



**RESEARCH PAPER**

**Exploring the Mediating Role of Environmental Performance in the Relationship between GHRM Practices and Organizational Sustainability in Manufacturing Industry**

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**ABSTRACT**

The primary aim of the research was to examine the approaches employed to enhance "organisational sustainability" (OS). The study highlights the significance of green human resource management (GHRM) practices for organisational sustainability by organizing the collection of available literature based to the strategic choice theory. The present research investigates the association between GHRM practices and OS. Environmental performance as mediator in the study was explored. 150 participants from manufacturing industries were selected for the data collection. The study's findings revealed that GHRM practises i.e., green performance appraisal (GPA), green reward compensation and compensation (GRC), green training and development (GTD) has positive and significant effect of on organisational sustainability. Environmental performance partially mediates the stated relationship.

**KEYWORDS** Employees, Green HRM, Manufacturing Industries, Organizational Sustainability

**Introduction**

Concerns about the environment have grown over the past few years on a global level (Sharma and Gupta 2015), particularly in the context of the industrial revolution and its associated destruction of the environment (Amui et al., 2017). It has been established that environmentally friendly businesses have more environmentally friendly operations than their traditional competitors. Eco-friendly product image has emerged as a vital component in today's corporate environment, integrating systems, adoption of cutting-edge technologies, and procedures. The research indicates that the manufacturing sectors in emerging countries deal with a range of environmental problems. Therefore, it is necessary for businesses to evaluate, monitor, and enhance management-related responsibilities (Ahmad et al., 2022). Environmentally friendly products and corporate social responsibility (CSR) initiatives are becoming significant components of technology adoption, system deployment, and company operations. According to a previous study, business entities that incorporated sustainable practices had a competitive advantage in terms of cost investments and incomes (Muster & Schrader, 2011). Industries are able to show their social responsibility and assist society at large by employing green practises. Green management practices must be fostered and used in the manufacturing sector in light of the growing environmental challenges. In addition to enhancing standard of living, incorporating green supply chain strategies may help protecting the environment from degradation. The companies in developing countries that are suffers a variety of environmental issues, companies need to be active in evaluating, monitoring, and changing management-related practises (Ghani et al., 2022; Rehman et al., 2016). Nowadays, operational management, marketing, and other areas of company operations are all influenced by the concept of environmental management (EM). Firms in rich countries have also taken the lead in launching innovative initiatives known as "green HRM (GHRM)." Furthermore, the GHRM

practises stimulate employees' enhanced performance and commitment to improving sustainability. In order to support sustainability, the Green HRM Approaches entail modifying organisational policies, HRM strategies, and HRM philosophy. Thus, GHRM has played an important part in the sustainability of organisations). Based on Renwick et al. (2013), GHRM has been developed to assist companies in improving their environmental performance (EP). Many organisations are speedily adopting GHRM in order to establish an environmentally conscious organisational culture, which will minimize environmental consequences in this advanced industrial development era. While sustaining the organization's ecological environment is the duty of all departments, it is not the workers of any one particular organisational department that must embrace green behaviour. International research on the association between GHRM and organisational sustainability is few. Massive environmental challenges are impacting Pakistani industry, which is affecting the manufacturing sectors of the nation. To fill the knowledge gap about how GHRM practices affect the environmental performance of the manufacturing sectors in Khyber Pakhtunkhwa, further investigation needs to be conducted. As the levels of pollution rise, the majority of wealthy nations have been successful in implementing environmental limits. However, developing countries such as Pakistan make it difficult to put their environmental laws into effect due to a wide range of problems, such as a lack of economics, official opposition, and a lack of competence. The long-term sustainability of the global environment is the main problem facing human society in the twenty-first century. In addition to preserving the environment in which people resided all nations should work to protect the quality of natural resources, ecosystems, and various kinds of animal and plant species in the medium and long periods. In the last few decades, the behavioural and social sciences have investigated environmental behaviour, human well-being, and damage to the environment (Amjad et al., 2021; Ma et al., 2023; Carr et al., 2002; Becherer & Halstead, 2004). Experts argues that little investigation has examined at the importance of GHRM) systems in organisations that want to be environmentally sustainable. Consequently, it is necessary to link GHRM practises with environmental management. GHRM-related projects "became a component of larger corporate social responsibility" initiatives. Foreign buyers are typically happy when an individual obtains environmental authorization for improving their environmental performance from pertinent international agencies. This is a fundamental justification for pushing for and implementing environmentally friendly methods of manufacturing. A successful manufacturing sector encourages domestic production, exports, and job creation, which boosts an economy's overall growth. 16.1 percent of Pakistan's workforce is employed in the manufacturing sector, resulting in for 12.79 percent of the nation's GDP. In order to inform and instruct employees about an environmentally safe Pakistan, it is essential to do study on green HRM practises in the manufacturing industries of Khyber Pakhtunkhwa of Pakistan. By implementing the human aspect for such types of problems, Jabbour et al., (2017) grew the state-of-the-art circular economy (CE) business model publications. The research framework of this study is based on the theoretical facet of the "resource-based view" (RBV), which is a "middlerange theory."

## **Literature Review**

### **Organizational Sustainability**

The major companies of the twenty-first century have drawn attention to the challenges of sustainability. A company culture of sustainable organisational Culture may be developed with the help of the corporate and green human resources departments (Das and Singh 2016). Implementing administrative procedures is crucial to upholding sustainability's guiding principles. The shareholders' perspective is constantly taken into consideration by HR experts when making any HR choices (Gholami et al., 2016). At this point in time, organisations need to get a lot of input from individuals within as well as outside the company in order to handle the financial, sustainable, and societal consequences (Singh et al., 2020). According to Likhitkar and Verma (2017), enterprises can adopt a range of green determines for their sustainability, includes electronic filing, workplace

adaptability, virtual and phone conferences, ride-sharing, recycling, and the construction of more energy-efficient premises. The organization's sustainability is aided by the increased productivity, decreased costs, happier employees, and less turnovers that are caused by these green initiatives. Researchers looked at environmental sustainability and organisational sustainability in recently industrialized countries (Bag, 2019). By raising employee awareness and developing goods that are environmentally friendly, To slow down the degradation of the environment, corporate organisations should work harder to introduce new innovations and technologies and investigate into "Green and Green HRM" while considering the importance, incentives, and challenges of using it for the sustainability of an organisations (Aggarwal & Sharma, 2015). The idea of "development to meet the needs of the people effectively without compromising the needs of the next generations" is a term that describes sustainability. Team commitment to the sustainability of an organization plays an essential role for increasing awareness of climate change among the workforce and motivating them to confront any challenges (Das & Singh, 2016). When industries use HRM strategies, hiring and selecting, education and development, performance management, and remuneration for environmental sustainability are the main goals of GHRM, in accordance to research by Haddock et al. (2010). According to a study by Renwick et al. (2013), the adoption of GHRM practices was described as a performance-oriented evaluation system meant to improve employees' comprehension of environmental sustainability. The definition of "sustainability" is "development that fulfills today's demands without compromising the abilities of future generations to meet their needs." Employee respect for environmental problems and enthusiasm to easily overcome expected obstacles are both fostered by an organization's commitment to sustainability (Das and Singh 2016). Employing green HR practises indicates current and future staff members that the organisations promotes environmental and social problems and has a strong corporate social objective, argued Rangarajan and Rahm (2011). It also improves the organization's perceived external trust with potential employees, making it more "appealing" to them. Consequently, in accordance to the social identity theory, an employee's corporate association depends on how individuals interpret GHRM. Tompkins (2005) explains organisational identity as an emotional connection to the business that manifests the business's pride and is associated with an employee's dedication to the organisations. Individuals are being encouraged to display a great work ethic and behaviours to enhance their sense of self-worth and identification within the company. Additionally, research indicates that an organization's identity is positively correlated with employees' performance and negatively correlated with employees' intention to leave the organisations (Shen et al., 2018).

### **Human Resources Management**

The GHRM is the utilization of HRM processes to promote the sustainable exploitation of assets inside an organization in order to attain the goal of being environmentally friendly. The term "GHRM" is the most frequently used to represent the concerns of managers and individuals when developing concepts and practices for better corporate environmental planning (Shafaei et al., 2020). To keep people interested in the green plan and continue to recognise the importance of their companies, green promotions should make use of benefits related to the workplace and way of life, such as emissions reductions or free cycling (Suharti and Sugiarto 2020). Though many employees generally consider it is not their job to help the environment when they are busy working, millennial new hires ordinarily likely to realize this when they work towards their managers (Tompkins, 2005). According to Rangarajan and Rahm (2011), corporations that use GHRM policies indicate their respect for the environment and social goals of their existing and potential workers. This enhances the company's reputation outside the workplace and makes it more "appealing" to potential employees. Therefore, according to the social identity theory, how employees see green HRM will have an impact on their organisational identification. According to Nagarajan, (2020) organisational identification is an emotional connection to the firm that is linked to employees' organisational commitment and serves as a visible representation of an organization's sense of satisfaction. In order to further

develop their sense of self-worth and their sense of belonging within the organisations, employees are being encouraged to display favorable workplace behaviours and behaviours. Moreover, researches conducted by scientists have demonstrated a favorable correlation between organisational identity and employee performance and a negative link with employee dispositions to leave (Shen et al., 2018). Every person may achieve self-fulfillment and awareness in their employment through a variety of options. Other fundamentally green actions include limiting the number of printed words utilized for executive appraisals, salary calculations, etc. There are numerous of chances in waste reduction, even though there is a lot of "green washing" occurring done. Therefore, it is beneficial for organisations to integrate HR into the organization's entire green programme since the development of HR procedures on their own is failing to prevent HR from having an immense impact on the company's success (Korherr & Kanbach, 2023).

### **Green Performance Appraisal**

Employee knowledge about the need for enhancement of an organization's green performance continues to rise, based on assessment and management systems for green performance (Jackson et al., 2011). The performance assessment takes environmental responsibility into consideration as do all initiatives that eventually contribute to minimizing carbon emissions and addressing laws regarding the environment and issues. If corporations want to maintain improved employee performance, they must implement corporate-wide processes to evaluate resource acquisition (Tulsi and Yunho 2020). Employee engagement and motivation for green practices would increase if management provided incentives based on assessments of their green performance (Manzoor et al., 2023; Das & Jabbour 2016). To adopt green HR practises, managers should encourage their workers to share their thoughts on their roles and responsibilities. The management group should decide what areas to concentrate on in next year in order to put these green ideas into practice and assess worker performance. Sharma and Gupta (2015) state that the standard performance indicator employed in green evaluations of performance is green productivity quality. Managers might inform staff members or labour unions right away on their performance in fulfilling environmental goals in order to enhance their EP (Arulrajah et al. 2015). Employees' perception, skills, and capability will all be improved with the help of this input. Govindarajulu and Daily (2004) made notice of this and stated that it is crucial to communicate assessment results with staff members regarding their progress towards achieving their objectives in order to motivate them and to assist them grow their commitment to EM tasks. According to Harvey et al. (2013) businesses can also set up an online system that lets staff members express their opinions, allows representatives to make changes to their individual employee profiles, and provides online information systems and reviews, allowing participants to take part and offer new suggestions for creating an environmentally friendly workplace. Ahmad and Allen (2022) recommended that the departments of human resource enhance the display test grading system to enable employees to be evaluated based on their behaviour and specific abilities related to environmental sustainability. On the above arguments following hypothesis was developed.

**H1:** There is positive and significant effect of Green performance on organizational sustainability.

### **Green Reward and Compensation**

Providing an incentive to employees promotes an enterprise perform more effectively (Jabbour and Kantarjian, 2016). By rewarding employees for altering their behaviour, the completion of sustainable projects might be included into the remuneration system. In this manner Instead of encouraging unfavorable behaviour among the staff, eco-friendly behaviour should be encouraged (Zoogah, 2011). Awards may be used to recognise employees who have made a positive impact on the environment. As an instance, 3M rewards particular employee groups with incentives for ideas that improve the environment and increase company profitability (Renwick et al., 2013; Masri & Jaaron, 2017). Company's growing number of awards results in extraordinary levels of fulfillment

(Arulrajah et al., 2015). This makes it clear that not many companies have put in place award programmes to promote positive employee habits. Renwick et al. (2013) state that the rewards are mostly split between non-monetary and monetary advantages include offering employees vacation time, paid time off, gifts, and credit scores. The performance of employees that help to improve environmental sustainability is significantly impacted by all benefits (Renwick et al., 2013). As a result of these factors, businesses should adopt green management practises by supporting environmentally friendly practises such waste control and reuse, or by committing all available assets and resources to putting these practises into practises with vocation profits (Jabbar & Abid, 2014). Furthermore, it frequently encourages staff members to provide unique green ideas related to their particular occupation, therefore fostering some green innovation and growth (Ahmad & Allen, 2015). The following hypothesis was developed in light of the literature review.

**H2:** There is positive and significant effect of Green Reward and Compensation on organizational sustainability.

### **Green training and development**

A number of companies present their employees efficient educational projects on how to engage in green practices to stop or reduce the emission of gases that cause environmental pollution, in addition to strengthening managerial and technical skills for ensuring the continued preservation of natural resources and greater environmental sustainability (Cook and Seith 1992). It has not been acknowledged just how important green training and development initiatives are to the sustainability of companies and the environment (Pradhan 2020; Manzoor et al., 2023). The most difficult issue confronting business organisations today is how to combine organisational sustainability with economic growth (Pinzone et al., 2019). Green training programmes also include understanding on the environment that can help non-managerial staff members and management in modifying their mindsets and actions (Jeruto et al., 2017). Another problem affecting the modern world is combining the process of financial progress and enhancement with environmentally friendly development (Pinzone et al., 2019). The organization also has to provide knowledge about the environment that will affect the attitudes of organisational management and non-administrative personnel (Jeruto et al., 2017). Green HRM involves specific practises and strategies for human resources in relation to the social, and environmental pillars of sustainability, this expression is surprising (Renwick et al. (2013), Using literature as a base, the following hypothesis has been established:

**H3:** There is positive and significant effect of Green training and developing on organizational sustainability.

### **Environmental Performance**

According to the concept of environmental performance, it is "the evaluation of an organization's ability to achieve environmental goals and objectives that have been implemented in accordance with the organization's environmental plan or policy." In order to achieve a competitive edge, some businesses are now implementing environmentally friendly projects (Fraj et al., 2015). It has been suggested that enhancing environmental performance presents a win-win chance to increase organisational sustainability. Over the past several years, organisations from all over the world have been concentrating on different environmentally friendly endeavours and how they influence the environment (Cherian & Jacob, 2012). Green practises have to be implemented because they can lead to better performance when adopted by companies (Jackson et al., 2011). According to Amui et al. (2017) a few researchers showed how GHRM and green production may be developed together to achieve environmental performance. They also reached an understanding that GHRM, which encourages employees to carry out their tasks in accordance with green practises, is the best strategy for attaining environmental performance. The following hypotheses were put out based on the above literature.

**H4:** Environmental Performance positively mediates the relationship between Green HRM and organizational sustainability.

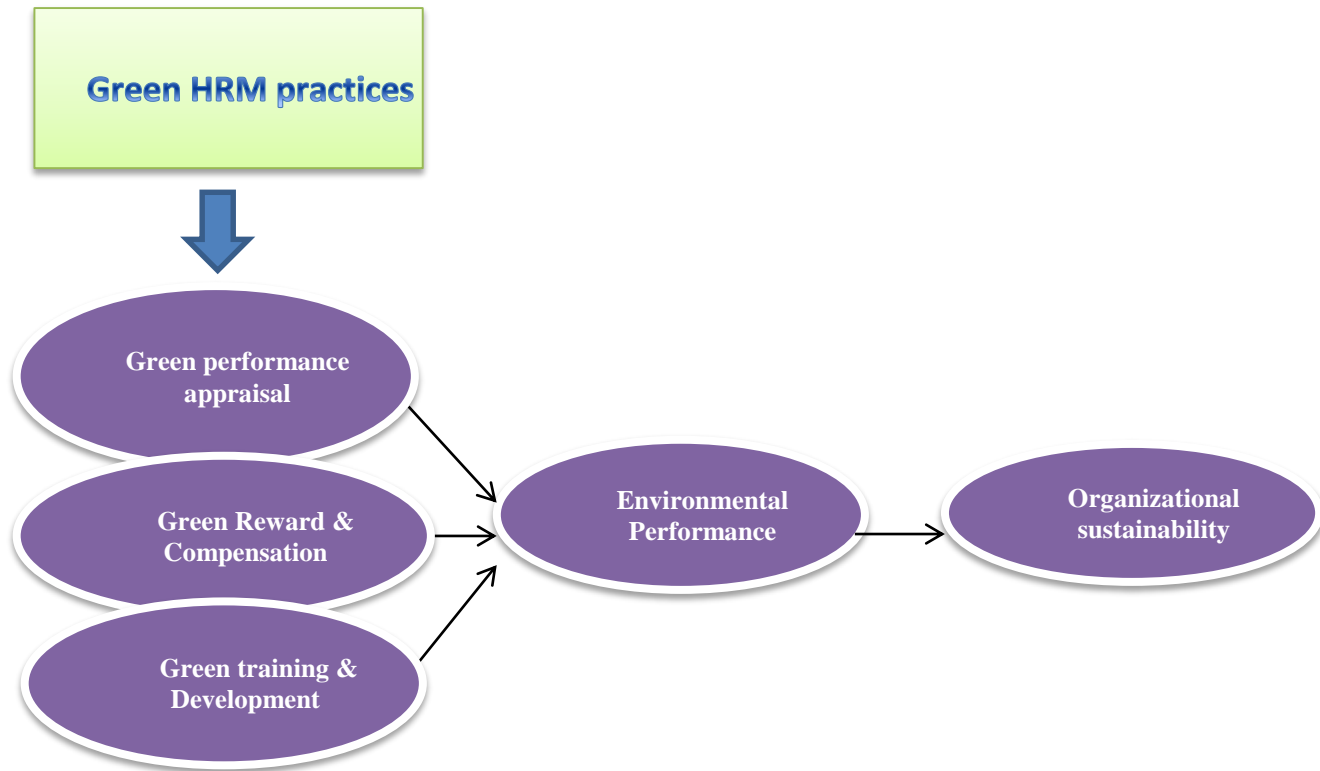


Figure 1: Theoretical Model

## Materials and Methods

### Population and Sampling

Employees from manufacturing industries in the province of Khyber Pakhtunkhwa Pakistan were included in this study. The top management of the manufacturing industries gave its consent before the survey was sent out, allowing employees to take part in the study. A meeting was held with managers through an interactive session in order to collect data on their experiences as Human resource managers for the survey that was performed in the province of Khyber Pakhtunkhwa. The target population for the survey was HR managers. A total of 150 valid questionnaires were received after the questionnaire was delivered to the 200 respondents. A standardized questionnaire was used to collect data from all organisations during a specific date and time of visiting.

### Instruments

A five-point Likert scale was used to measure all the variables in the present research.

### Green HRM Practices

To examine green HRM practices, including green reward compensation which consisted of three items, green training and development which possessed five items and green performance appraisal that consisted of five items modified from Masri (2016).

### Environmental Performance

For measuring environmental performance, five items were taken from past study of Zhu & Sarkis, (2004).

### Organizational sustainability

Eight elements were adapted from Murillo-Luna et al., (2008) have been applied to evaluate an organization's sustainability.

**Results and Discussion**

**Table 1  
Scale Reliability**

|                              | <b>Variables</b>              | <b>items</b> | <b>Alpha values</b> |
|------------------------------|-------------------------------|--------------|---------------------|
| <b>Independent variables</b> | Green performance appraisal   | 5            | .829                |
|                              | Green training & Development  | 5            | .932                |
|                              | Green reward compensation     | 3            | .798                |
| <b>Dependent variable</b>    | Organizational sustainability | 8            | .767                |
| <b>Mediating variable</b>    | Environmental Performance     | 5            | .853                |

Alpha value was measured in order to evaluate the instruments' reliability used SPSS software. The reliability which indicates how frequently items in a scale are strongly associated to one another was tested using Cronbach's Alpha (Sekaran, 2013). According to Sekaran's past studies, items have been considered reliable and kept in the study when the Cronbach's alpha value is .7 or above. The alpha values of the scale items are above .7, as can be observed from the model table no.1 above, confirmed that items is reliable and retained..

**Table 2  
KMO and BTS tests**

| <b>Variables</b>              | <b>KMO</b> | <b>BTS</b>                   | <b>df</b> | <b>P</b> |
|-------------------------------|------------|------------------------------|-----------|----------|
| Green performance appraisal   | .839       | X <sup>2</sup><br>(570.960)  | 10        | .000     |
| Green training & Development  | .806       | X <sup>2</sup><br>(480.080)  | 10        | .000     |
| Green reward compensation     | .791       | X <sup>2</sup><br>(461.706)  | 10        | .000     |
| Organizational sustainability | .782       | X <sup>2</sup><br>(1487.435) | 10        | .000     |
| Environmental Performance     | .780       | X <sup>2</sup><br>(304.474)  | 10        | .000     |

Based on the above finding, the sample is adequate considering that the KMO' values of the study's variables are more than .5. Similar to this, the study's variables' BTS values are significant, suggesting the alternative hypothesis is supported.

**Table 3  
Hypothesis Testing**

| <b>Variables</b>                        | <b>R</b> | <b>R<sup>2</sup></b> | <b>S.e</b> |
|---|----------|----------------------|------------|
| <b>Green performance appraisal</b>      | .749     | <b>.559</b>          | .748       |
| <b>Green training &amp; Development</b> | .707     | <b>.500</b>          | .798       |
| <b>Green reward compensation</b>        | .641     | <b>.411</b>          | .865       |

Regression analysis is explained in the table 3 above. Based on the values of R<sup>2</sup> of GPA 0.55, GTD 0.50, and GRC 0.41 represent 55%, 50%, and 41% of the variation in organizational sustainability, respectively.

**Table 4**  
**Coefficient summary**

| Variables | Und. stand beta | t      | Stand beta | ANNOVA                | P    | Decision  |
|-----------|-----------------|--------|------------|-----------------------|------|-----------|
| GPA       | .66             | 16.864 | .749       | F (284.357)<br>P < .5 | .000 | Supported |
| GTD       | .82             | 14.931 | .707       | F (222.933)<br>P < .5 | .000 | Supported |
| GRC       | .71             | 10.493 | .575       | F (110.097)<br>P < .5 | .000 | Supported |

**Dependent variable:** Organizational sustainability

Based on the finding of the regression study, the independent Green HRM practices (GTD, GPA, and GRC) has significantly and positively relationship with the dependent variable organizational sustainability (OS). High beta values for GTD, GPA, and GRC suggest that it contribute more explaining variance in the OS. Therefore, a strong value of F and a substantial value of p reflect the overall model fitness. Hence, the three study hypotheses (H1, H2, and H3) are accepted.

**Table 5**  
**Mediation Analysis**

| Mediation Analysis |                                  |               |            | Result            |
|--------------------|----------------------------------|---------------|------------|-------------------|
| Relationship       | Green HRM practices as predictor |               |            | Partial Mediation |
| IV → M             | b (.7870)                        | T = (17.2120) | P = (.000) |                   |
| M → DV             | b (.1440)                        | T = (2.5240)  | P = (.000) |                   |
| Total effect       | .9076                            |               |            |                   |
| Direct effect      | .4943                            |               |            |                   |
| Indirect effect    | .1133                            |               |            |                   |
| Sable test         | 2.49527715                       |               |            |                   |

Table 5 above depicts the mediation analysis for the potential mediator GHRM practices and organizational Sustainability (OS). This relationship has a positive and strong mediating effect. The fact that study's mediator, namely environmental performance (EP) partially mediates the relationship between GHRM practices and organizational sustainability. Further, it is supported by positive and significant values of z and p. Thus, the result provides support for H4.

**Conclusion**

The main objectives of the study was to investigate how GHRM practises influence environmental performance as they support the sustainability of Khyber Pakhtunkhwa manufacturing industries. The findings reveal that Green HRM practices i.e., green performance appraisal, Green training and development, and green reward compensation is significantly influence organizational sustainability. Green training and development significantly enhances employee performance, suggest Masri and Jaaron (2017). Mishra et al. (2014) found the similar effects in other developing nations like India when implementing GHRM practises to obtain advantages from employees. The study's findings align with the findings presented by Bai and Sarkis (2010), argued that worker training, can improve employee performance. Ahmad (2018) stated that all social and environmental issues need to be included in employee training and development programmes. Jackson et al. (2011), Govindarajulu and Daily (2004), and Daily and Huang (2001) consistently presents the argument that reward and compensation are important for the effective implementation of GHRM practises. It's important to keep in mind that manufacturing industries do not concentrate much on using green rewards and compensation to promote a pro-environment attitude among employees.



According to Fernández et al. (2003), it can be difficult to successfully implement a reward system that encourages employees at all levels because various incentive types could be required for various employee categories, which presents administrative difficulties with regard to the resources required for connecting rewards to specific behaviours. The current study revealed an important connection between green performance appraisal and organizational sustainability. These findings are in line with those of other studies, which indicated that green performance appraisal strongly impacts organisational organizational sustainability. Based on study by Jabbour et al. (2013) on the manufacturing industry in Mexico, EP has been significantly affected by green training. When it comes to Pakistani manufacturers, training is considered into account in terms of financial incentives (According to the Pakistani Federation, loads for numerous organisations, and the Pakistani manufacturer utilizes a more profitable green training procedure. Organizational sustainability will improve from rewards and compensation, argues by Zoogah (2011), if companies focused on positive behaviours, eliminate undesirable behaviours, and promote environmentally friendly practises. In order to accomplish this, rewards programmes must demonstrate management's dedication to employee performance while also supporting and energizing staff environmental behaviours. The current study's findings suggest an influential mediation role for environmental performance between green HRM and organisational sustainability. According to earlier research, in order to sustain overall performance specifications, organisations need to set up environmental management information systems as well as perform audits on the environment (Arulrajah et al. 2015; Khan et al., 2022). However, the work performed by the green team is practically used in manufacturing industries. Manufacturing industries are expected to recognise value in developing green management practises.

### **Theoretical and Practical Implications**

The fields of sustainability and conventional management which frequently share similarities are combined in this study, and the researchers provide a comprehensive understanding of the organization's sustainability. The significance of GHRM practices in hiring, training and development, incentive, and evaluation in the greening of an organisations and improving employee performance has been highlighted by previous studies (Ramus 2002; Mishra et al. 2014). It is imperative for decision-makers to take into consideration the continued growth of GHRM practises in emerging nations. Although the current study was carried out in Khyber Pakhtunkhwa, Pakistan, the findings can be generalized worldwide, particularly to progressive countries, given the growing interest in green and sustainable management (Shen et al. 2017). In several aspects, this study contributes to the body of literature. It integrates GHRM practises, environmental performance, and organisational sustainability in the context of developing nations. In order to achieve sustainable organisational achievement within the manufacturing industry, the study investigates the relationship between GHRM practises and organizational sustainability.

Second, it examines how environmental performance might help GHRM practises support organisational sustainability. This relationship has never been investigated in the context of manufacturing industries in studies before. For industrial managers considering selecting GHRM practices for the sustainability of their organization, this study provides beneficial insights. The study also gives managers understanding on how to influence employees' attitudes towards environmental issues in a more significant and productive way. The significance of GHRM practises in Khyber Pakhtunkhwa manufacturing sector is the primary focus of this study. As a result of incorporating the GHRM idea into the company's vision and mission statement, senior management and human resources now also have the added duty of putting green practises into implementation.

Therefore, upper management should take environmental goals into consideration when making operational decisions that reflect the company's objectives and reputation. This study assists and encourages management in manufacturing companies to develop and

tie together specific GHRM with sustainable strategic goals. In order to undertake sustainable environmental practises and also encourage deeper employee engagement. The study is helpful for green performance management and appraisal, green training and development in the manufacturing industry. For the triple bottom line of the Pakistani manufacturing sector, it establishes a relationship between GHRM and sustainability. It is the responsibility of researchers and companies to promote and develop a green culture among both inside and outside customers, in order to save the environment and preserve natural resources for upcoming generations.

### **Recommendations**

The results of this study could motivate manufacturers to encourage employee education and understanding of GHRM practises, which are essential in the modern era. Promoting a culture of rewarding employees for adopting a green mindset is also helpful in changing the perception that overseas customers have of Pakistani manufacturing industries products. This study provides managers a description of an area of research that is very important to the integration of GHRM practises with organisational sustainability. It also makes suggestions on how managers might incorporate sustainability into regular company operations.

To evaluate, change, and improve the aforementioned assertions as part of a further study, researchers and managers are invited to carry out further investigations. Develop an in-depth investigation methodology that clarifies the complex relationships between environmental performance, organisational sustainability, and Green Human Resource Management (GHRM) practices in the manufacturing sector.

Evaluate gathered data using advanced statistical methods such as structural equation modeling and mediation analysis, with an emphasis on comprehending the role of intermediary that environmental performance plays between GHRM practices and organisational sustainability.

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