Does Green Human Resource Practices have any impact on Environmental sustainability in Manufacturing Sector of Pakistan?

Irfan Qasim* Qamar Zaman** & Waqas Ashraf***

Abstract: The term "Green HRM" refers to the blend of environmental management into human resource management (HRM). This study focuses on green human resource elements like employee empowerment and environmental management systems. 430 employees (360 males and 70 women) from five renowned Pakistani manufacturing companies completed self-administered surveys (listed on Pakistan Stock Exchange Manufacturing Industry). Demographic descriptions and questionnaire for qualities that are both independent of and dependent on the study's outcomes are included in the findings. The reliability presumptions were validated prior to performing a regression analysis to assess the hypothesis. According to the study, developing countries like Pakistan should integrate more environmentally friendly practices into their systems of Human Resource Management.
Keywords: Green HRM, sustainability, commitment, empowerment, manufacturing sector, Pakistan

1   Introduction

The United States needs GHRM practices because it is a developed and developing country. Despite the fact that developed countries are conducting a growing amount of research on GHRM, administration should emphasize environmental protection policies at all levels. The impact of GHRM practices on Pakistani companies' long-term sustainability. For you to get the maximum performance out of your workers, you must provide them with emotional and psychological

*(main & corresponding author)
School of Business Administration
PhD Scholar, Superior University Lahore, Pakistan
Email: miqnadra@gmail.com
**Senior Lecturer,
Department of Business Administration
Khaldunia Institute of Technology & Applied Sciences (KITAAS), Lahore, Pakistan.
Email: qamar.fc@hotmail.com
***Director Operations, Kreative Hub, Lahore Pakistan
Info.kreativehubs@gmail.com

support. If you have strong sense of self-worth and confidence, you'll have a better chance of succeeding at work.

Individuals and organization can be empowered if they can make and implement effective decisions. According to this theory, increasing employee satisfaction may be accomplished by giving individual ownership and responsibility for their own work and the repercussion of their activities. Certain businesses have found that empowering employees is a successful strategy (Ahmad 2015). The use of this unique management method may boost a company's efficiency and worth. Individuals gain a sense of self-assurance ad self-worth as a result of this method, which encourages them to experiment with the new ways of doing things at work.

In both theory and practice, we have a shaky grasp on the concept of management. Most administration professionals agree that empowerment is a crucial component of many administrative methods. An effective manger is more than just a boss, he or she is also a facilitator and an agent of empowerment, as evidenced by the growing body of research. The concept of empowerment, which can be interpreted in numerous ways can be used to reject the Tylor and Ford executive model. According to Theory X, money concerns irritate representatives.

In Theory Y, human existence is viewed as an idealistic route toward betterment. The term "empowerment" has taken on many different meanings over the years, and it is still used today. In 1970s, the quality of working life (QWL) movement coalesced and evolved around these issues. It is useful to be aware of numerous strategies for empowering people. Knowing about different approaches of empowering people is helpful. Those at the top of the hierarchy may feel more independent as a result of their empowerment. This model was developed by Thomas et al. (76). According to this school of thought, social traits like intensity assignment, data sharing, and asset sharing are just a few elements that may help in the future growth and sustainability of the empowering process. According to Conger, J. A., "A way for developing an individual's conviction in their own self-sufficiency" (76). (Barney 1991),

The approach has allegedly been enhanced in three ways, according to its developer. You have a wide variety of interpretative methods to choose from.

The twenty first century has seen rise in the appeal of environmental issues among people from all walks of life, including those who are not actively involved in government, open society, or economic sector. The GHRM model consists of component including vision strategy, environmental performance evaluation, and incentive activities. It is impossible to exaggerate how important environmental issues are to business. The importance of long-term viability in evaluating human resource management is rising (HRM). Most important component of sustainability is Green Human Resource Management. (Jabbour, Sarkis et al. 2019). The company's overall CSR plan includes a small portion of the environmental sensitivity of human resource management. Additionally, the investigation seeks to comprehend a number of crucial GHRM activities better. Management programs are carried out using human resource policies.

1.2   Research Gap

Expert investigations are conducted by specialists.
Deficiency: There is still a lot of uncertainty over how to apply green HR management practices in industrial organizations, despite the wealth of knowledge that is readily available. To find out more about how green policies are applied in the industrial sector, we consult the literature on the HR components of GHRM. The purpose of this research is to look at the influence of green HRM practices on industrial organizations. Despite the GHRM's importance in maintaining a healthy work environment, many professions disregard it. The investigation's objectivity has been questioned because of a lack of resources and time. As a result of the study's non-generalizability, the sample size is also restricted to industrial firms.

1.3   Objectives

The objectives for this session are as follows:
        To determine whether an organization's environmental commitment can be upheld, a Green Human Resource Management strategy can be used.

Using a green HRM technique, we may evaluate how employee empowerment impacts environmental sustainability.

1.4   Research questions

Take a look at the research questions below:
Is there a link between management commitment and environmental sustainability when it comes to GHRM practices?
Is there a link between GRM practices and employee empowerment that is also environmentally sustainable?

1.5   Hypotheses

Our purposed hypotheses are given below:
Management commitment has minimal influence on an organization's long-term viability as a GHRM practice. Management commitment as a GHRM practice has a significant impact on a company's long-term viability. As a long-term GHRM approach, empowerment has little influence. The GHRM method of employee empowerment has a major effect on a company's long-term success.

2   Literature review

It tries to make a connection between Green human Resource Management and environmental performance. Analysis reveals that work life balance is significant mediator by which GHRM influences environment performance. Organization must implement comprehensive policies and programs. To establish a green balance, all stakeholders at all level should collaborate. For policies to be implemented effectively, there should be a strong synergy of GHRM and environmental practices (Masri and Jaaron 2017). It has been discovered that employees who are heavily reliant on environmentally friendly activities in their workplace contribute significantly to environmental performance. To create the green balance in an organization, no prior in-depth knowledge or expertise is necessary, but making an effort can aid in improving learning and identifying

chances to practice sustainability and achieve the green environmental balance (Mishra, Sarkar et al. 2014).

Due to rising public concern for the environment corporate organizations are being compelled to alter their business models in order to embrace green human resource management (Tariq, Jan et al. 2016). The majority of manufacturing companies have realized how important green innovation is to their success. Despite the potential contribution this study line might make to green management studies, green human resource academics have ignored it (Muisyo, Qin et al. 2021). The results clearly shows that GHR practices, such as employee engagement and leadership, recruitment and selection, training and development (green abilities), rewards and compensation, and performance management, have a significant positive effect on the firm Green Competitive Advantage (GCA). Additionally, businesses that engage on Green Innovative Culture (GIC), such as green product innovation (GPDI) and green process (GPRI), support their GCA. Article also demonstrates that companies that mix GHRM with GIC achieve higher GIC than those that solely employ GHRM.

The paper examines the linkage between Green Human Resource Management (GHRM) and the literature on sustainability as well as recent conceptualizations and theorizing of GHRM (Mukherji and Bhatnagar 2022). The study's conclusions have significance for GHRM assessment and study design in the area of human resource management (HRM)-environment-sustainability-responsibility, which has not been well studied. The study is supported by the literature on the impact of environmental related HR activities on fostering long-term competences and enhancing firm-specific social outcomes. The study also finds that GHRM has a different impact on organizational sustainability depending on the viewpoints used in conceptualizing it (Daily, Bishop et al. 2012), which supports GHRM's growing recognition as a crucial tool for organization to demonstrate their commitment to being accountable stakeholders in socioeconomics system.

The article underlines the need of integrating GHRM practices and culture at work in order to foster good green behavior in employees and raise the environmental performance (EP) and business performance (BP) of the company, the article emphasizes the necessity of integrating GHRM

practices and culture at work (Ghouri, Mani et al. 2020). This study evaluates the essential elements of GHRM and look at how it affects both the business and environmental performance. The study revealed a substantial correlation between GHRM and EP as well as correlation between EP and BP. In addition, EP strongly modulates the interaction between GHRM and BP.

Around the world, there has been an overall increase in environmental impact-related anxiety. The organization's agenda now places a high premium on environmental conservation and the adoption of environmentally friendly methods (Jackson, Renwick et al. 2011). Organizations, both public and private, have started to focus more on their green elements because doing so will increase their sustainability and hasten the transition to a more circular economy (Marrucci, Daddi et al. 2021). The investigation if the connection between GHRM and the circular economy is only beginning. Moreover, it adds to the body of scholarly work on the influence of GHRM practices on economic and environmental performance. The impact of GHRM efforts on how various stakeholders view an organization's environmental reputation was also examined. The study's conclusion adds to the scholarly debate surrounding the implementation of GHRM techniques.

In order to apply Green HRM in research, there is an increasing demand for environmental management to be incorporated into Human Resource Management (HRM). Through the application of environmental management systems, the study seeks to ascertain the relationship between green human resource elements such as management commitment, employee empowerment, feedback and review, incentives, and exit with sustainability {Mahmood, 2016 #14}. The study has investigated how GHRM practices affect the sustainably of manufacturing enterprises in Pakistan in the context of management philosophy. Major advantages of GHRM practices include growth in employee retention rates, advancement of public perception growth in attracting better personnel, improvement in efficiency and sustainability, reduction in ecological effect if organization, increased productivity, and enhanced overall performance. The success of green HRM depends on the HR

managers' activities and evaluations following unique and recognized patterns. The importance of Green Human Resource Management practices is effective to support employee confidence, according to empirical data, and this may help in achieving significant benefits for the business and employees.

The research article intended to investigate how company environmental strategies and a green psychological environment influence workers' pro-environmental behavior. Additionally, the modifying effect of environmental consciousness, which was largely disregarded in earlier studies, is investigated. In the Punjab, Pakistan, health sector, quantitative research techniques were employed, and data were gathered utilized a standardized questionnaire. The results indicates that the association between Green Human Resource Management and environmentally friendly mediated behavior by company environmental strategy and a green psychological climate. Management commitment has minimal influence on an organization's long-term viability as a GHRM practice. Management commitment as a GHRM practice has a major effect on a company's long-term viability. As a long-term GHRM approach, empowerment has little influence. The GHRM method of employee empowerment has a significant impact on a company's long-term success. Additionally, certain HR practices have a greater influence than others on the business environmental policy. For a better workforce that is environmentally sensitive, greater attention might be given to the extremely crucial GHRM practices. The healthcare industry in underdeveloped nations may focus their meagre resources on important green human resource policies that will encourage their workforce to operate in a more environmentally friendly manner.

The goal of study is to determine how environmental performances are improved by employing Green Human Resource Management techniques by encouraging employees to act in ways that are friendly to the environment. Additionally, it evaluates the largely unnoticeable moderating effect of environmental knowledge between pro-environmental behaviors and organizational environmental performance. According to the analytical results, Green Human Resource Management practices and company environmental strategy are favorably associated to the psychological green environment, which in turn encourage employees to adopt environmentally friendly behaviors. The outcomes also illustrate the specific formulation of a strategy at the corporate level to encourage

staff members to build a green workplace that would improve environmental performance. Results also suggest that environmental performance and pro-environmental behavior are moderated by environmental knowledge. By making business environmental strategy one of the primary predictors of pro-environmental behavior and environmental performance. This research offers crucial practical implication to top management and policy makers for achieving environmental performance through corporate environmental strategy and by implementing Green Human Resource Management.

How the university's environmental performance is impacted by green HRM this study was conducted. The study also examines the role that pro-environmental attitudes and actions play as mediators. Additionally, the aim of the study is to ascertain how the relationship between environmental commitment and pro-environmental conduct is influenced by green self-efficacy. The findings of the study suggested that human resource management strategies may alter employee behavior, which would eventually impact the organization's environmental performance. Additionally finding shows that the association between green commitment and pro-environmental behavior is moderated by green self-efficacy. This study highlighted the degree of dedication of the university staff and self-efficacy, which is advantageous for enhancing the institution's environmental performance. The report provides information on green human resource management strategies that are used in higher education. In order to improve a environmental performance of university, it highlights the critical significance that environmentally conscious conducted on the part of academic staff plays. The subsequent research focused on the growing idea of "green human resource management" as a collection of activities aimed at developing skills, boosting motivation, and creating chances to influence employees' pro environmental behavior.

The study looks at how environmental performance of hotels is affected by their use of green human resource management (GHRM). Additionally, it looks at how important pro-environmental psychological capital, psychological climate of the environment, and pro-environmental actions are for improving environmental performance. Green human

resource practices (green empowerment, green performance management and assessment, and green training and development) are important predictors for pro-environmental psychological capital, which further contributes favorably to the psychological green climate. Additionally, it is shown that pro-environmental activities are favorably correlated with the psychological climate of green. Finding shows that workers' pro-environmental activities significantly contribute to improving hotels' environmental performance. It has been shown that by fostering pro-environmental psychological capital, a psychological atmosphere of green, and pro-environmental behaviors, Green Human Resource Management practices indirectly improve environmental performances. This study looks at the almost completely moderating effect of environmental consciousness. For hotels attempting to implement environmentally friendly HR procedures, this report is crucial. When formulating a plan to advance environmental performance by using Green Human Resource practices in various ways, it offered some recommendations to the practitioners. By encouraging green recruitment and selection, green training and development, green performance management and assessment, and green empowerment for the promotion of environmental performance, it also helps the hotel management to increase pro-environmental psychological capital.

While taking into consideration the intervention role of green intellectual capital and environmentally aware behavior, the study looked at the relationship between green Human Resource Management practices and environmental performances in context of Malaysian hospitality. According to the study's findings, there is a connection between green training and development, green disciplinary management, and green intellectual capital, which supports the idea that they are related. The findings show that hotels must provide their staff members the training they need to develop green intellectual capital.

Organizations in the twenty-first century are working hard to lessen their environmental impact since environmental challenges have become a big challenge. The study examines what Green Human Resource Management (GHRM) doses for the environment of hotel while taking into account the newest environmental concerns. The study also focuses on how employee green behavior and green self-efficacy interact to have a mediation impact. The results demonstrate that employing green human resource

management approaches improves hotel environmental performance.
Additionally, motivated workers are extremely effective once they
become involved in engaging green behavior, which improves hotels
environmental effectiveness. Using the comparative analysis as a basis,
HR in the hotel industry needs emphasis on GHRM procedures in depth.
The study provides insightful information on how HR may increase the
self-efficacy of the staff members on their involvement in enhancing
environmental performance.

3   Theoretical framework

3.1   Research Methodology

The study concentrated on Pakistani workers who manufacture consumer
goods such as food, personal care product, and other items for household
use. Thus, quantitative data will be used in the research, which will be
based on surveys of major companies with 500 or more employees will be
selected randomly from Pakistan Stock Exchange. From the 22 listed
companies in Stock Exchange, we choose 5 highly traded companies
having thousands of employees. Furthermore, after getting permission and
support from employees of firm data will be collected. To prevent any
biasness, the questionnaire is accompanied by a cover letter. 5-point
Likert Scale is used to measure variables.

3.2   Data Collection Methods
The process of data collection is described below.

3.3   Questionnaire

Self-administered questionnaires were used to collect statistical data. In
order to get comprehensive data on sizable populations that may be
challenging to examine directly, a survey research approach is the most

practical method available. It may be used for descriptive, explanatory, and exploratory goals.

3.3.1 Mode of questionnaire development

Age, gender, service time, and educational level were closed-ended questions that were included in the questionnaire to help identify the study's focus. Likert scales were used for all of the major study variables, with responses ranging from "strongly disagree" to "strongly agree", so that respondents could rate how robust their reviews and experiences were with regard to a variety of interests. Respondents can distinguish between different attitudes. Prior to asking more detailed questions regarding staff experience, managerial capacity, and resilience, the questionnaire is designed to gather generic information first.

3.3.2 Structure of the questionnaire

There are two sections of the questionnaire: The first portion provides data on demographic characteristics, and the second section includes three instruments to measure the variables that have been the subject of the research. The appendix contains detailed description of the questionnaire as well as a copy of it.

3.3.3 Demographic information
In this section of study, the respondents' age, gender, duration of service, and qualifications were sought after.

3.3.4 Instruments

This section solicited feedback on the study interest variables.
- Employee Empowerment.
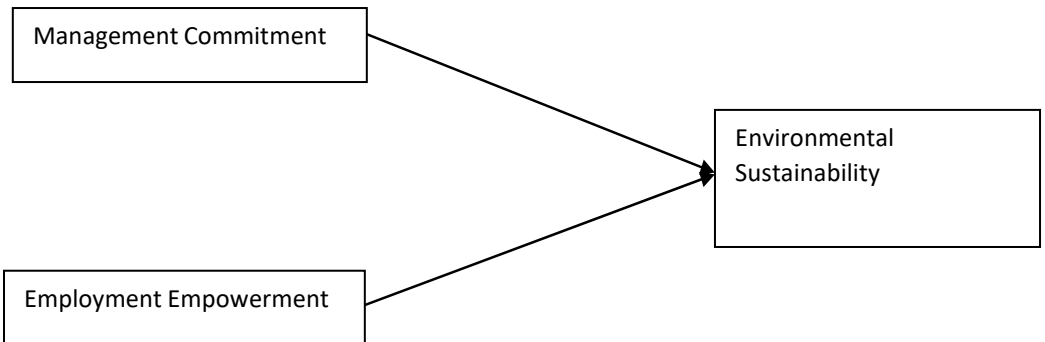- Management Commitment.
- Environmental Sustainability.

3.3.5 Administration of the Questionnaire
3.3.5.1 Ethics and Confidentiality
The goal of the study and how it will benefit the producing region were briefly explained in an introduction statement. In addition to this, people received guarantees about the privacy of their information to encourage them to give accurate and detailed answers. It was also made clear to them

that their input was voluntary. Mangers of the stock listed companies who were on duty had been given roughly 100 questionnaires.

4   Analysis Discussion

Table 1: Reliability Statistics Employee Empowerment

	Cronbach Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Management Commitment	**0.852**	**0.878**	**0.887**	**0.307**

Table 1 shows the reliability of the construct, Employee Empowerment", which is greater than 0.7. It shows the reliability of the data of given variable.

Table 2: Reliability Statistics Organizational Sustainability

	Cronbach Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)

Management Commitment	0.865	0.832	0.808	0.514

Table 2, show the test's reliability, if it is above 0.7, the test is thought to have very good reliability; if it is below 0.5 the test is not thought to have very good reliability. Whether or not an estimate accurately measures what it is intended to measure is discussed in term of validity.

Table 3: Reliability Statistics Management Commitment

	Cronbach Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Management Commitment	0.713	0.831	0.892	0.509

Table 3, shows the test's reliability: if it is above 0.7, the test is thought to have very good reliability; if it is below 0.50, the test is not thought to have very good reliability. Whether or not an estimate accurately measures what it is intended to measure is discussed in term of validity. Because the sample reliability is 0.713, we can say that we have a reliable sample for current research.

Table 4: R square

R Square	Adjusted R Square
0.581	0.572

The relationship between dependent and independent variables are examine by adjusted R square. R square is 0.572 which shows the good relationship between variables, if it is less than 0.5 than is seems to have bad relation.

4 Conclusion

The sustainability of the organization served as the base for this study. In this respect hypotheses were tested.

Ho: Management Commitment as a GHRM practices dose not has significant impact on Organizational Sustainability.

H1: Management Commitment as a GHRM practices has significant impact on Organizational sustainability.

Ho: Employees Empowerment as a GHRM practices dose not has significant impact on Organizational Sustainability.

H2: Employees Empowerment as a GHRM practices has significant impact on Organizational Sustainability.

With the help of a survey questionnaire, various respondents were questioned, and their responses were assessed.

We check the reliability of our data through Cronbach Alpha. The reliability, or internal consistency, of group of scale or test item is evaluated using the Cronbach's Alpha statistics. In other words, "Reliability refers to how consistently a measurement conveys a notion, while "Cronbach's Alpha is a matric for determining how consistently a measurement conveys a concept.

For all of the HRM stakeholders, including businesses, employers, specialists, and academics, Green HRM's prospects are promising. We advise GHRM to overcome ant barriers preventing effective Green Human Resource Management practices and lectures in research and demonstrating environmental management. GHRM has a significant degree for management research but lags behind practically speaking within the academic sector.

The study's focus was on workers who produced things for domestic use, such as food, personal care items, and other consumer goods, in Pakistan. As a result, the research is based on quantitative data, which was gathered through a survey of significant businesses with 500 or more employees that were chosen at random from the Pakistan Stock Exchange. We will select 5 highly traded companies with thousands of employees among the 22 listed companies on the Pakistan Stock Exchange.

Self-administered questionnaire was used to collect statistical data. The survey research method for gathering substantial data on huge populations that may be challenging to examine directly is survey research technique, which can be utilized for descriptive, explanatory, and exploratory goals.

Additionally, the easiest and most effective way to collect data is through questionnaire. They reduce factual distortions brought on by interviewer biases. The questionnaire is divided into two sections: Three instruments were included in the second section to measure the most investigated factors because the first section contained information about demographic characteristics. Within appendix, there is detailed copy of the questionnaire.

4.2   Methodology of SMART PLS

We used the Partial east Square (PLS) method and the Smart PLS 3.3.9 programmed to examine the research model. We evaluated the structural model after testing the measurement model (validity and reliability of the measures) in accordance with the advised one-stage analytical processes (testing the hypothesized relationship). Additionally, a bootstrapping procedure (5000 resamples) was utilized to test the significance of the route regression and the
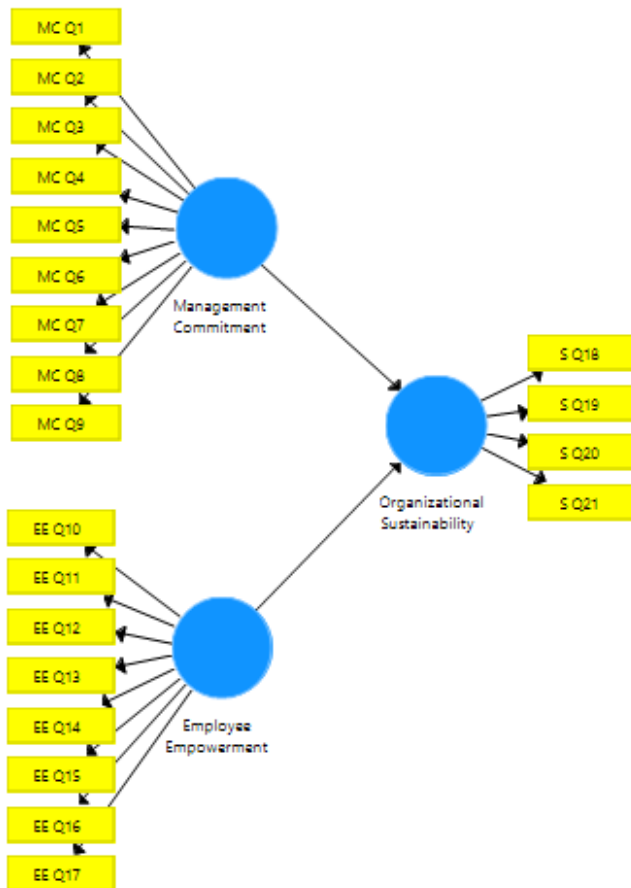
Discussion on bases of results:

To evaluate the hypotheses, reliability assumptions were verifying before the regression analysis. Internal consistency of the measures is referred to as reliability, the goal is to ensure that if these constructs are utilized in other contexts, the result should be consistent. The degree of consistency among the answers across the scale items was discovered using Cronbach's Alpha coefficient approach, which was used to assess the validity of the data. Additionally, the constructs' validity was examined.

A score of greater than 0.7 is typically acceptable so our reliability of all three variables is above 0.7.

Regression analysis were used to test the current research's hypotheses after determining their reliability and validity. The relationship between dependent and independent variables is examined by R square. The R-squarer must be adjusted when a multiple regression is made up of numerous independent variables. Using the adjusted R-Squared, regression models with different numbers of predictors are evaluated for their descriptive power. R square adjusted is 0.572 which shows the good relationship between variables, if it is less than 0.5 than is seems to have bad relation

4.3   Limitations:

- Budget restriction and a lack of time are the reasons limiting the investigation, which could raise concern about reliability of the findings. Additionally, the sample size is restricted to industrial businesses, which could be drawback because it is not generalizable.

- Because this study just offers a general framework and is not narrowly focused on additional categories, future researchers may take into account more aspects of Green Human Resource Management.
- Large sampling sizes are necessary for quantitative research, but due to resource shortages and time restraints, this strategy would not be able to gather as much data as it would be need to.

Recommendations:

First, despite the fact that the nature of study is cross sectional and was done in Pakistan, this assessment of effect analysis may differ between countries and cultural orientations. Longitudinal investigations could therefore be conducted in the future. Second, the current study included demographic characteristics as control variables. It is possible to say that this study simply makes predictions about the relationship between management commitment, employee empowerment, and sustainability in the listed industrial companies on the Pakistan Stock Exchange. Future researchers must be extensive and focus on numerous populations with diverse individuals. In this regard, the quantitative models ought to be produces. Only management commitment and employee empowerment

were examined in this study. It is necessary to perform new research that takes into account additional factors in order to target various impacts on the organizational sustainability.

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