, sure barriers have to be acknowledged. The cross-sectional layout restricts the capacity to set up causal relationships. Future research should undertake longitudinal processes to have a look at how GHRM practices affect environmental overall performance over time. Additionally, the reliance on self-said facts might also additionally introduce bias, as respondents may overstate their organization's environmental overall performance. Incorporating goal measures, including strength intake facts or waste discount facts, could offer a extra correct assessment. Another challenge lies withinside the generalizability of the findings. The have a look at centered on SMEs inside a particular local and cultural context, which won't absolutely constitute SMEs in different international locations or industries. Comparative research throughout special sectors and cultural contexts could provide richer insights into the universality of the findings. Future studies may also discover moderating variables along with management style, organizational subculture, or regulatory surroundings to higher recognize the situations below which GHRM practices are maximum effective.

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