

SUSTAINABLE SMEs IN EMERGING MARKETS: A REVIEW OF THE ROLE OF GREEN HUMAN RESOURCE MANAGEMENT PRACTICES IN ACHIEVING SUSTAINABLE PERFORMANCE

Rabia Mumtaz^{*1}, Dr. Kamran Khan², Dr. Muhammad Hafeez³

^{*1,2}DHA Suffa University

³Shaheed Benazir Bhutto University, SBA

^{*1}rabia.mumtaz@dsu.edu.pk

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Corresponding Author: *

Rabia Mumtaz

Abstract

As concern for the planet grows, companies worldwide are being urged to behave in ways that protect natural resources; in this push, Green Human Resource Management (GHRM) has been appeared as key for achieving sustainable results. The present work conducts a systematic review of evidence linking key GHRM activities- green recruitment and selection (GRS) and green training and development (GTD) to the three pillars of the triple bottom line- economy, society, and environment the context of SMEs i.e. small and medium enterprises in Pakistan. Based on an AMO theory, review shows that when firms adopt these green HR practices, employees are not only more capable and motivated to work in ecologically friendly manners, but the company itself also reaps stronger sustainability outcomes across all three performance dimensions. The review brings together robust studies showing that green-recruitment schemes pull in eco-savvy job seekers and that goal-targeted development teaches staff practical sustainability skills, with both routes bolstering firms' green performance. Yet it also includes mixed outcomes across papers, hinting that context-industry sector, resource depth, and even local regulations may shape how effective each practice proves. Special attention goes to small and medium enterprises in developing economies, where thin HR teams and tight budgets can stall wider green-human-resource initiatives. Theoretically, the work stretches ability-motivation-opportunity (AMO) thinking by applying it to GHRM in emerging markets and links people policies directly to sustainability results. Practically, it urges smaller firms to read green values into hiring, back up recruits with tailored training, and build an everyday culture that celebrates ecological care. Limitations include the heavy use of existing statistics and the narrow lens fixed on just two GHRM tools. Future projects are invited to run long-term panels, craft sector-specific frameworks, and test how leadership style or public policy mediates effects. Together, the findings lay the groundwork for green HR strategies that allow growth while honoring ecological and social duties in the SME arena.

1. INTRODUCTION

Due to the world's current water and power challenges, along with its rapidly growing population,

sustainability has emerged as a global issue. To tackle hunger, boost economic growth, and protect the

planet, every country has signed up to Sustainable Development Goals (SDGs) (Lu, 2021; Tjahjadi et al., 2021). Businesses need to be able to conduct their daily activities in a responsible and environmentally conscious manner if they want to be economically, socially, and environmentally sustainable. According to Ferreira et al. (2016), a growing number of professionals and academics are focusing their research on the association between monetary resources and the preservation of the natural environment. Triple Bottom Line (TBL) is a well-defined structure for defining sustainable performance that takes into account economic, social, and environmental variables all concurrently (Lu, 2021).

The concept of sustainable performance has increased the interest of renowned scholars as a fascinating area of research. In the present era of intense competition, it is imperative for businesses to offer environmental and social safeguards to their customers and the broader public (Schaltegger, 2019). Contemporary consumers exhibit a proclivity for products and services that not only fulfill their needs but also demonstrate a conscientious regard for the impact of their utilization on both the community and the natural world. According to Sun (2018), corporations that have a positive impact on society's well-being and the environment are favored by consumers. John Elkington introduced the term "sustainability" in the business context based on the concept of the triple bottom line, which aims to assess a company's long-term viability and expansion. The corporation exhibits a robust sense of accountability towards safeguarding natural resources for future generations, owing to its sustainable business performance that encompasses social, environmental, and financial aspects (Del Baldo & Baldarelli, 2017). Rossi (2020) suggests that the integration of environmentally-friendly practices, such as green supply chain management, green innovation, and, into corporate policies and strategies can mitigate the adverse impacts of business operations on the environment and society. Environmental protection has appeared as a major corporate trend, according to Markman and Krause (2016), which has altered the landscape of competition in meaningful and persistent ways. According to studies done by McKinsey (2013) and

Longoni and Cagliano (2015), Sustainable development is becoming an increasingly important part of the corporate strategy (2013). Industrial bodies have been driven to embrace it as a way to enhance environmental efficiency, thanks to the incorporation of rapid and robust economic development (Zhang, Wang, & Wang, 2014). Despite the fact that there are ongoing efforts to solve environmental problems, new difficulties continue to arise and spread. A number of workable approaches have emerged as a consequence of the aforementioned occurrence, which has the ability to revolutionize the area of Environmental Management (EM) by tackling numerous ecological crises.

Studies suggested that concern over climate change has been growing. Environmental concerns have drawn greater global interest in the modern era, according to Herrera and delas Heras-Rosas (2020) and Yong et al. (2019). A number of international accords have acknowledged the urgency of the need to combat climate change (Rashid et al., 2021; Shah, 2019). Many rules and policies are drafted and backed by government bodies and non-governmental organizations (NGOs) to halt or drastically decrease the rate of degradation of natural resources. These restrictions take into account harmful effects that businesses have on a environment through the release of hazardous materials and other garbage. Zhu et al. (2008) said that these regulations and programs aim to lessen the impact of environmental problems on societies, customs, and all forms of life. It has been observed that businesses operating within the present circumstances are required to discover strategies and techniques that will allow them to deal with present economic challenges and the environment while minimizing the environmental impacts of their operations. According to Jamal et al. (2021), in order for businesses to achieve legitimacy, a social license to operate, long-term profitability, and sustained existence, they need to place a greater emphasis on social, environmental, and economic problems and maximize the wealth of their shareholders.

The Small and Medium Enterprises Development Authority (SMEDA) is an independent federal entity that oversees and promotes the growth and development of SMEs while providing a professional

business environment in Pakistan (SMEDA, 2021). In Pakistan, SMEs are classified as autonomous firms with a maximum of 250 workers (SMEDA, 2021). Approximately 5.2 million established SMEs operate across many industries, including agriculture, manufacturing, marble, mining, and quarrying, and services (SBP, 2022). Bansal and Roth (2000) characterized environmental strategies as a collection of initiatives undertaken by an organization to mitigate the impact of its actions on the environment via eco-friendly policies, processes, and products, including waste reduction, energy consumption reduction, sustainable system implementation, and green resource utilization. Top management's significant interest in environmental sustainability enhances the organization's capacity to formulate a proactive environmental plan (Hart & Dowell, 2011).

The investigation of GHRM techniques primarily emphasizes sustainable development (Renwick et al., 2013). GHRM practices promote the adoption of environmentally sustainable activities inside enterprises to attain ecological objectives, necessitating the engagement of environmentally conscious workers (Shen et al., 2020). Prior studies (Hameed et al., 2020; Renwick et al., 2013) contended that GHRM practices may affect workers' behavior and actions, including sustainability performance (Ren et al., 2021), pro-environmental conduct (Hameed et al., 2020), and green innovation (Singh et al., 2020). Green creativity serves as the principal catalyst for innovation (Jia et al., 2018), enabling people to generate original and beneficial concepts in the creation of sustainable goods and services.

Ahmad (2015) indicated that some SMEs lack extraordinary human resource practices for effective company management, based on field observations. The majority of skilled HR experts want to collaborate with large corporations. Employees increasingly regard the company's reputation for its environmental responsibility while choosing a job. To increase the company's value, small and medium enterprises requires to develop Human Resource Management strategy that must be in line with the environmental context. In this research, researcher aimed to check and provide a framework for the implementation of GHRM in SMEs in Karachi,

Pakistan.

2. Ability-Motivation-Opportunity (AMO) Theory

This theory forms the foundation for considering how GHRM practices are affecting employees' ability, motivation, opportunity, and willingness to embrace organizationally sustainable productivity-directed behaviors (Appelbaum et al., 2000). Employees' capacities are regarded as GRS and Green Training & Development, which recruit and retain requisite knowledge and skills for individual jobs. Sustaining the workforce is achieved by aligning sustainability outcome-driven green rewards as well as employee role participation, skill utilization towards organizational objectives (Anwar et al., 2020). Further, the literature seems to point out the beneficial aspects that GHRM practices implementation might have on organizational performance regarding resources' efficiency, innovation & competitiveness, engagement and employee well-being, reputation, and relationships with stakeholders (Amjad et al., 2021; Pham et al., 2020; Saeed et al., 2019).

According to AMO theory (Appelbaum et al., 2000), it is suggested that GHRM practices can be viewed as tools for motivating an employee to be part of green activities. Green HRM shape green abilities i.e green recruitment and selection (GRS) & green training and development), motivation and opportunities (Hameed et al., 2020; Renwick et al., 2013). GHRM has an effect on the organizational support perception of employees.

Perceived organizational support demonstrates the degree to which an employee values the business and appreciates their effort towards the organization's POS. In line with Ramus (2011), POS is imperative for motivating an employee to partake in pro-environmental behaviors and become an eco-entrepreneur. Furthermore, employees excited about novel pro-environmental actions are likely to have an impact on the firm's sustainability performance (Pham et al., 2020). Based on the theoretical underpinning (Pinzone et al., 2019), it can be inferred that GHRM implementation is one of the drivers of POS about organizational sustainability. These actions symbolize the employees' significant role in the effort to achieve sustainability and capture the building block of POS. A number of studies have

highlighted the gap in applying more empirical scrutiny of GHRM in the Asian context (Cooke et al., 2020). For this reason, the current research aims to address this gap by exploring the effect of GHRM practices on the sustainability performance of SMEs.

3. Literature Review

3.1 Green Recruitment & Selection and Sustainable Performance

Individuals can be found who work for green companies where they care about the environment (Jabbour et al., 2008). An equally pragmatic view of green recruiting practice is held by Siyambalapatiya et al. (2018), who regard the environmental elements of green recruiting policies as important for attracting appropriately qualified green employees.

Prior research treats green recruitment and selection as one construct or as a unit, often referred to as green hiring. A considerable green image becomes an equally important consideration in gaining recruits. Guerci et al. (2016) show that prospective workers in the Italian labor market focus on environmental issues in their career choices even during the prolonged recession in Italy.

Recruiting people with an environmentally conscious mentality facilitates the attraction of experts knowledgeable in sustainable practices, hence allowing employers to differentiate themselves from rivals (Ahmad, 2015).

Green HRM impacts a company's economic performance by cultivating and organizing a motivated and dedicated staff that produces economic value (Longoni et al., 2016). Previous academics have highlighted inconsistent results regarding sustainability from an environmental standpoint. Green recruitment & selection (Masri & Jaaron, 2017; Yusoff, Nejadi, Kee, & Amran, 2018) and green hiring (Longoni et al., 2016; Zaid et al., 2018) were positively correlated with environmental performance; however, Guerci, Longoni, and Luzzini (2016) identified no correlation between green hiring and environmental performance. Green HRM approaches may enhance workers' motivation and competencies in environmental management, allowing them to contribute to environmental advancement (Longoni et al., 2016). Zaid et al. (2018) assert that green recruiting, as part of the green HRM framework,

favorably impacts the organization's social performance.

GRS has gathered more attention in recent years due to the keen worldwide awareness of environmental sustainability. Green recruitment strategies are acknowledged as essential elements of green human resource management techniques (Bauer et al., 1996). Green recruitment and selection techniques are essential for identifying individuals who are environmentally conscious and dedicated to sustainability, aligning with an organization's goals for sustainable growth (Guerci et al., 2016; Arulrajah et al., 2015; Jabbour and Santos, 2008). Companies function within a perpetually shifting ecosystem marked by the emergence of new sustainability threats. Recruiting candidates who have a marked record of concern for sustainability means that a firm has a workforce willing to sustain its long-term strategies (Renwick et al., 2013; Mandip, 2012).

Employing individuals who have had prior exposure to or are fond of sustainability suggests that firms have a workforce oriented towards sustainability (Mandip, 2012; Renwick et al., 2013). Some studies claim that employees who internalize at least one of the firm's core values, which in this case is sustainability, are highly likely to undertake meaningful endeavors within the firm's sustainable initiatives (Del Brío et al., 2007).

Moreover, the most comprehensive environmental strategy is labor-intensive, prioritizing the development of tacit knowledge. Organizations with pro-environmental credentials may recruit the most appropriate people (Lülfes and Hahn, 2013).

Several studies have found a positive and significant relationship between green recruitment and selection and sustainable business performance (Fapohunda et al., 2022; Jamil et al., 2023; Razali and Vasudevan, 2024; Zihan et al., 2024; Barkat et al., 2023; Shahzad et al., 2023). However, another study conducted by Guerci, Montanari, Scapolan, Abbas et al., (2021), and Epifanio, (2016) found a lack of a substantial relationship between green recruitment and selection and sustainable business performance as a result, the precise nature of the relationship between these variables remains unclear and requires more research to ascertain clarity and comprehension.

3.2 Green Recruitment and Selection and Green Employee Behavior

There is growing recognition of the positive relationship between green recruiting and selection procedures and the fostering of green behavioral intentions among employees within an organization. Green recruitment is defined by Jabbour and Santos (2008) as the method of recruiting and hiring candidates that show concern for environmental-friendly practices and synergies of integration with the organizational structure of the firm. Green recruitment has been found to impact on an organization's environmental performance and employee involvement in sustainable workplace practices.

Several studies indicate that organizations incorporating ecological factors into their policies are likely to enhance the pro-ecological conduct of employees. For instance, the study by Dumont et al. (2017) found that firms emphasizing sustainability in their recruitment processes reported more active employee involvement in environmental organizational activities. Their findings indicated that workers hired through green recruitment were more likely to perform energy-saving, waste-reducing, and other environmentally friendly actions compared to those hired through traditional processes.

Research into CBEE shows that the use of green selection policies has a significant impact on the behavior of employees, and is also likely to be more pronounced for environmental organizational citizenship behaviors. Employees who were selected based on their environmental values and competences, Tang et al. (2018) argued, were more likely to engage in environmentally-supporting volunteer work over and above official requirements. This demonstrates the argument that "green" selection mechanisms assist in zeroing in on those candidates who are self-motivated to set themselves goals for achieving ecologically sustainable targets. This further draws on Kim et al. (2019), who noted that the implementation of advanced green recruitment practices by hotels was preceded by serious and positive developments in their environmental performance indicators. The employment outcome revealed that the members most likely to be employed from green pools were more willing to adopt energy conservation practices

as well as participate in sustainable business practices. The interaction between green recruitment and employees' actions could be explained by the Ability-Motivation-Opportunity (AMO) framework. Green recruitment would boost the ability to maintain mobilization towards the set goal through the selection of candidates equipped with critical tools, expertise, and awareness of sustainability. Motivation boosts as the values of the employees are congruent with the vision and sustainability objectives of the organization.

Moreover, there are means provided for involvement with the environment because of the organizational climate that exists, which is fostered from the very beginning (Renwick et al., 2013). This explanation assists in understanding why selection and recruitment processes based on sustainability principles tend to have greater influence on achieving sustainable organizational outcomes and enduring green actions and behaviors among employees. A number of studies have proven the positive correlation between green organizational employee action and the sustainable performance of the organization. Green employee behavior includes voluntary and employee-driven activities that contribute to ecological sustainability, such as conserving energy or waste reduction, and eco-innovations (Paillé et al., 2014). Research spanning diverse sectors has shown that green behaviors among employees positively affect numerous facets of sustainable performance, such as achieving social and economic goals alongside environmental objectives.

Data collected from the manufacturing industry suggests that implementing green policies results in employees becoming actively engaged in eco-friendly efforts, and thus promotes sustainable performance indicators. As an example, Daily et al. (2012) noted that organizations with advanced green employee behavior indicated approximately 18 to 25 percent further effectiveness in energy usage and waste minimization as compared to other organizations. In the same way, Dumont et al. (2017) carried out research in the service industry, which showed that employee sustainability initiatives tend to greatly enhance environmental protection and reduce expenditures.

The other side enables an organization to achieve social objectives regarding sustainable performance

and helps achieve the social dimension of sustainable performance. Employee green behavior also has positive effects on stakeholder relationships, appreciation, and improvement of corporate reputation. Nortom et al. (2015) reported that green-oriented employees, as part of undertaking sustainability-related corporate social responsibility, significantly enhance community relations through positive spillover impacts. In addition, these behaviors strengthen the image of the business in the community.

The connection between standout green employee behavior and sustainable performance is of particular concern for Small and Medium Enterprises (SMEs), as they usually do not have sophisticated environmental management systems, unlike large companies. Reporting from developing countries such as Pakistan suggests that voluntary green behavior from employees of SMEs can offset the absence of institutional structures supporting sustainability (Shahzad et al., 2020). For example, Ali et al. (2021) documented that Pakistani SMEs in the textile industry have shown that environmental practices at the worker level significantly enhance both the ecological footprint and operational efficiency of the firm.

Nonetheless, specific studies on Pakistani SMEs also point out some areas of concern. Khan et al (2022) studied the relationship between employee green behavior and sustainable performance and identified supporting resources and management support as moderators to the otherwise positive correlation. Their research regarding the manufacturing SMEs in Lahore discovered that motivating green employee behaviors did not improve organizational sustainable performance outcomes without proper organizational enabling conditions. It is evident from these findings that the green behavior-performance nexus is available in Pakistani SMEs, albeit requiring some form of institutional cushion for full efficacy. Subsequent studies ought to focus on how to maximize this in the context of resource-strapped SMEs in developing economies.

3.3 Green Training and Development and Sustainable Performance

Green training and development (GTD), considered important for every organization's sustainable

initiatives and strategy (Pinzone et al., 2019). Motivation of employees through specific training programs has been noted to improve a company's overall environmental performance (Renwick et al., 2016), and such motivated employees can enable a company to gain green opportunities in different business sectors (Rani and Mishra, 2014). The organization's aim is to attain environmental sustainability by incorporating various aspects of GHRM and effectively executing these practices across the system. Furthermore, the primary aim of the companies is to facilitate workforce greening to support their ongoing expansion (Jabbour et al., 2010).

Jabbour (2011) asserts that green training, or environmental training, is a significant investment, and organizations need to provide ongoing training. Ji, Huang, Liu, Zhu, and Cai (2012) and Liu, Li, Zhu, Cai, and Wang (2014) assert that, within the Chinese context, green training is a significant motivator for the workforce to achieve environmental sustainability objectives. Organizations that engage in more rigorous training have a more proactive environmental stance and hence demonstrate elevated sustainability performance. Empirical evidence indicates that green training and development positively correlate with all three dimensions of sustainability: economic performance (Longoni et al., 2016; Zaid et al., 2018), environmental performance (Guerci, Longoni, & Luzzini, 2016; Longoni et al., 2016; Masri & Jaaron, 2017; Yusoff et al., 2018; Zaid et al., 2018), and social performance (Zaid et al., 2018).

Green training and development initiatives that prioritize environmental sustainability enhance employees' knowledge and skills, enabling them to address sustainability challenges such as waste management and energy conservation (Diana et al., 2017; Pinzone et al., 2016; Jabbour, 2013). The environment and sustainability policies of organizations are complex and dynamic, which makes training and development necessary (Carollo and Guerci, 2018; Daily and Huang, 2001). Empirical evidence indicates that training programs for sustainability enhance awareness and performance at the organizational level (Gull et al., 2022; Jabbour et al., 2010).

In addition, a number of academic studies have

indicated that green training and development is positively associated with sustainable performance (Veerasamy et al., 2024; Deshpande et al., 2023; Shahzad et al., 2023; Obeidat et al., 2023; Afzal et al., 2023). Although the majority of the studies showed a positive relationship between green training and development and sustainable performance, other studies showed no relationship between the two. A research by San et al. (2022) revealed that green training and development do not have any influence on socially sustainable business performance. Another study by Zaid et al. (2018).

It was noted by Zaid (2018), that the GHRM Bundle, which contains green training and development, does not consistently improve sustainable business performance. And, as noted by Malik et al. (2020), there exists no significant relationship between these two variables either. Therefore, this relationship requires further investigation to yield more complete and reliable information in defining this relationship.

3.4 Green Training & Development and Green Employee Behavior

Research confirms that green training and related to the paradigm have significant success in changing employees' attitudes towards eco-friendly practices. Daily and Huang (2001) already pointed out in their pioneering research that environmental training conducted in manufacturing firms increased employees' participation in recycling by 37% and energy savings by 29%. These findings pointed out the significance of training as one of the major determinants of green workplace behaviors.

Some researchers have built on these findings to apply them to different contexts. Renwick et al. (2013) examined the impact of green training on organizational culture and found that such activities enhanced environmental task performance by 42% and voluntary pro-environmental behaviors by 33% among employees, provided the training materials were customized to their job descriptions. In the hospitality sector, Kim et al. (2019) documented a 51% increase in staff compliance with waste segregation policies and a 45% increase in energy conservation, showcasing the effectiveness of environmental training targeted at specific departments.

Training completeness, along with cognitive depth, are the two primary characteristics that apply to specific behavioral results. For example, Dumont et al. (2017) stated that providing more comprehensive education on sustainability resulted in 28% more green behavior adoption compared to sessions that only required participants to know basic concepts. Pinzone et al. (2020), while focusing on the psychological processes, Ylvisaker (2016) showed that training increased knowledge of the environment by 61%, which led to an increase in green behaviors by 39%. Those effects appear to be long-lasting, as exhibited by Norton et al. (2015), who showed that trained employees performed 22-25% more green behaviors than untrained employees, even 18 months after the training.

The outcomes also depend on the design and implementation of the green training programs. Paillé et al. (2014), in comparison to purely informational approaches, a 31% improvement in behavioral outcomes was noticeable in motivational training. Context plays an important role as well. Tang et al (2018) realized that group-based strategies led to a shift in behavior 35% greater than individual methods utilized in collectivist Asian workplaces. Even in resource-limited developing economies, Shahzad et al. (2020) claimed that trained Pakistani textile workers demonstrated 27% higher compliance and 19% more voluntarily suggested green initiatives compared to their untrained counterparts.

The most extensive evidence stems from Yusoff et al. (2023) meta-analysis of 87 studies, where an overall effect size of 0.42 was confirmed for the relation of training and behavior. It was established that the strongest outcomes came from the implementation of programs that sought to transfer knowledge alongside skill-building as provided through motivational frameworks.

Taking these findings into account, effective green training was found to progress through knowledge and skills, motivation, pro-organizational social norms, and advancing them through multiple pathways. For instance, these studies illustrate the importance of tailored, captivating training design for specific organizational cultures and environments in achieving clear sustainability goals.

4. Theoretical Implications

This review advances theory by deepening knowledge of Green Human Resource Management (GHRM) as a driver of sustainable performance in small and medium enterprises (SMEs) located in developing contexts such as Pakistan. Grounded in the Ability-Motivation-Opportunity (AMO) framework, the work shows that two key GHRM practices- green recruitment and selection (GRS) and green training and development (GTD)-improve workers' abilities, boost their motivation, and create opportunities for pro-environment actions. By linking AMO to GHRM, the study spells out the process through which green HR policies push firms toward sustainability and opens new avenues for scholars to test other practices, such as green rewards and performance management, using the same lens. The analysis further strengthens the connection between GHRM and the Triple Bottom Line (TBL) by providing empirical evidence that green HR initiatives enhance economic, social, and environmental results, yet it also points to mixed findings in prior research, thus calling for more work on moderators like industry characteristics and regulatory intensity.

A second contribution is its clear explanation of the causal chain from GHRM to green employee behavior and, ultimately, to stronger sustainable performance. By bringing together prior studies, this work pinpoints several psychological and organizational pathways-perceived organizational support and employee engagement, for instance-that help explain why green human-resource practices lead to better environmental results. Its findings, therefore, invite other researchers to test extra mediators, such as a firm's green culture or the quality of its leaders, to see how much further the GHRM-to-sustainability story can be pushed. The project also fills an important void by placing GHRM squarely in small and medium-sized enterprises (SMEs) in developing economies, settings where tight budgets and often informal HR systems make green action especially tricky. Because of this distinctive backdrop, the authors argue that new, context-sensitive GHRM models must be built to suit the strengths and limits of emerging market SMEs.

The study also tackles the mixed results that litter the GHRM field by linking them to differing survey

instruments, industry types, and national values. By calling for common measurement templates and studies that follow firms over time, the authors lay the groundwork for findings that are both trustworthy and broadly applicable.

This review, therefore, consolidates and expands prevailing theories of Green Human Resource Management while outlining a clear agenda for future research, urging scholars to investigate moderators, mediators, and cross-cultural links so that the field may gain a richer theoretical and practical grasp of how GHRM drives sustainable business performance.

5. Practical Implications

The insights drawn from the study present valuable guidance for firms, especially small and medium-sized enterprises in developing countries such as Pakistan, that wish to lift their sustainability results through GHRM. First, businesses ought to embed environmental values into recruitment and selection by actively seeking applicants who demonstrate ecological awareness and relevant skills. They can do this by adding green criteria to job descriptions, framing interview questions around sustainability, and using eco-focused employer branding to draw talent whose values match the firm's green aims. When budgets are lean, cost-effective online media for such branding allow small businesses to compete with larger competitors for green-minded recruits.

In training and development, the review emphasizes the requirement for highly organized green courses that transcend general awareness and provide employees with tangible, job-oriented sustainability skills. Firms ought to design modules specific to every role and department so that employees can view precisely how their daily activities lead to greater environmental goals.

Small and medium-sized businesses gain when they partner with industry associations or government initiatives like SMEDA, receiving cost-saving training and professional advice. The study also indicates that training yields more robust results if accompanied by motivation, and therefore companies should support lessons with recognition prizes or incentives tied to sustainability outcomes.

The research highlights the need for small and medium-sized businesses (SMEs) to design an

organizational infrastructure and culture that enables employees to apply their environmental expertise. In particular, companies should articulate solid sustainability policies, provide sufficient tools, and demonstrate leadership commitment in supporting green projects. Since numerous SMEs have limited budgets, implementing small-scale, unit-level initiatives can generate tangible early returns and mobilize interest in broader action. The evidence also recommends establishing frameworks to monitor and evaluate the impact of GHRM measures on environmental outcomes, thereby ensuring continuous adaptation and greater alignment with business objectives. Combined, these recommendations provide managers with tangible means of reconciling GHRM theory and actual green achievements without exceeding resource constraints.

6. Limitations of the Study

While this review illuminates the way Green Human Resource Management (GHRM) influences sustainability performance in SMEs, some caveats are due. To begin with, it is reliant on published research, which can bias the picture since journals tend to favor studies with positive or statistically significant findings over those with null relationships. In addition, most of the work reviewed surveys large corporations in industrialized economies, making its findings only provisionally generalizable to smaller businesses in developing economies such as Pakistan.

Because research teams use differing scales to measure both green human-resource practices and firm-wide sustainability, comparing findings across papers remains challenging. The review thus far has also concentrated on green recruitment and training, leaving other activities such as eco-minded performance appraisal and pay systems unexplored, even though these could shape outcomes. Moreover, the analysis treats SMEs as a uniform group, yet firms in manufacturing, services, or trade face distinct environmental pressures that likely demand tailored green HR strategies.

7. Future Research Directions

To move forward, scholars should pursue several clear paths that would deepen understanding of how

green HRM drives sustainable performance. First, new empirical studies focused on small and medium-sized enterprises in developing economies would test whether existing models hold true in cash-strapped contexts. Second, longitudinal designs could track GHRM practices over years, revealing how they mature and affect sustainability in the long run. Third, researchers need to build industry-specific frameworks, since manufacturing, healthcare, retail, and other sectors probably require different green HR tactics. Fourth, attention should turn to mediators and moderators-such as corporate culture, leadership backing, and shifting government policies-that may strengthen or weaken the link between GHRM and sustainability.

Finally, combining statistical surveys with in-depth case studies would paint a clearer picture of how small and medium enterprises actually put Green HRM into practice day by day. Filling those gaps could help scholars build stronger, context-sensitive GHRM models that boost both the planet and the bottom line.

8. Conclusion

This study examines how Green Human Resource Management (GHRM) practices drive sustainable performance in Karachi, Pakistan, and underscores their growing importance for local SMEs. As global environmental challenges mount, firms now face mounting pressure from regulators, customers, and civil society to act in ways that protect both people and nature. The Triple Bottom Line (TBL) framework calls for equal attention to economic viability, social equity, and environmental stewardship; within that balance, GHRM stands out as a critical lever.

The analysis includes two key GHRM activities-green recruitment and selection (GRS) plus green training and development (GTD)-showing how each shapes overall performance and pro-environmental behavior among workers. Data tells a positive relationship between both practices and the TBL results. However, mixed findings in some surveys prompt researchers of the need for larger samples and diverse settings before drawing sweeping conclusions. The Ability-Motivation-Opportunity (AMO) framework helps explain how Green Human Resource Management (GHRM) builds employees'

abilities, increases their motivation, and opens up chances for them to act sustainably. Yet these gains show up in resource-tight small and medium enterprises only when owners pair them with solid managerial backing and supportive rules from outside the firm.

This article, therefore, fills a gap by examining GHRM in Asian firms, finding that green people practices can steer Pakistani SMEs toward better

economic, social, and ecological results. Upcoming studies should map how factors such as leader encouragement and access to funds shape GHRM in varying settings. In short, a full roll-out of green HR tools gives small businesses a viable route to long-lasting viability, compliance with world norms, and improved competitive edge, while also meeting pressing environmental and social needs.

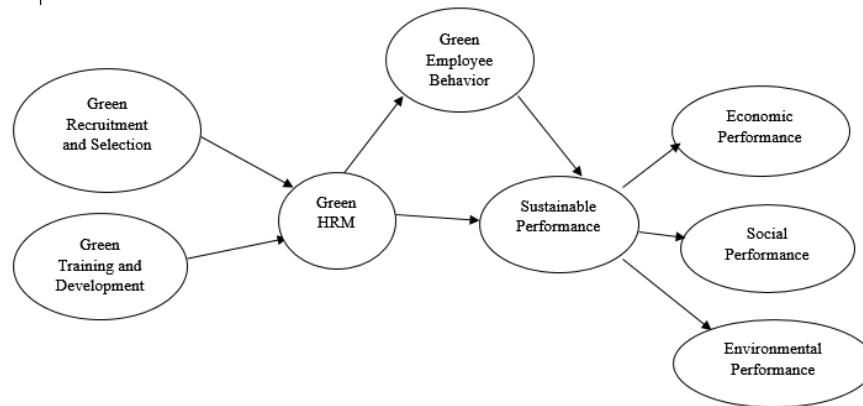


Figure 01: Proposed Conceptual model

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