

“The Role of Green Human Resources Management for Sustainable Organization Development in Bangladesh”



A Thesis Report

Submitted to the MBA (professional)
Bangladesh University of Professionals for
the Degree Master of Business Administration

Prepared By

Suborna Akter
ID: 181019015
Program: MBA (Professionals) 19th Batch
Section: A
Faculty of Business Studies
Bangladesh University of Professionals

Supervised By

Professor Dr. Md Arifur Rahman
Department of Business Administration
in Management Studies
Bangladesh University of Professional

Date: 25th September, 2023

Letter of Transmittal

25th September, 2023

Dr. Md Arifur Rahman

Professor,

Dept. of Management Studies

Bangladesh University of Professionals (BUP)

Mirpur Cantonment, Dhaka-1216

Subject: Submission of thesis paper on “**The Role of Green Human Resources for Sustainable Organization Development in Bangladesh**”.

Sir, with due respect, I would like to inform you that I am delighted to submit the thesis paper on “The Role of Green Human Resources for Sustainable Organization Development in Bangladesh” as an obligatory prerequisite for MBA Program. I am extremely grateful to you by which you guided me to learn new concepts to write my thesis paper. The experience and knowledge sharing from you enabled me to get an insight into the real-life situation. I have tried my level best to make a full fledged paper by analyzing all the requirements you have asked for.

I strongly believe that the report will fulfil your expectation and tried to give my best effort according to your instruction. It would be grateful if you accept my report. All my effort will be successful if the paper can serve its purpose.

Sincerely,

.....

Suborna Akter

MBA Prof, dept. of HRM

Batch: 19th

ID: 18019015

Letter of Declaration

This is Suborna Akter, Roll: 18019015, under the program of the Department of Business Administration, hereby declares that the thesis paper titled the “The role of Green Human Resources for sustainable organization development in Bangladesh” Which was offered by Dr. Md Arifur Rahman for the fulfillment of the requirement of the MBA Professional program, I have prepared this report by my own effort.

I have put my best effort for completing the thesis successfully

.....

Suborna Akter

Roll: 18019015

Program: MBA Professional

Department of Business Administration

Bangladesh University of Professional

Acknowledgement

First of all, I would like to pay our gratitude to almighty God, who has given me patience to complete this report. I would like to thank Bangladesh University of Professionals for planning such a course that gave us the chance to gather knowledge about what we learn. The knowledge I gathered throughout the course would help us to develop our future career. During the years of my dissertation journey, there have been many colleagues, friends, and family members who have given me so much encouragement and support to attain my goal, all of whom I thank for the strength to finish.

My dissertation committee members, all of whom I respectfully refer to as my angels and who have spent countless hours giving me guidance to get through the process, I extend my sincere gratitude to my supervisor, who encouraged me to continue on the long road to completion and graciously took on the role of dissertation chair. His words of wisdom and encouragement helped me get through some of the difficult times.

My committee's experience and expertise in each of their fields and their commitment to this journey has been a true blessing. Your love and support mean so much to me. Last, but certainly not least, an enormous amount of thanks and love goes to my parents. Their support and constant encouragement to get this dissertation done is indescribable. I could not have done this without their support.

I respect and thank our honorable supervisor, (Bangladesh University of Professionals) for providing me an opportunity to do the assignment and giving me all support and guidance, which made me complete the project duly. I am extremely thankful to him for providing such a nice support and guidance.

The success and final outcome of this assignment required a lot of guidance and assistance from many people and I am extremely privileged to have got this all along the completion of my assignment. All that I have done is only due to such supervision and assistance and I would not forget to thank them.

Certificate of Supervisor

This is to certify that Suborna Akter ID: 18019015, 19th Batch, of MBA (Professionals) is a regular students of Faculty of Business Studies, Bangladesh University of Professionals major in Human Resource Management(HRM) has worked under my supervision in preparing the thesis entitled **“The Role of Green Human Resource Management for Sustainable Organization Development in Bangladesh”** submitted in fulfillment of the requirement for the award of the degree of Master of Business Administration (Professional), Bangladesh University of Professionals. This report is prepared with sincerity and dedication carried out by Suborna Akter alone and to the best of my knowledge. She has completed her project work under my supervision and guidance. I wish her bright future.

.....

Professor, Dr. Md Arifur Rahman

Dept. of Management Studies

Bangladesh University of Professionals (BUP)

Abstract

Nowadays it seems that a considerable number of organizations practice green human resource management practices in the global context. Exploring and synthesizing about these green HRM practices which are being practiced and are to be practiced by the business and other organizations will contribute significantly to the HRM field academically and practically. Green HRM has become one of the most critical topics in the Business world and sustainability. Many researchers and studies indicate that environmental green staffing associated strongly with the success of financial and marketplace components. The Green Human resource in green-oriented organizations plays a significant part in shaping the culture of suitability in their organization. Currently, all the work gives more attention to the relationship between GHRM and organization sustainability.

The research scrutinizes six key GHRM practices: Green Recruitment & Selection, Green Training & Development, Green performance management & appraisal, Green Compensation & Rewards, Green Organizational culture, and Green safety and health practices with a sustainable development focus.

The main objective of the study is to explore the significance of GHRM practices within organizations in Bangladesh and understand how GHRM can facilitate the integration of sustainability into organization Development. The study adopted descriptive survey research design and structured questionnaire was the main tool of collecting data from manufacturing sector including High-Mid level HR professionals. This research follows a statistical data analysis procedure. Primary Quantitative data have been composed by using a survey questionnaires' with relevant queries to bring out the effect on GHRM practices for SOD having a possible mediating effect on concept of GHRM.

For performing statistical data analysis I have adopted the data analysis software named ' statistical Package for the Social Sciences (SPSS).For the hypothesis testing in statistical data analysis , the parametric data interpretation method has been used and then descriptive statistics were conducted (i.e. mean, Standard Deviation, frequency, percent as appropriate). SPSS AMOS has been used for mediation Analysis. The study proposed 6 hypotheses and all the hypotheses were supported by statistical analysis.

The study unfolds significant findings. Robust positive associations emerge between each of the GHRM practices and SOD, substantiating the notion that organizations in Bangladesh stand to gain from the adoption of these practices. Moreover, the research underscores the mediating role played by the GHRM concept in strengthening these relationships, emphasizing the importance of a comprehensive GHRM approach.

The implications of these findings reverberate throughout the organizational landscape in Bangladesh. Organizations are encouraged to integrate GHRM practices into their HR strategies, not as isolated components but as interwoven elements within the broader GHRM concept. Policymakers are urged to champion supportive policies, incentives, and regulations that propel GHRM adoption. Academic situations can contribute by advancing research and education in the realm of GHRM

Keywords: HRM, Green HRM, Sustainable Organization Development (SOD), Concept of GHRM, Bangladesh

Table of Contents

Subtitles	Page no.
Letter of transmittal	iii
Letter of Declaration	iv
Acknowledgement	v
Certificate of Supervisor	vi
Abstract	vii-viii
Table of Content	ix-xi
List of Table/Figures	xii
List of Acronyms	xiii
Chapter One: Introduction	
1.1 Introduction	1
1.2 Background of the Study	2-3
1.3 Problem Statement	3-4
1.4 Study Rationale	4
1.5 Research Question	4
1.6 Research Objectives	4
1.7 Research Structure of the work	5
Chapter Two: Review of Literature	
2.1 Introduction	6
2.2 Theoretical Review	6-7
2.3 GHRM	7-8
2.4 Green HRM Practices	8-11
2.4.1 Green Recruitment & Selection	8-9
2.4.2 Green Training & Development	9
2.4.3 Green Performance Management & Appraisal	9-10
2.4.4 Green Compensation & Rewards	10
2.4.5 Green Organizational Culture	10-11
2.4.6 Green Safety & Health	11
2.5 Sustainable Organization Development	11
2.6 Research Gap	12

2.7 Hypotheses Development	12-13
2.8 Framework of Research	13
2.9 Research Model	14
Chapter Three: Methodology	
3.1 Introduction	15
3.2 Selection of the topic	15
3.3 Research Design	15-16
3.4 Sampling Method	16
3.5 Sample Size Determination	16
3.6 Variables cover for Data Collection	16
3.7 Population	17
3.8 Identifying Data Sources	17-18
3.9 Data Collection Process	18
3.10 Duration Of the Study	18
3.11 Data Type	18
3.11.1 Quantitative Data	18-19
3.12 Justification for questionnaire Chosen	19
3.13 Analytical Tool Used	19
3.14 Computer Software Used	20
3.15 Research Approach	20
Chapter Four : Research Findings & Analysis	
4.1 Introduction	21
4.2 Demographic information of the Respondents	21-22
4.2.1 Respondents Age	22
4.2.2 Respondents Gender	23
4.2.3 Tenure of Employment	23
4.2.4 Industry Sector	24
4.2.5 Concept of Green HRM	24
4.3 Percentages of Responses	25-27
4.4 Test of Normality	28-29
4.5 Test of Reliability	29
4.6 Pearson Correlation among the variables	30-32

4.7 Multiple Liner Regression	32-33
4.8 Mediation Analysis	34-35
Chapter Five: Discussion & Summery of Findings	
5.1 Discussion	36-37
5.1.1 Concept of GHRM as a Mediator	37
5.2 Summery of Findings	38-39
5.2.1 Implication for organizations in BD	40
5.3 Summary of Linkage between Research Objectives and core Findings	40
Chapter Six: Conclusion & Recommendation	
6.1 Conclusion	41-42
6.2 Summery of the research	42
6.3 Limitation of the Research	42
6.4 Recommendation	43
References	44-45
Appendix A: Survey Questionnaire	46-49
Appendix B	50

List of Figures/ Tables

Subtitle	Page no.
List of Figures	
Figure 1: Conceptual Framework	14
Figure 2: Respondents age distribution	22
Figure 3: Respondents Gender	23
Figure 4: Distribution of tenure of employment	23
Figure 5: Distribution of Industry Sector	24
Figure 6: Concept of GHRM distribution	24
Figure 7: Effect of GHRM concept on SOD through various SOD components	34
Figure 8: Framework of core findings of the research	40
List of Tables	
Table 1: Socio-demographic characteristics	21-22
Table 2: Percentages of Responses	25-27
Table 3: Test of Normality	29
Table 4: Cronbach's Alpha level	29
Table 5: Reliability test	29
Table 6: Correlation Range	30
Table 7: Correlations	30-31
Table 8: Multiple linear Regression	32-33
Table 9: Mediation analysis	34

List of Acronyms

HRM= Human Resources Management

GHRM= Green Human Resources management

SOD= Sustainable Organizational Development

T&D= Training & Development

RS= Recruitment & Selecting

OC= Organizational Culture

SH= Safety & Health

PMA= Performance Management & Appraisal

SPSS= Statistical Package for the Social Sciences

Chapter one: Introduction

1.1 Introduction

Green Human Resource Management (Green HRM) is a strategic approach to managing human resources within an organization with a focus on sustainability and environmental responsibility. It involves integrating environmentally friendly practices and principles into various HR functions to promote sustainability, reduce the organization's environmental footprint, and contribute to corporate social responsibility. Green HRM begins with the recruitment process. Organizations aim to hire individuals who align with their environmental values and sustainability goals.

Green HRM encourages eco-friendly workplace design, including energy-efficient buildings, waste reduction, and sustainable office practices. Flexible work arrangements, such as telecommuting, can reduce employees' carbon footprint. HR can collaborate with procurement and supply chain management to ensure that suppliers and vendors adhere to sustainability standards. Green HRM may include supplier assessments based on environmental performance. Green HRM ensures that the organization complies with environmental regulations and reporting requirements. A sustainable corporate culture is promoted through leadership, values, and employee behavior. Green HRM plays a role in cultivating an organizational culture that values and prioritizes environmental responsibility. By doing so, organizations can reduce their environmental impact, enhance their reputation as socially responsible entities, and create a more engaged and environmentally conscious workforce. It aligns HR practices with the broader goal of sustainable and responsible business operations.

1.2 Background of the Study

Transformation in environment is a true fact, ecological specialists and futuristic claim that the excellence of our environment is declining and great measure tidal wave and environment changes are an indication of global warming objective. Now a day's authoritative to correct our lifestyles and to extreme fly paper in cognizant exertions to discourse ecological problems on urgency source. The significance of ecological growth can be understood with the statement that United Nations assumed to be an innovative guideline for all republics to confirm till 2030 i.e. sustainable development objectives. Brundtl and Commission in 1987 stated that "Sustainable development imply, growth which unfavorably influence capitals with a manner that upcoming peers can feel pain and may not love the superfluity of a worthy atmosphere and their requirements may not fulfill".

Sustainable Development now a days becoming the need of the hour, administrations intend to completely think about at work out instruments with isolated division to flow out strategies supporting and caring the atmosphere. The acceptance and assimilation of the knowledge of Green Accomplishes by Human Resource Management is the opportunity of this paper and this knowledge is fundamentally known as Green HRM.

Green Human Resources Management (GHRM) is an approach that emphasizes the integration of environmental considerations into human resources strategies, policies, and practices. It recognizes that employees play a vital role in shaping an organization's environmental performance and sustainability outcomes. By adopting GHRM practices, organizations can enhance their environmental performance, reduce resource consumption, and contribute to sustainable development goals. Bangladesh, with its burgeoning population and rapid industrialization, faces pressing environmental issues such as pollution, deforestation, and climate change. The country's industries, including textiles, agriculture, and manufacturing, have a significant impact on the environment. Therefore, it becomes imperative for organizations in Bangladesh to adopt sustainable practices and embed environmental responsibility into their HR strategies. The concept of sustainable development has gained significant attention in recent years as organizations strive to balance economic growth with environmental stewardship. As a developing country with a growing industrial sector, Bangladesh faces unique challenges in achieving sustainable development. In this context, the role of Green

Human Resources Management (GHRM) becomes crucial for organizations to integrate environmentally friendly practices into their operations and contribute to sustainable organizational development.

Bangladesh, a densely populated country in South Asia, has experienced significant economic growth and industrialization in recent decades. While this growth has brought about numerous opportunities, it has also raised concerns about its impact on the environment and society. The country faces challenges such as air and water pollution, resource depletion, and vulnerability to climate change. In this context, the concept of sustainable development has gained prominence as a means to balance economic growth with environmental and social considerations.

1.3 Problem Statement

In an era defined by global environmental challenges, businesses worldwide are increasingly recognizing the imperative of aligning their operations with sustainability goals (Renwick, Redman, & Maguire, 2013; Schuler, Jackson, & Tarique, 2011). The emergence of Green Human Resource Management (GHRM) as a strategic approach offers organizations the means to incorporate sustainability principles into HR practices, thereby fostering Sustainable Organizational Development (SOD) (Jackson, Renwick, Jabbour, & Muller-Camen, 2011).

A substantial body of research underscores the pivotal role of GHRM in driving sustainability outcomes. Studies emphasize the positive relationships between GHRM practices—such as green recruitment and selection, green training and development, and the alignment of performance management and appraisal.—and organizational sustainability (Jackson et al., 2011; Renwick et al., 2013; Schuler et al., 2011). These practices have been shown to contribute to reduced environmental impacts, improved corporate social responsibility, and enhanced competitiveness (Jackson et al., 2011; Renwick et al., 2013).

However, amid the growing global discourse on GHRM and sustainability, there exists a pronounced research gap concerning the specific influence of GHRM practices on Sustainable Organizational Development within the distinctive context of Bangladesh. Bangladesh faces a complex environmental landscape characterized by challenges such

as rapid urbanization, resource scarcity, and climate change vulnerability, necessitating a specialized examination of how GHRM can drive sustainable development tailored to this unique milieu.

1.4 Study Rationale

This research seeks to bridge this gap by investigating how GHRM practices influence Sustainable Organizational Development within the context of Bangladesh. By doing so, it aims to provide an enriched understanding of the role of GHRM in navigating the intricate and evolving environmental challenges faced by organizations in the country.

This rationale explains the importance of the study by emphasizing the global relevance of GHRM in sustainability and the specific need to investigate its impact within the unique context of Bangladesh. It underlines the research gap and justifies the study's significance in contributing to the understanding of GHRM's role in Sustainable Organizational Development in Bangladesh's distinct environmental landscape

1.5 Research Question

- i. What is the role of Green Human Resources Management (GHRM) in promoting sustainable organizational development?
- ii. Does GHRM Practices have an impact on sustainable organizational development through a possible mediating effect of concept of Green HRM?

1.6 Research Objectives

In This research I have focused on the broad objectives and they are:

- i. To explore the significance of GHRM practices sustainable growth in the organization
- ii. To understand how GHRM can facilitate the integration of sustainability into organization Development.
- iii. To assess the relationships between specific GHRM practices and SOD
- iv. To investigate the mediating role of the GHRM concept

1.7 Research structure of the work

Chapter 1: This chapter will introduce the substance of this research paper. At first it presents the aims of the research, along with exemplifying the background and justification for carrying out the research. This tailed by a brief argument of the research quires, hypotheses and conceptual structure. This chapter will outline the structure of the thesis and conclude with brief evaluation of the contents of the chapter.

Chapter 2: The second chapter delivers deeper observation on Role of Green Human Resources management through literatures view of GHRM practices and how effect on sustainable organization development. Also, Hypotheses development and conceptual framework had been shown

Chapter 3: The researcher's data collection method is described in this third chapter. This is supported by the survey methodology chosen to better understand and get an insight on GHRM and sustainable organizational Development.

Chapter 4: This fourth chapter examines the visual representation of the data obtained, allowing for a synthesis of the findings and the identification of some crucial aspects.

Chapter 5: This chapter connects the findings of the previous chapter's data and tests to the research's goals and objectives. The gaps discovered are incorporated into the suggestions, along with the scope of future research.

Chapter 6: the last chapter connects with construct the final and concluding chapter of the research with recommendation.

Chapter Two: Review of Literature

2.1 Introduction

This chapter provides the theoretical foundation for the analysis of the theories in GHRM also seeks to capture the role of GHRM for sustainable organization development, and a review of empirical studies. Furthermore, this chapter will discourse the Research Gap associated with the topic of the research. The study was guided by a conceptual framework and empirical review of relevant studies finally, GHRM and organization sustainability is outlined with the help of empirical literature obtained from secondary sources.

2.2 Theoretical Review

When it comes to sustainable business growth in Bangladesh, Green Human Resource Management (GHRM) is a key factor. Businesses in a country like ours, which is susceptible to climate change and faces environmental issues, can only ensure their long-term success by implementing sustainable practices. Sustainable human resource management (GHRM) is an approach that takes environmental factors into account when formulating policies and procedures.

This is the subject of green human resource management, which takes into account not just environmental consciousness but also the social and economic well-being of the business and its staff. What we call "Green HRM" is the practice of incorporating environmental management into HR (Renwick, 2008). Human resource management (HRM) that is "green" takes into account all of a company's workers in order to increase awareness and commitment to 3 environmental sustainability (Mandip, 2012). The performance of employees in their personal and professional environments is also emphasized (Muster & Schrader, 2011).

Environmental management training is one of the most important components of creating a sustainable workplace for any business (Unnikrishnan and Hegde, 2007). Environmental events, environmental literacy, responsible action, and internal communication about environmental concerns and policy are all factors in a green

performance appraisal (Milliman and Clair 1996). The United States is a leader in green remuneration policies, with green companies paying their CEOs more than non-green companies. This shows that there are strong correlations between environmental success and CEO salaries (Berrone and Gomez-Mejia, 2009). Green awards can range from carbon credit offsets to free bicycles as a way to get staff involved in green management and show appreciation for their hard work (Pillai & Sivathanu, 2014). A competitive advantage can be attained through the intangible and long-term asset of good employee relations. The likelihood of improved green management practices and systems increases when employees are included in the decision making process. Cooperation from staff members is crucial to achieving sustainable outcomes (Collier & Esteban, 2007). Employee engagement in environmental management initiatives is weakened by managerial and supervisory changes, a long-term issue in promoting pro-environmental cultures (Forman and Jorgensen, 2001).

2.3 GRHM

Green is all about HRM related Practices required to achieve environmental objectives of Companies is to commit about sustainable development (Apriyanti, 2020). Sharma and Gupta in 2015 stated that “The acceptance and assimilation of the awareness of Green activities by Human Resource Management is fundamentally called Green HRM. “Greens” are mostly related with peace activities, ecological sustainability and pacifist actions .Green HRM is a novel thought & is considered an essential part of HRM”. Rani and Mishra, 2014 stated that Green HRM comprises practice of HRM to strengthen ecological practice of capitals in institutions. Mondy and Noe in 2005 stated that “The using the HRM activity” , the succeeding subdivision on the origin of collected works recommends dissimilar methods across which more or less feature of Green be reproduced in HRM activities of an institution”. Mondy and Noe in 2005 explained that “There are five tasks of Human Resource Management i.e. Recruitment, Selection, Training and Development, Performance Management & Compensation and Benefits”. Business organization today well about the green HR concept that has been put forward to help them to keep the environment green but still few business organization are not able to put in to practices in different functional area of HRM (Popli, 2014). The Green HRM literature is largely a western one and, given the

importance of Asian economic development for environmental management, this is an important gap for future studies to reduce (Renwick, Redman, & Maguire, Citation2013). Through Human Resource Management conduct the environmental management is called green Human Resource Management (Gazi, 2020).

The public for Human Resource Management in 2009 described that “A “Green workstation” as a “place of work that is environmentally intricate, resource disciplined and socially answerable. To know for which purpose Green is (mentioned above) mentioned the consequence of Green HRM, Greening is important for the following:

- For the minimization of global warming.
- For the minimization of regular calamities such by means of Acid rains, red rains, Tsunamis, flooding, hurricanes, droughts etc. due to familiar, destructive and grasping usage of regular assets aimed at manufacture plus feeding.
- For the minimization of health diseases owing to pollution.
- For the minimization of troubles to wildlife and other natural individuals.
- For the minimization of suitable steadiness of interactions amongst plants, animals, individuals, and their surroundings.
- For the minimization of survival of individuals and commercial institutions for a lengthy retro of period.

2.4 Green HRM Practices

2.4.1 Green Recruitment & Selection

Recruitment can be defined as a set of processes to obtain a large pool of applicants from which the suitable candidate maybe selected by the organization (Schuler, 1987). In order to go green in the context of recruitment function, organizations can have two options i.e. such a recruitment strategy be designed that attracts candidates that are somewhat knowledgeable and concerned about the environment. The other option is that organizations may present themselves as “green employers” because according to a study, people like to work for an organization that recognizes the importance of protecting the environment (Clarke, 2006). Attracting high-quality staff is a key HR challenge in the “war for talent” (Renwick et al., Citation2013, p. 2). Holtom, Mitchell,

Lee, and Eberly ([Citation2008](#)) in their study on turnover and retention of employees argue that the most important benefit dimensions of HR and sustainability are retention/recruitment and satisfaction

Following recruitment, an important function of HRM is that of Selection. It involves series of steps that lead to hiring of the best suitable candidate for a position under consideration (Mondy and Noe, 2005). According to Revill (2000), a green selection process may involve evaluating candidates on the basis of environment related questions. This shall help panel in gauging a person's attitude towards an organizations goal for greener approach. Furthermore, minimum usage of paper for selection tests can also be a basic strategy towards green selection function.

2.4.2 Green Training & Development

Training and Development is a significant movement when a worker has converted a part of an Institution. Zubair and Khan, 2015 in their study stated that “It is nowadays the responsibility of the association to capitalize in its labor force and grow parallel with its institutional purposes and this speculation attitude can provide knowledge as to by what means far an institution beliefs Training and Development”. Training and development is a practice that focuses on development of employees' skills, knowledge, and attitudes, prevent deterioration of EM-related knowledge, skills, and attitudes (Zoogah, [Citation2011](#), p. 17). Ramus ([Citation2002](#)) in a survey of managers, on best management practices concluded that environmental training and education, along with establishing a favorable environmental culture for the employees where they feel that they are the part of environmental outcomes, were the most important HRM processes that facilitate the achievement of environmental goal. Liebowitz in 2010 explains that “HRM should focus on progress of a justifiable values in institutions for consuming a long-term impression”.

2.4.3 Green Performance Management & Appraisal

Epstein and Roy ([Citation1997](#)) in their study concluded that when HR managers integrate environmental performance into PM systems they safeguard environment management against any damage. Today some firms deal with the issue of PM by installing corporate-wide environmental performance standards, and Green information systems/audits to gain useful data on environmental performance (Marcus & Fremeth, [Citation2009](#)).

Abbaspour, et al. in 2006 stated that “The "Green management system" is an energetic and stable managing preparation of training and actions to screen, escape and regulate noxious waste of environment”. Molina-Azorin et al. in 2009 stated that “In the meantime Green management have an effect on as a source of economical benefit through providing planned and cost-effective benefits, the institution should agree to take it as an ethical concern, not as a quick to respond system. Opatha (2013) claims in kindness of attachment of a distinct element in performance appraisal practices.

2.4.4 Green Compensation & Rewards

Compensation and reward is the most important Green HRM practices over and done with which workers are rewarded for their performance. Compensation is a major significant fundamentals of HRM thus is measured to be the supreme problematic and stimulating part of HR. Compensation is the over-all of all wages given to a worker in arrival for facility a specific provides. Mondy and Noe in 2005 stated that “Simple motivation of offering payment is to attract, retain, and motivate workers”. With respect of green, on situations can tie some rewards to contentment or Green objectives recognized throughout performance appraisal procedure. Flexible remuneration scheme added in compensation system by connection it by eco performance. The HR practices are the supreme influential technique which links together an character’s attention to that of the institutions. In the contest of Green HRM rewards and compensation can be expected as prospective tool for associate ecological actions in institution. Phillips in 2007stated that “According to an investigation directed in the UK it was found that approximately 8% of UK firms remunerated Green behaviors”. Additionally, institutions may recompense for extraordinary achievement of Green physical activity or ability getting credentials from different document presenting organizations.

2.4.5 Green Organizational Culture

Organizational culture can be considered green if its employees can minimize negative environmental effects while maximizing positive environmental benefits by going above and beyond profit-seeking purposes [Sroufe R., Liebowitz J., Sivasubramaniam N., & Donahue JF (2010)]. There is increasing demand to develop organizational policies that promote green behaviour. As a result, the human resource function incorporates pro-environmentalism and ecological concepts into practically all activities and procedures [Dumont J., Shen J., & Deng X. (2017)]. This finally results

in employees adopting a more environmentally conscious attitude and the reduction of environmental waste and development of a green culture. Human resource management (HRM) plays a vital role in supporting the firm's green culture by influencing employees' attitudes, behaviours, and values via recruiting, training, performance management, and incentive [Amini M., Bienstock C. C., & Narcum J. A. (2018)].

2.4.6 Green Safety & Health

Providing a safe and healthy environment to its workforce is major responsibility of any employer. Society for Human Resource Management (2009) defines a "green workplace" as a "workplace that is environmentally sensitive, resource efficient and socially responsible". Provision of a green environment at workplace shall help in improving health of employees and may ultimately help in reduction of medical costs that an organization might have to incur at some point due to unsafe working conditions

2.5 Sustainable Organization development

Brundtland Commission in 1987 stated that "Sustainable development means, improvement that does not unpleasantly have an effect on properties in such a manner that upcoming generation may undergo and cannot admire the extravagance of a good surroundings and their requirements are not met".

Sustainable Development has in present day converted need of the hour, government might extremely ruminate functioning out mechanism to breeze out strategies preferring and caring the surroundings with collaborating with private sector. The significance of sustainable development can be seen from the reality that United Nations specified an innovative way for entirely nations to accomplish till 2030 i.e. sustainable development objectives (SDG's). Mandip in 2012 stated that "Institution lower than the title of Corporate Social Responsibility (CSR) right to pay-back to the surroundings, but they require to go outside standard actions and accept more put into practice in predictable for the improved execution of their Green initiative and these Green creativities can be a fragment of the larger CSR as well, which results in sustainable development".

2.6 Research Gap

A significant research gap in the study of "The Role of Green Human Resource Management for Sustainable Organization Development in Bangladesh" is the limited empirical research within the Bangladeshi context. While there is an emerging global body of knowledge on Green HRM, there is a distinct lack of empirical studies focused on the Recruitment & selecting, Training & Development, Performance Appraisal, Compensation & Rewards, Organizational Culture, Safety & health of Green HRM practices in Bangladeshi organizations. This gap hinders our understanding of the unique challenges and opportunities in Bangladesh, as well as the impact of Green HRM on sustainable organizational development in this specific context. Closing this gap is essential for providing actionable insights and recommendations for organizations and policymakers striving to advance sustainability practices in Bangladesh.

2.7 Hypotheses Development

To assess the relationship between Independent variable, Dependent Variable and mediating variable following Alternative hypotheses are being proposed for my thesis:

Hypotheses 1

H1a: There is a significant relationship between recruitment & selecting and sustainable organizational development.

H1b: Concept of GHRM can Mediates relation between recruitment & selecting and sustainable organization development

Hypotheses 2

H2a: There is a relationship between training & development and sustainable organization development

H2b: Concept of GHRM can Mediates relation between training & development and sustainable organization development

Hypotheses 3

H3a: There is a relationship between performance Management & appraisal and sustainable organization development

H3b: Concept of GHRM can Mediates relation between performance management & appraisal and sustainable organization development

Hypotheses 4

H4a: There is a relationship between Green Compensation & rewards and sustainable organization development

H4b: Concept of GHRM can Mediates relation between Compensation & rewards and sustainable organization development

Hypotheses 5

H5a: There is a significant relationship between organizational culture and sustainable organization development

H5b: Concept of GHRM can Mediates relation between Organizational Culture and sustainable organization development

Hypotheses 6

H6a: There is a significant relationship between Safety & health and sustainable organization development

H6b: Concept of GHRM can Mediates relation between Safety & health and sustainable organization development

2.8 Framework of Research

A mixed method approach will be followed for the research which will discourse the characteristics of both forms of Qualitative and Quantitative research.

2.9 Research Model

Green HRM = Independent Variable/Predictor

Sustainable Organizational Development=Dependent Variable/Outcome

Concept of GHRM= Mediating Variable/Mediator

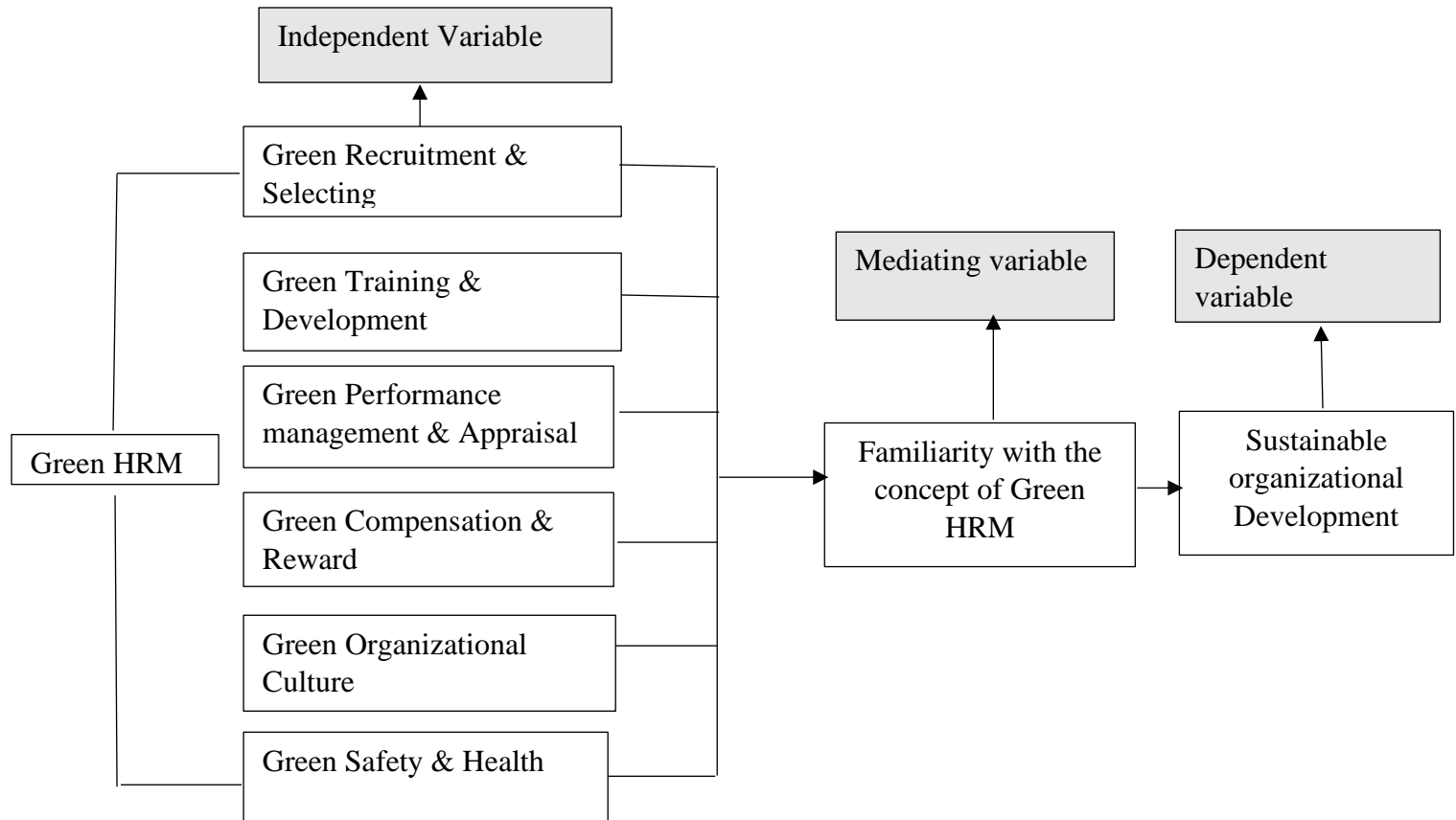


Figure 1: Conceptual framework (author's development). [Inspiration is taken from Dr Syed Sohaib Zubair (2019) and Ms. Poonam Likhitkar¹, Dr. Priyanka Verma² (2017)]

Chapter Three: Methodology

3.1 Introduction

This chapter explains the research methodology and the methods that were used throughout this thesis. The chapter will commence with an outline of the research design and discuss the features of both forms of qualitative and quantitative means of research. All these strategies for gathering data from the field are explained in terms of the research's validity and reliability. There will also be certain limitations highlighted. I used the survey method to obtain data. I've created a questionnaire to assess the chosen strategy.

3.2 Selection of the Topic

The topic of the research is an analysis of the “The role of Green HRM for Sustainable organization Development in Bangladesh” discussed with my supervisors from my university so that a well-organized research paper can be prepared.

3.3 Research Design

This study is descriptive and exploratory in nature. It involves obtaining information about necessary facts and events for describing the information needed to get better understanding. The questions for the survey were very clear and direct, making it easy for the employees to respond. From their answers, it will be possible to find out what makes them satisfied and what they think can be done to improve. This study resolved to investigate whether there is any mediation effect of Green HRM through Green Management on sustainable organization development of Bangladesh. To evaluate this issues independent variables, dependent and mediating variables were constructed which have helped me to conclude a descriptive research design because the research incorporated both qualitative and quantitative data which were collect from the study area concerning the status of the phenomena. It was relevant to study some past literatures to be able to understand the concepts of GHRM and SOD. All data gathered

from the questionnaires and personal experience during my time there were analyzed to draw up conclusions and give some recommendations.

3.4 Sampling Method

A sample survey is one that is conducted using a sampling process, which means that only a subset of the population is surveyed rather than the whole population. This study in descriptive format was designed. The study was developed in quantitative point of view. Information was collected by conducting a survey to measure role of GHRM for sustainable organization Development. Here in this research, statistical quantitative sampling method is used as sampling method. A statistical tool helps researchers and marketers organize quantitative data gathered from experiments, questionnaires and more. As questionnaire is used in this paper that's why qualitative sampling method used here.

3.5 Sample Size Determination

The sample size decisions were primarily based on Green HRM Practices for sustainable organization development. Initially it was decided to collect responses from 150 respondents through questionnaire survey under statistical sampling method. Eventually the respondents were 100. These 100 respondents are the HR representatives and manager from different manufacturing organizations.

3.6 Variables Covered for data collection

This paper covers Eight variables of which one is the mediating Variable is concept of GHRM and another dependent variable that is named Sustainable Organization Development and the rest of the Six variables are independent variables that are Green Recruitment & selecting, Training & Development, Performance Management & Appraisal, Compensation & Reward, Organizational Culture, Safety & Health.

3.7 Population

The research population refers to the entire group of individuals, entities, or elements that the research aims to study or gather data from. In the context of my study on The Role of Green Human Resource Management for Sustainable Organization Development in Bangladesh. The primary focus of my research is likely to be organizations operating in Bangladesh, spanning various manufacturing organizations. This population includes both large corporations and small to medium-sized enterprises (SMEs). High-Mid level HR representatives and manager within these organizations constitute a crucial subset of the population. These individuals are responsible for implementing and managing HR policies, including GHRM practices, which are central to my research. To assess the impact and perceptions of GHRM practices, my need to target a sample of employees from different manufacturing organizations. This could include employees from different hierarchical levels (High & Mid), departments, and roles. Careful consideration of my research population ensures that my research findings are relevant and aligned with my research goals.

3.8 Identifying Data Sources

There is a blend of both Primary and secondary data that has been used in this research. The primary data have been collected by using a questionnaire with relevant questions. The questionnaires comprises some biographic information at the end. The questionnaires' has covered six sections: Green Recruitment & selecting, Green Training & Development, Green Performance management & Appraisal, Green Compensation & reward, Green Organizational Culture, Green Safety & health which are consternated with sustainable organization development mediating with concept of green human resources Management. The questionnaire were mainly closed-ended that offered a set of appropriate answer from which participants have chosen the best one that matches their judgment. As a result, the questionnaires were used to collect quantitative statistics. A Total of 16 Questionnaires were distributed online goggle form to those randomly selected employees of different manufacturing Organizations. Afterwards, questionnaires with insufficient information were removed and the rest of the questionnaires were used for data analysis. The secondary data sources were identified

for the literature and theoretical assessment of this study. Different journals, books, the internet and different reports have been used as important sources of secondary data.

3.9 Data Collection Process

A total of 100 responses from different areas were collected randomly using online Google forms. Respondents replied to a structured questionnaire and their answers were recorded accordingly by the researcher. Survey questionnaire was distributed through Google form.

3.10 Duration of the Study

The following data collection and analysis schedule will be followed apparently during this study. During the first few weeks, the primary focus was on finding reliable data sources. After collecting the data, it was reviewed, sorted, and arranged in a manner so that it fit in the quantitative framework. Once the data were sorted, the constraints and objective function was derived. Later on, during the 2-3 week, forecasting model was tested using the sorted data. The findings were analyzed based on the assumptions and applicability of the mode. For this study, data were collected within 3 weeks.

3.11 Data type (Quantitative)

3.11.1 Quantitative data

For this research quantitative data were used. Quantitative data is quantifiable and is subjected to statistical testing to arrive at subjective results. It is consistent with positivism and the logical method to validating or altering current beliefs using scientific data testing. To collect quantitative data, several approaches such as surveys, employee's observation, (quantitative), and so on can be used. Quantitative data, on the other hand, is unable to convey the respondents' feelings and detailed experiences because it primarily involves the following five-point Likert scaling technique has been used for obtaining response on each question: Strongly Disagree = 1, Disagree= 2, Neutral = 3, Agree = 4, Strongly Agree = 5 responses with no opportunity for open

discussion. Afterwards quantitative analysis was carried out to find association of the independent, dependent and mediating variables.

3.12 Justification for choosing questionnaire survey

Surveying is the most cost-effective, versatile, and easy way to collect quantitative data in a short amount of time and with a high sample size. In the case of surveys, the usage of questionnaires is most effective, as they may be sent to respondents either physically or using internet approaches such as "Google forms." In this study, questionnaires were delivered to 100 HR professionals & manager having designation Mid-level to high level using a basic random sampling technique. The Google forms were primarily used to distribute the questions. Advantages of Questionnaire are:

- It is less expensive to collect data than other techniques.
- It is simple to distribute either online or offline.
- It takes less time to collect data than other methods.
- It is best used when the sample size is large and there's a lot of time.

3.13 Analytical Tool Used

Descriptive statistics such as test of normality, test of reliability, multiple linear regression, Pearson Correlation Analysis, Mediation Analysis between the variables linked as the role of GHRM for sustainable organization development in Bangladesh. Through regression model researchers try to find out whether the independent variables have the ability to explain the dependent variable and the degree and pattern of the relationship between Recruitment & selecting, Training & Development, Performance management & appraisal, Compensation & Reward, Organizational culture, Safety & Health with mediating effect on concept of GHRM.

3.14 Computer Software Used

The computer software used here is MS Excel, and IBM SPSS® Statistics 29.0, which is a powerful statistical software platform. Microsoft Excel is used for data entry and representation. The data collected from the survey are arranged in tables and figures. The tables and figures are formed with the help of Microsoft Excel. Column chart, and pie chart are formed from the response and the results of the survey questionnaire given to sales force employees. Then others statistical analysis like test of normality, test of reliability, correlation analysis, linear regression analysis have done by using SPSS and mediation analysis have done by SPSS AMOS.

3.15 Research Approach

The data used in this study gathered and assembled using a deductive methodology. The first step in developing the hypotheses was to research the literature on the topic to obtain a deeper comprehension and understanding of it. For research purposes, the data and information are collected by a survey on different manufacturing organization with an appropriate questionnaire method.

Chapter Four: Research Findings and Analysis

4.1 Introduction

This chapter summarizes the findings and outcomes depending on the questionnaire. Tables and graphs are formed from the analyzed data. The data is presented in accordance with demographic information, Recruitment & selecting, Training & Developing, Performance Management & Appraisal, Compensation & Reward, Organizational Culture, Safety & Health.

4.2 Demographic Information of the Respondents

Table 1: Socio-demographic characteristics

Variable	Frequency	Percentage
Age		
24-30 years	61	61.6%
31-35 years	33	33.3%
36-45 years	4	4%
45 and above	1	1%
Gender		
Male	63	63.6%
Female	36	36.4%
Tenure of Employment		
<1 year	25	25.3%
1-3 years	33	33.3%
3-5 years	17	17.2%
5 years and above	24	24.2%
Industry sector		

Manufacturing	28	28.3%
Services	30	30.3%
Technology	15	15.2%
Healthcare	5	5.1%
Others	21	21.2%
Concept of GRM		
No	25	25.3%
Yes	74	74.7%

4.2.1 Respondents Age

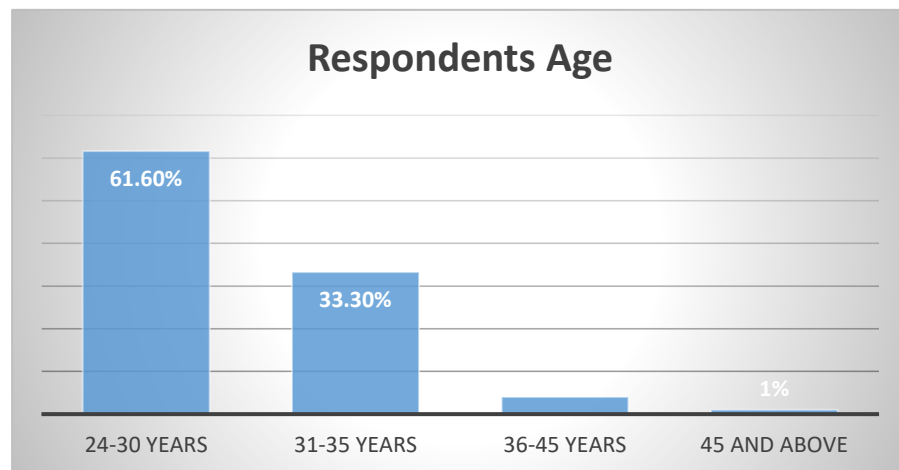


Figure 2: Respondents Age distribution

The Figure 1 showed that 61.60% participants were between the age of 24-30 years, 33.30% were 31-35 years, 4% between 36-45 years and 1% were 45 and above aged (Figure 2).

4.2.2 Respondents Gender

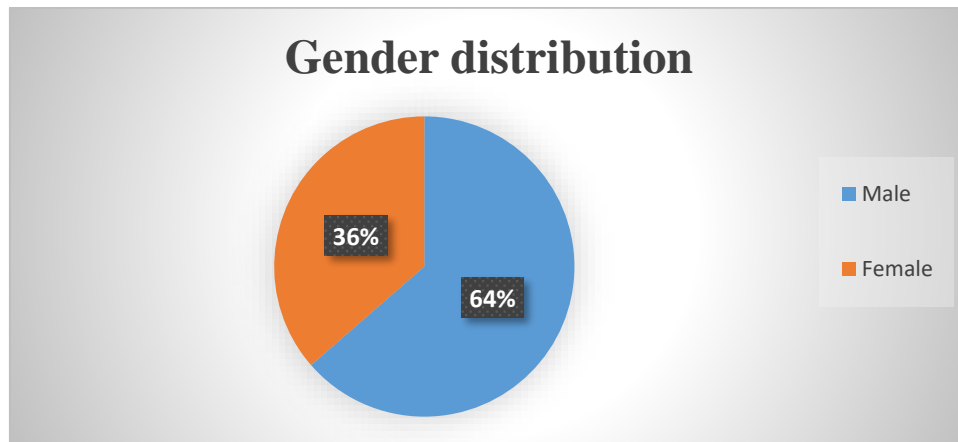


Figure 3: Respondents gender

The figure reported that 36% of the participants were female and 64% were males (Figure 3).

4.2.3 Tenure of Employment

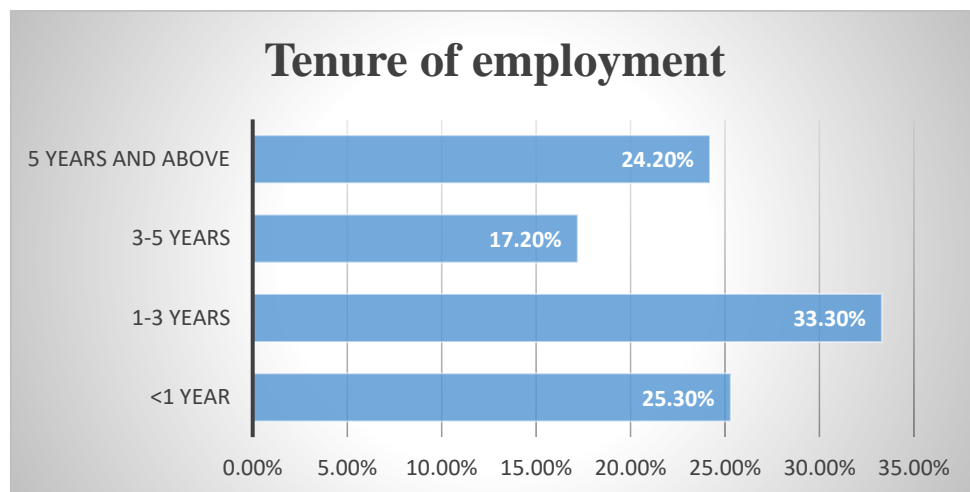


Figure 4: Distribution of tenure of employment

Figure 3 showed that 25.30% had experience less than 1 year, 33.30% had experience 1-3 years, 17.20% had experience 3-5 years, and 24.20% had experience 5 years and above (Figure 4).

4.2.4 Industry Sector

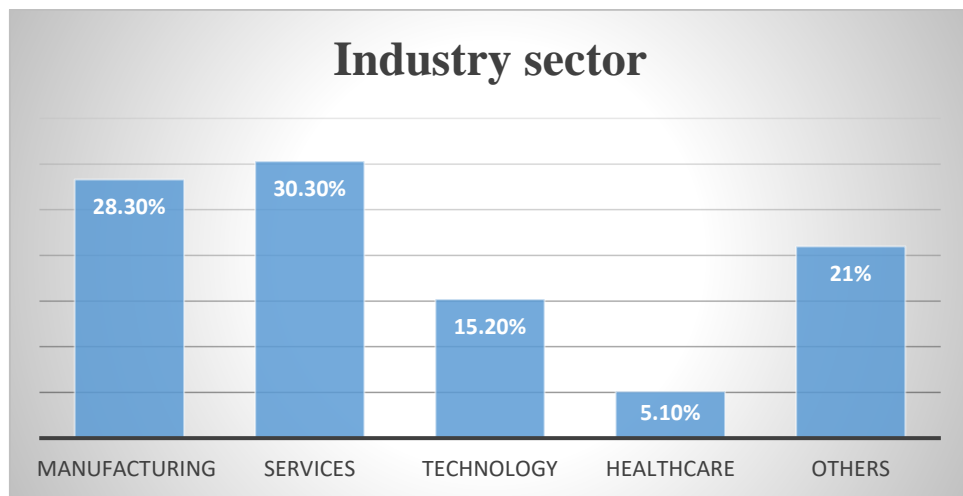


Figure 5: Distribution of industry sector

Figure 3 demonstrated that 28.30% were from manufacturing industry, 30.30% were from services, 15.20% were from technology, 5.10% were from healthcare, and 21% were from other industry sector (**Figure 5**).

4.2.5 Concept of Green HRM

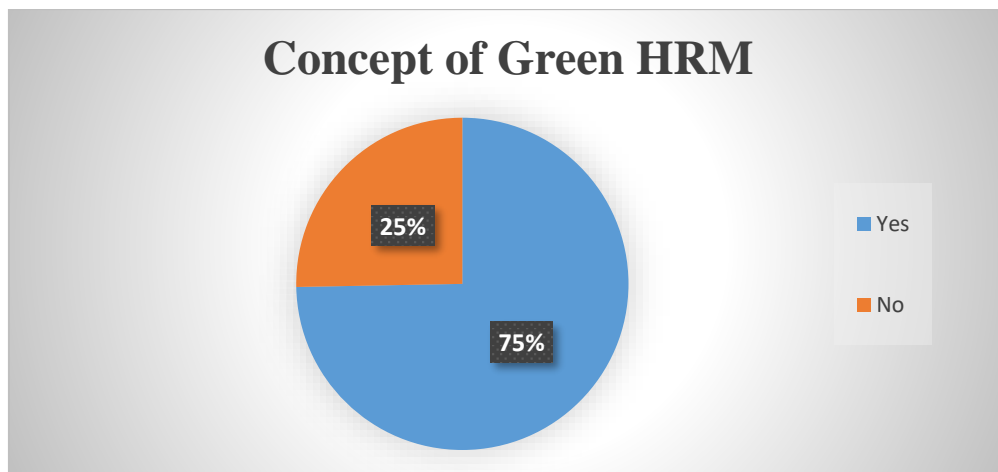


Figure 6: Concept of Green HRM distribution

Figure showed that 75% participants had familiarity with the concept of Green HRM and 25% had not (**Figure 6**).

4.3 Percentages of Responses

Table 2: Percentages of Responses

Statement	Responses				
	Strongly disagree (n, %)	Disagree (n, %)	Neutral (n, %)	Agree (n, %)	Strongly agree (n, %)
Green Recruitment & Selection					
Our organization considers environmental sustainability criteria when recruiting new employees.	4, 4%	4, 4%	18, 18.2%	57, 57.6%	16, 16.2%
Online recruitment policy impacts positively our organization's sustainability efforts.	4, 4%	7, 7.1%	25, 25.3%	47, 47.5%	16, 16.2%
Provide online offer letter & acceptance letter & joining letter which surely reduces large amount of paper work.	-	1, 1%	9, 9.1%	42, 42.4%	47, 47.5%
Green Training & Development					
Our organization provides specific training on power-saving management, safety, energy efficiency, and other aspects related to development sustainability.	2, 2%	6, 6.1%	19, 19.2%	38, 38.4%	34, 34.3%
Training materials related to environmental sustainability are provided in digital (softcopy) format rather than printed handouts.	2, 2%	9, 9.1%	24, 24.2%	36, 36.2%	28, 28.3%

I believe that the skills and knowledge gained from training contribute to our organization's sustainability efforts.	2, 2%	6, 6.1%	20, 20.2%	50, 50.5%	21, 21.2%
Green Performance management & Appraisal					
Our performance management system includes sustainability goals and metrics.	-	9, 9.1%	18, 18.2%	51, 51.5%	21, 21.2%
Our organization has a green reward scheme in place to motivate staff at all levels to actively engage in sustainability initiatives.	3, 3%	9, 9.1%	22, 22.2%	45, 45.5%	20, 20.2%
Sustainability goals are integrated into employee performance appraisals.	1, 1%	5, 5.1%	19, 19.2%	54, 54.5%	20, 20.2%
Green Compensation & Reward					
Our organization offers incentives or rewards for employees who actively contribute to sustainability goals.	2, 2%	13, 13.1%	19, 19.2%	44, 44.4%	21, 21.2%
Providing incentives to encourage environmentally friendly activities and behaviors to contribute organizational sustainability.	1, 1%	8, 8.1%	22, 22.2%	48, 48.5%	20, 20.2%
The compensation and rewards structure aligns with sustainability		12, 12.1%	20, 20.2%	42, 42.4%	25, 25.3%

objectives in our organization.					
Green Organizational Culture					
Employees are encouraged to actively participate in sustainability initiatives within our organization.	-	3, 3%	20, 20.2%	55, 55.6%	21, 21.2%
Sustainability is integrated into our company's core values and beliefs.	-	8, 8.1%	24, 24.2%	47, 47.5%	20, 20.2%
Green Safety & Health					
Safety and health initiatives in our organization prioritize the well-being of employees and the environment.	2, 2%	5, 5.1%	15, 15.2%	49, 49.5%	28, 28.3%
Employees feel that safety and health practices in our organization contribute to overall sustainability.	1, 1%	6, 6.1%	15, 15.2%	51, 51.5%	26, 26.3%

Green Recruitment & Selection

57.6% participants agree that their organization considers environmental sustainability criteria when recruiting new employees, 47.5% participants agree that the online recruitment policy impacts positively the organization's sustainability efforts, and 47.5% strongly agree that by providing online offer letter & acceptance letter & joining letter which surely reduces large amount of paper work.

Green Training & Development

38.4% agree that their organization provides specific training on power-saving management, safety, energy efficiency, and other aspects related to development sustainability, 36.2% agree that training materials related to environmental sustainability are provided in digital (softcopy) format rather than printed handouts, and

50.5% agree that the skills and knowledge gained from training contribute to our organization's sustainability efforts.

Green Performance management & Appraisal

51.5% agree that their performance management system includes sustainability goals and metrics, 45.5% agree that their organization has a green reward scheme in place to motivate staff at all levels to actively engage in sustainability initiatives, and 54.5% agree that sustainability goals are integrated into employee performance appraisals.

Green Compensation & Reward

44.4% agree that their organization offers incentives or rewards for employees who actively contribute to sustainability goals, 48.5% agree that providing incentives to encourage environmentally friendly activities and behaviors to contribute organizational sustainability, and 42.4% agree that the compensation and rewards structure aligns with sustainability objectives in our organization.

Green Organizational Culture

55.6% agree that employees are encouraged to actively participate in sustainability initiatives within our organization, and 47.5% agree that sustainability is integrated into our company's core values and beliefs.

Green Safety & Health

49.5% agree that safety and health initiatives in our organization prioritize the well-being of employees and the environment, and 51.5% agree that employees feel that safety and health practices in our organization contribute to overall sustainability.

4.4 Tests of Normality

The normality assumption of the data was checked using the Shapiro-Wilk test. Results suggested that the significance level was above 0.05 which indicated the data was normally distributed. The histogram and normal q-q plot also showed satisfactory results. In addition, there was no auto-correlation and multicollinearity. Hence, the data was normally distributed. Therefore, we conducted parametric tests to analyze the data.

Table 3: Tests of normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistics	df	Sig.	Statistic	df	Sig.
SOD	.100	99	.016	.975	99	.060
^a Lilliefors significance correction						

4.5 Test of Reliability

Reliability refers to the extent to which a test measures without error. Reliability is conducted to measure the internal consistency of the items. The Cronbach's alpha value indicate the internal consistency level. The higher the internal consistency is, the greater the internal consistency is meaning the results from the test is more reliable.

The range of Cronbach's alpha level is given below-

Table 4: Cronbach's Alpha level

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Table 5: Reliability tests

Cronbach's alpha	Internal consistency	No. of items
0.859	Good	16

In the present study, the Cronbach's alpha is 0.859 which is good

4.6 Pearson correlation among the variables (Independent, Dependent, Mediating)

Pearson correlation measures the strength of association and direction of the relationship between two variables. It has a range between -1 to +1.

Table 6: Correlation range

Interval coefficient	Relationship level
0.80-1.000	Very strong
0.60-0.799	Strong
0.40-0.599	Moderate
0.20-0.399	Weak
0.00-0.199	Very weak

Table 7: Correlations

		SOD	RS	TD	PMA	CR	OC	SH
SOD	Pearson correlation	1	.674**	.707**	.839**	.775**	.710**	.620**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	99	99	99	99	99	99	99
RS	Pearson correlation	.674**	1	.366**	.414**	.362**	.464**	.383**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	99	99	99	99	99	99	99
TD	Pearson correlation	.707**	.366**	1	.480**	.386**	.382**	.379**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	99	99	99	99	99	99	99
PMA	Pearson correlation	.839**	.414**	.480**	1	.717**	.506**	.437**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	99	99	99	99	99	99	99
CR	Pearson correlation	.775**	.362**	.386**	.717**	1	.520**	.246*

	Sig. (2-tailed)	.000	.000	.000	.000		.000	.014
	N	99	99	99	99	99	99	99
OC	Pearson correlation	.710**	.464**	.382**	.506**	.520**	1	.381**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	99	99	99	99	99	99	99
SH	Pearson correlation	.620**	.383**	.379**	.437**	.246*	.381**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.014	.000	
	N	99	99	99	99	99	99	99
**Correlation is significant at the 0.01 level (2-tailed)								
*Correlation is significant at the level 0.05 level (2-tailed)								

SOD=Sustainable Organizational Development; RS=Recruitment & Selection; TD=Training & Development; PMA=Performance management & Appraisal; CR=Compensation & Reward; OC=Organizational Culture; SH=Safetv & Health.

H1a: There is a significant relationship between recruitment & selecting and sustainable organizational development.

Results suggested that Sustainable Organizational Development (SOD) has a strong positive significant association with Recruitment & Selection (RS) ($r=0.674$, $p<0.001$). Hence, H1a is accepted.

H2a: There is a relationship between training & development and sustainable organization development

Training & Development (TD) has a strong positive significant association with SOD ($r=0.707$, $p<0.001$). Hence, H2a is accepted.

H3a: There is a relationship between performance Management & appraisal and sustainable organization development

Performance management & Appraisal (PMA) has a strong positive significant association with SOD ($r=0.839$, $p<0.001$). Hence, H3a is accepted.

H4a: There is a relationship between Green Compensation & rewards and sustainable organization development

Compensation & Reward (CR) has a strong positive significant relationship with SOD ($r=0.775$, $p<0.001$). Hence, H4a is accepted.

H5a: There is a significant relationship between organizational culture and sustainable organization development

Organizational Culture (OC) has a strong positive significant association with SOD ($r=0.710$, $p<0.001$). Hence, H5a is accepted.

H6a: There is a significant relationship between Safety & health and sustainable organization development

Safety & Health (SH) has a strong positive significant association with SOD ($r=0.620$, $p<0.001$). Hence, H6a is accepted.

4.7 Multiple Linear Regression

Linear regression used to estimate the relationship between independent variables and dependent variable.

Table 8: Multiple Linear Regression

Variables	Model information				
	Coefficient (β)	Standard Error	95% confidence interval		Test statistics t (p -value)
			Lower bound	Upper bound	
Recruitment & Selection	3.01	0.33	2.34	3.67	6.580 (<0.001)
Training & Development	2.72	0.27	2.17	3.26	9.850 (<0.001)
Performance management & Appraisal	3.28	0.21	2.85	3.71	15.214 (<0.001)
Compensation & Reward	2.75	0.22	2.30	3.21	12.085 (<0.001)

Organizational Culture	4.52	0.45	3.61	5.42	9.938 (<0.001)
Safety & Health	3.17	0.40	2.36	3.97	7.790 (<0.001)

H1a: There is a significant relationship between recruitment & selecting and sustainable organizational development.

Results suggested that Sustainable Organizational Development (SOD) has a significant association with Recruitment & Selection ($\beta=3.01$, $t=6.580$, $p<0.001$). Hence, H1a is accepted.

H2a: There is a relationship between training & development and sustainable organization development

Training & Development has a significant association with SOD ($\beta=2.72$, $t=9.850$, $p<0.001$). Hence, H2a is accepted.

H3a: There is a relationship between performance Management & appraisal and sustainable organization development

Performance management & Appraisal has a significant association with SOD ($\beta=3.28$, $t=15.214$, $p<0.001$). Hence, H3a is accepted.

H4a: There is a relationship between Green Compensation & rewards and sustainable organization development

Compensation & Reward (CR) has a significant relationship with SOD ($\beta=2.75$, $t=12.085$, $p<0.001$). Hence, H4a is accepted.

H5a: There is a significant relationship between organizational culture and sustainable organization development

Organizational Culture (OC) has a significant association with SOD ($\beta=4.52$, $t=9.938$, $p<0.001$). Hence, H5a is accepted.

H6a: There is a significant relationship between Safety & health and sustainable organization development

Safety & Health (SH) has a significant association with SOD ($\beta=3.17$, $t=7.790$, $p<0.001$). Hence, H6a is accepted.

4.8 Mediation analysis

Mediation analysis represent the effect of a third variable between the relationship of independent and dependent variables. Here, RS, PMA, TD, CR, OC, and SH are the independent variables. Concept of GRM is the mediator variable and SOD is the outcome variable.

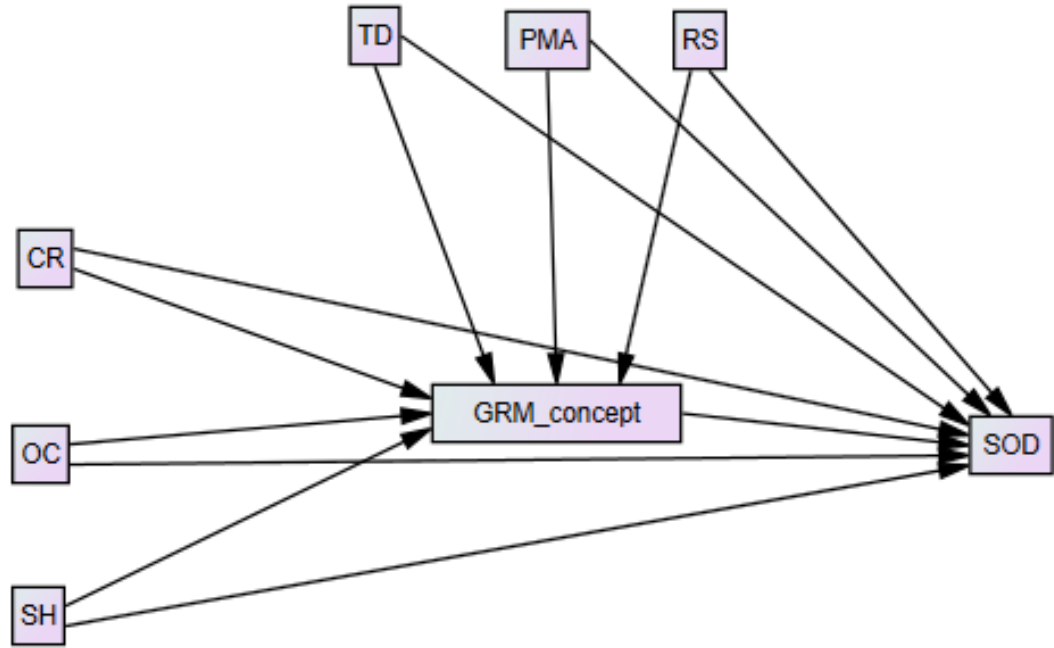


Figure 7: Effect of GHRM concept on SOD through various SOD components

Table 9: Mediation analysis

Mediating effect of GRM concept	β	p	Decision
RS→ GRM concept → SOD	0.06	0.023 <0.05	H1b accepted
TD→ GRM concept → SOD	0.057	0.010 <0.05	H2b accepted
PMA→ GRM concept → SOD	0.036	0.072 >0.05	H3b rejected
CR→ GRM concept → SOD	0.051	0.005 <0.05	H4b accepted
OC→ GRM concept → SOD	0.057	0.005 <0.05	H5b accepted
SH→ GRM concept → SOD	0.041	0.170 >0.05	H6b rejected

GRM concept=Concept of Green HRM; SOD=Sustainable Organizational Development; RS=Recruitment & Selection; TD=Training & Development; PMA=Performance management & Appraisal; CR=Compensation & Reward; OC=Organizational Culture; SH=Safety & Health.

H1b: Concept of GHRM can Mediates relation between recruitment & selecting and sustainable organization development

Results suggested that GRM concept significantly mediated the relationship between SOD and RS ($\beta=0.06, p=0.023$). Hence, H1b is accepted.

H2b: Concept of GHRM can Mediates relation between training & development and sustainable organization development

Results suggested that GRM concept significantly mediated the relationship between SOD and TD ($\beta=0.057, p=0.010$). Hence, H2b is accepted.

H3b: Concept of GHRM can Mediates relation between performance management & appraisal and sustainable organization development

Results suggested that GRM concept significantly mediated the relationship between SOD and PMA ($\beta=0.036, p=0.072$). Hence, H3b is rejected.

H4b: Concept of GHRM can Mediates relation between Compensation & rewards and sustainable organization development

Results suggested that GRM concept significantly mediated the relationship between SOD and CR ($\beta=0.051, p=0.005$). Hence, H4b is accepted.

H5b: Concept of GHRM can Mediates relation between Organizational Culture and sustainable organization development

Results suggested that GRM concept significantly mediated the relationship between SOD and OC ($\beta=0.057, p=0.005$). Hence, H5b is accepted.

H6b: Concept of GHRM can Mediates relation between Safety & health and sustainable organization development

Results suggested that GRM concept significantly mediated the relationship between SOD and SH ($\beta=0.041, p=0.170$). Hence, H6b is rejected.

Chapter Five: Discussion & Summery of Findings

5.1 Discussion

My study investigates the relationships between various aspects of Green Human Resource Management (GHRM) practices and their impact on Sustainable Organizational Development (SOD) in the context of Bangladesh. Additionally, I explore whether the concept of GHRM mediates these relationships. The analysis reveals many interesting points compared to prior studies.

First, this study found a strong positive significant association between Recruitment & Selection (RS) and SOD. All the test are showing positive impact on recruitment & selecting for organization sustainability. Organizations in Bangladesh that focus on recruiting and selecting employees with a commitment to environmental sustainability tend to experience higher levels of sustainable organizational development involving job rotation practice by which every employee of the organization would get an exposure to contribute towards the organizational sustainability. This suggests that the process of selecting environmentally-conscious employees positively influences an organization's sustainability efforts.

Secondly, this study revealed a strong significant association between Training & Development (TD) and SOD. All the test are showing positive impact of training & development for sustainable organization development. This indicates that organizations in Bangladesh that invest in eco-friendly training and development programs for their employees tend to achieve higher levels of sustainable organizational development.

Thirdly, the findings demonstrate a significant association between Performance Management & Appraisal (PMA) and SOD. All test are showing positive impact on PMA for SOD. This practice explores how performance evaluations consider sustainability goals and whether they impact an employee's contribution to sustainability. This suggests that organizations that align their performance management and appraisal systems with environmental goals are more likely to experience higher levels of sustainable organizational development.

Fourthly, the study uncovered all test showing strong positive significant relationship between Compensation & Reward (CR) and SOD. Organizations in Bangladesh that link compensation and rewards to eco-friendly practices tend to achieve higher levels of sustainable organizational development. Green Comp and Reward recognizes the contribution of employees in the creation of a more sustainable company. It is the result of the success of employees in their performance (PM) and works as proof that a company's strategic sustainability goals are being accomplished

Fifthly, this research found a strong positive significant association between Organizational Culture (OC) and SOD. This indicates that organizations fostering a culture of sustainability tend to experience higher levels of sustainable organizational development in Bangladesh. Fostering a culture that values sustainability and environmental responsibility. This includes promoting eco-friendly values, behaviors, and norms within the organization.

Finally, this study suggest a strong positive significant association between Safety & Health (SH) and SOD. Organizations that prioritize safety and health while addressing environmental risks tend to achieve higher levels of sustainable organizational development in Bangladesh. Ensuring a safe and healthy work environment with a focus on minimizing environmental risks and promoting employee well-being in eco-friendly workplaces.

5.1.1 Concept of GHRM as a Mediator

The study explored whether the concept of GHRM mediates the relationships between GHRM practices and SOD. The results indicate that the concept of GHRM significantly mediated the relationships between Recruitment & Selecting, Training & Development, Compensation & Reward, and Organizational Culture with Sustainable Organizational Development. This suggests that the overall effectiveness of these GHRM practices in influencing Sustainable Organization Development is partially mediated by the concept of GHRM. However, the mediation effect was not significant for Performance Management & Appraisal and Safety & Health. This indicates that for PMA and SH, other factors might play a more direct role in influencing SOD.

5.2 Summary of Findings

Overall, the study provides compelling evidence for the positive associations between various Green HRM practices (Recruitment & Selection, Training & Development, Performance Management & Appraisal, Compensation & Rewards, Organizational Culture, and Safety & Health) and sustainable organizational development in the context of Bangladesh. These findings underscore the importance of integrating sustainability-focused HRM practices to enhance organizational sustainability. Suggesting that organizations in Bangladesh benefit from implementing GHRM strategies that prioritize sustainability.

Furthermore, the mediating role of the GHRM concept is confirmed in most cases, emphasizing the need for a comprehensive and integrated GHRM approach that goes beyond individual practices to promote sustainable organizational development.

However, it's essential to recognize that while these relationships are significant, they do not necessarily imply causation. This research provides valuable insights into the interplay between Green HRM practices, the GHRM concept, and sustainable organizational development, laying the foundation for further research and practical implementation in the context of Bangladesh's unique environmental challenges and business environment.

In summary, this research contributes to the understanding of how HRM practices can be leveraged to promote sustainable organization development in Bangladesh, ultimately benefiting both the organizations and the environment.

Hypotheses 1

H1a: There is a significant relationship between recruitment & selecting and sustainable organizational development. **Accepted**

H1b: Concept of GHRM can Mediates relation between recruitment & selecting and sustainable organization development. **Accepted**

Hypotheses 2

H2a: There is a relationship between training & development and sustainable organization development. **Accepted**

H2b: Concept of GHRM can Mediates relation between training & development and sustainable organization development. **Accepted**

Hypotheses 3

H3a: There is a relationship between performance Management & appraisal and sustainable organization development. **Accepted**

H3b: Concept of GHRM can Mediates relation between performance management & appraisal and sustainable organization development. **Rejected**

Hypotheses 4

H4a: There is a relationship between Green Compensation & rewards and sustainable organization development. **Accepted**

H4b: Concept of GHRM can Mediates relation between Compensation & rewards and sustainable organization development. **Accepted**

Hypotheses 5

H5a: There is a significant relationship between organizational culture and sustainable organization development. **Accepted**

H5b: Concept of GHRM can Mediates relation between Organizational Culture and sustainable organization development. **Accepted**

Hypotheses 6

H6a: There is a significant relationship between Safety & health and sustainable organization development. **Accepted**

H6b: Concept of GHRM can Mediates relation between Safety & health and sustainable organization development. **Rejected**

In short, this research findings highlight the positive relationships between Green HRM practices and sustainable organizational development in Bangladesh, as well as the mediating role of the GHRM concept in enhancing these relationships. These insights offer practical implications for organizations striving to balance economic development with environmental sustainability in the context of Bangladesh.

5.2.1 Implications for Organizations in Bangladesh:

The findings of this research offer valuable insights for organizations in Bangladesh. They suggest that adopting Green HRM practices and embracing the GHRM concept can be instrumental in achieving sustainable organizational development.

These insights can inform HRM strategies in the manufacturing industry, helping organizations better align their practices with sustainability goals, considering the unique environmental challenges and business context of Bangladesh.

5.3 Summary of Linkage between Research Objectives and core Findings

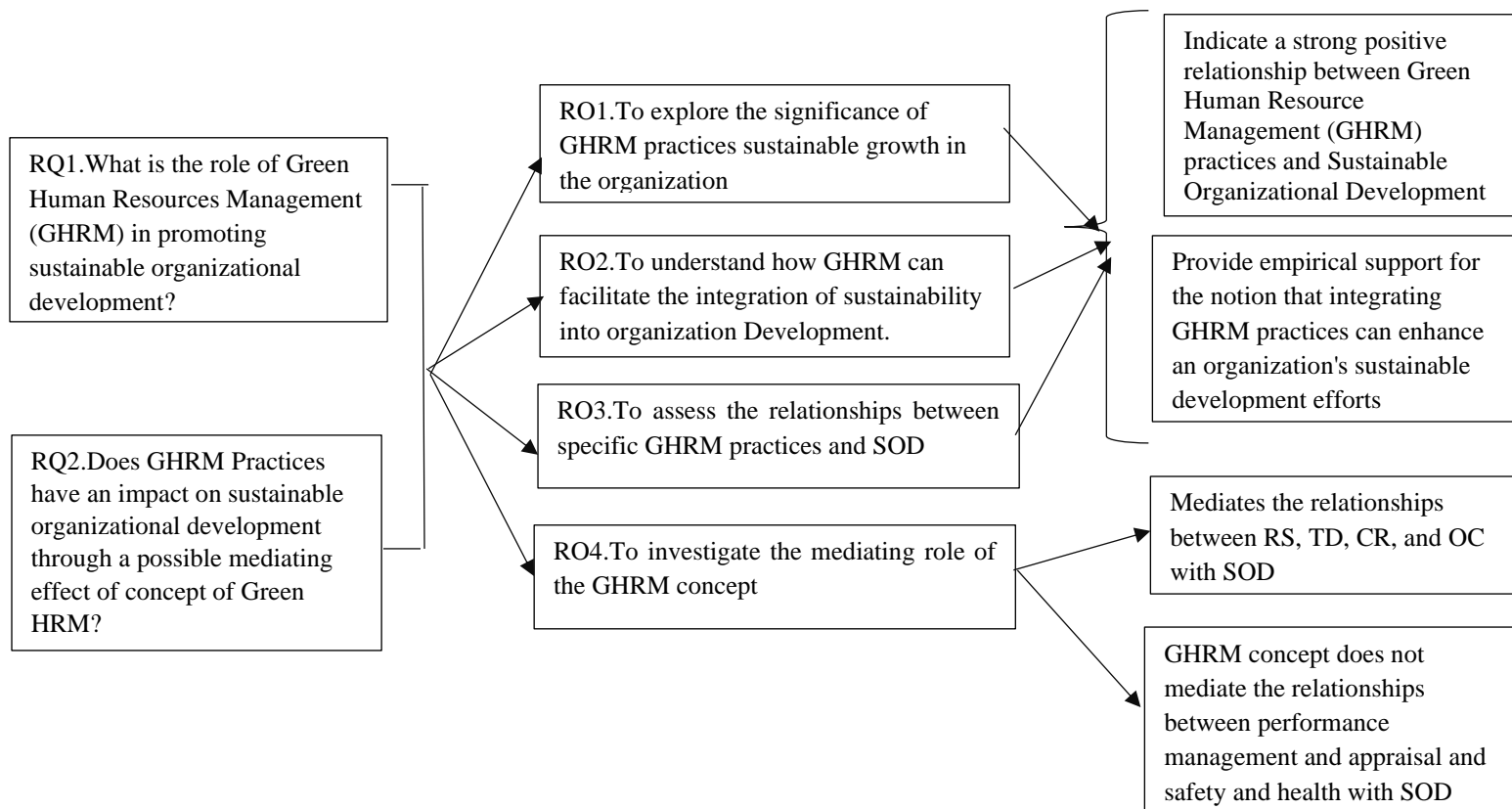


Figure 8: Framework of core findings of the research

Chapter Six: Conclusion & Recommendation

6.1 Conclusion

Green HRM is an emerging field. Some of the concerns for environment and for the need of going green can be addressed through adoption of green HRM by different public and private sector organizations. The GHRM framework is not complex and may not require a fundamental shift in the structure of HRM functions but at the same time have a positive impact in the long run. GHRM can be more fruitful if it is adopted by the organizations as part of the broader sustainable development or green management philosophy rather than just a time bound small isolated step.

In the pursuit of sustainable development, organizations worldwide are increasingly recognizing the pivotal role of Green Human Resource Management (GHRM) practices. This research has investigated the specific context of Bangladesh, a nation facing unique environmental challenges and opportunities, to understand how GHRM practices contribute to Sustainable Organizational Development (SOD).

Ahmad (2015) reiterates that Green HR efforts have resulted in “increased efficiencies, cost reduction, employee retention, and improved productivity, besides other tangible benefits”. Organizations need to become proactive and go for practices that can help them grow and at the same time enable organizations for paying back to the society

The study has provided compelling evidence that GHRM practices significantly influence SOD in Bangladesh. Positive associations were found between various GHRM practices, including eco-friendly recruitment and selection, sustainability-focused training and development, performance management aligned with environmental goals, green compensation and rewards, fostering a culture of sustainability, and safety and health practices with an environmental focus, and the attainment of sustainable organizational development.

Moreover, the research has highlighted the mediating role of the GHRM concept in enhancing the relationships between these practices and SOD. This underscores the importance of a comprehensive GHRM approach that transcends individual practices,

emphasizing the interconnectedness of these elements in promoting sustainability within organizations.

6.2 Summery of the Research

All the test are shown positive associations between various GHRM practices and SOD in Bangladesh. These GHRM practices include Recruitment & Selection, sustainability-focused Training & Development, and performance management aligned with environmental goals, green Compensation & Rewards, fostering a culture of sustainability, and safety and health practices with an environmental focus. This suggests that organizations prioritizing these practices are more likely to achieve sustainable development. The study highlights the mediating role of the GHRM concept in enhancing the relationships between these GHRM practices and SOD. The GHRM concept serves as a unifying framework that strengthens the influence of these practices on organizational sustainability. This underscores the importance of adopting a holistic GHRM approach that considers the interconnectedness of these elements.

6.3 Limitation of the Research

- Our study was limited to the manufacturing industry in Bangladesh, and therefore, cannot be generalized to non-manufacturing sectors and other industry. To that end, we recommend extending our conceptual research framework to non-manufacturing sectors and other industry in the future.
- Data Collection in an extensive manner for advanced statistical analysis.
- Further future study can be extended in this statistical model
- To talk with Industry experts in depth to have more comprehensive findings
- The research may not capture longer-term effects of GHRM practices on sustainable development, as sustainability efforts often require time to yield significant results.

6.4 Recommendation

Certainly, here are recommendations based on the findings of this research on "The Role of Green Human Resource Management for Sustainable Organization Development in Bangladesh"

- **Integration of GHRM Practices:** Organizations in Bangladesh should integrate specific Green Human Resource Management (GHRM) practices into their HR strategies, with a particular emphasis on the practices that have shown strong positive associations with Sustainable Organizational Development (SOD).
- **Embracing the GHRM Concept:** Organizations should not view GHRM as a collection of isolated practices but rather embrace the broader concept of GHRM.
- **Policy Support:** Policymakers and regulatory bodies should consider introducing supportive policies, incentives, and regulations that encourage organizations to adopt GHRM practices.
- **Continuous Improvement and Evaluation:** Organizations should implement continuous improvement processes and regularly evaluate the effectiveness of their GHRM practices in achieving sustainability goals.
- **Knowledge Sharing and Collaboration:** Encourage knowledge sharing and collaboration among organizations, industry associations, academic institutions, and government bodies to exchange best practices and innovations in GHRM.
- **Industry-Specific Analysis:** Future research can delve into industry-specific analysis, examining how GHRM practices impact sustainable development in different sectors within Bangladesh. Different industries may face unique challenges and opportunities concerning sustainability. Industry-specific insights can provide tailored recommendations for organizations operating within these sectors.

These recommendations are tailored to help organizations in Bangladesh leverage the findings of your research to enhance their HRM strategies and contribute to sustainable organizational development in the country. By implementing these recommendations, organizations can play a crucial role in fostering a more environmentally responsible and sustainable future for Bangladesh and the global community.

References

- M. S. (n.d.) (2015). Green HRM A Tool for Organizational Sustainability. *Proceedings of the Fourth International Conference on Global Business, Economics, Finance and Social Sciences*.
- Andjarwati T., B. E. (2019). THE IMPACT OF GREEN HUMAN RESOURCE MANAGEMENT TO GAIN ENTERPRISE SUSTAINABILITY. *POLISH JOURNAL OF MANAGEMENT STUDIES*, Vol.20 No.2.
- Arulrajah, A. A. (2015). Green Human Resource Management Practices: A Review. *Sri Lankan Journal of Human Resource Management*.
- Awwad Saad Awwad Al-Shammari¹, S. A. (2022). Green Human Resource Management and Sustainable Performance With the Mediating Role of Green Innovation: A Perspective of New Technological Era. *ORIGINAL RESEARCH article*, Volume 10 - 2022.
- Fiza Amjad, W. A.-U.-R.-u.-R. (2021). Effect of green human resource management practices on organizational sustainability: the mediating role of environmental and employee performance. *Environmental Science and Pollution Research*, 28, pages 28191–28206 (2021).
- Islam, R. (2019). Green Human Resource Management Practices in Bangladesh: A Study on the Banking Sector. *Academia.edu*, 18.
- Jabbour, C. J. (2016). Green Human Resource Management and Green Supply Chain Management: linking two emerging agendas. *Journal of Cleaner Production*, 1824-1833.
- Likhitkar¹, M. P. (2017). Impact of green HRM practices on organization sustainability and . *INTERNATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD* , 152-157.
- Mishra, P. (2017). Green human resource Management A framework for sustainable organizational. www.emeraldinsight.com/1934-8835.htm, 762-788.

- Mishra, P. (6 november 2017). Green human resource management: A framework for sustainable organizational development in an emerging economy. *International Journal of Organizational Analysis*.
- Nejati, A. S. (2019). Green humanresource management A two-study investigation of antecedents andoutcomes. <https://www.emerald.com/insight/0143-7720.htm>.
- Pinakshi, B. (2019). Impact of green hrn practices towards organizational sustainability growth. *indian Journal.com*, 163-170.
- Qazi2†, M. K. (2022). Understanding the Impact of Green Human Resource Management Practices and Dynamic Sustainable Capabilities on Corporate Sustainable Performance: Evidence From the Manufacturing Sector. *ORIGINAL RESEARCH article*.
- R.K. Mishra, S. S. (2014). Green HRM: innovative approach in Indian public enterprises. *INDERSCIENCE ONLINE*.
- S, A. (2015). . Green Human Resource Management:Policies and practices. . *Cogent Business &Management*, 2(1).
- Shaban, D. S. (April 2019). Reviewing the concept of Green HRM (GHRM) and Its Practices Application (Green Staffing) with Suggested Research Agenda: A Review from Literature Background and Testing Construction Perspective. *International Business Research*, ISSN 1913-9004.
- Yusliza M.Y., N. N. (2019). Top management commitment, corporate social responsibility and green human resource management: A Malaysian study. *Benchmarking: An International Journal*, 2051-2078.
- Zubair, S. S. (2019). Sustainable development: The role of green HRM. *International Journal of Research in Human Resource Management*, 1-6.

Appendix A: (Survey Questionnaire)

Dear Respondent:

I am a student of the MBA program in Bangladesh University of Professionals and I am doing a survey for my Thesis Paper that involves “The Role of Green Human Resources for Sustainable Organization Development in Bangladesh” Your kind cooperation will be highly appreciated.

With regards

Suborna Akter

Student of MBA Professional

Bangladesh University of Professionals

Section A

Demographic Information:

A) Respondent's Age

☐ 24-30 ☐ 31-35 ☐ 36-45 ☒ 46 and above

B) Gender

☐ Male ☐ Female

C) Tenure of Employment

☐ Less than 1 year ☐ 1-3 year's ☐ 3-5 years' ☐ Above 5 years

D) Industry Sector

☐ Manufacturing ☐ Services ☐ Technology ☐ Healthcare ☐ Others

E) Are you familiar with the concept of Green HRM?

☐ Yes ☐ No

Section B

This section is seeking your opinion regarding Green human resource management practices and sustainable development in your company. Respondents are required to indicate to what extent you agreed or disagreed with each statement.

Where Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5)

Sl. No	Statement	Ref.	Response				
			Strongly Disagree(1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
	Recruitment & Selection						
A1	Our organization considers environmental sustainability criteria when recruiting new employees.	Ms. Poonam Dr. Priyanka (2017)					
A2	Online recruitment policy impacts positively our organization's sustainability efforts.	Ms. Poonam Dr. Priyanka (2017)					
A3	Provide online offer letter & acceptance letter & joining letter which surely reduces large amount of paper work.	Ms. Poonam Dr. Priyanka (2017)					
	Training & Development						
B1	Our organization provides specific training on power-saving management, safety, energy efficiency, and other aspects related to development sustainability.	Dr Zubair (2019), po nam & priyanka (2017)					
B2	Training materials related to environmental sustainability are provided in digital (softcopy) format rather than printed handouts.	Ms. Poonam Dr. Priyanka (2017)					

B3	I believe that the skills and knowledge gained from training contribute to our organization's sustainability efforts.	Dr Zubair (2019),po nam& priyanka (2017)					
	Performance management & Appraisal						
C1	Our performance management system includes sustainability goals and metrics.	Ms. Poonam Dr. Priyanka (2017)					
C2	Our organization has a green reward scheme in place to motivate staff at all levels to actively engage in sustainability initiatives.	Ms. Poonam Dr. Priyanka (2017) Sonal (2018)					
C3	Sustainability goals are integrated into employee performance appraisals.	Dr Zubair (2019),po nam& priyanka (2017)					
	Compensation & Reward						
D1	Our organization offers incentives or rewards for employees who actively contribute to sustainability goals.	Dr Zubair (2019),po nam& priyanka (2017)					
D2	Providing incentives to encourage environmentally friendly activities and behaviors to contribute organizational sustainability.	Dr Zubair (2019),po nam& priyanka (2017)					
D3	The compensation and rewards structure aligns with sustainability objectives in our organization.	Ms. Poonam Dr. Priyanka (2017)					
	Organizational Culture						
E1	Employees are encouraged to actively participate in sustainability initiatives within our organization.	Sonal Singh Rathi (2018)					
E2	Sustainability is integrated into our company's core values and beliefs.	Dr Zubair (2019),po nam& priyanka (2017)					
	Safety & Health						
F1	Safety and health initiatives in our organization prioritize the well-being of employees and the environment.	Dr Zubair (2019),po nam& priyanka (2017)					

F2 .	Employees feel that safety and health practices in our organization contribute to overall sustainability.	Dr Zubair (2019),po nam& priyanka (2017					
---------	---	---	--	--	--	--	--

Appendix B

SPSS_data.sav [DataSet1] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Visible: 28 of 28 Variables

	Age	Gender	Tenure_of_Employment	IndustrySector	GRM_concept	RS_1	RS_2	RS_3	TD_1	TD_2
1	2	2	3	2	1	5	5	4	4	2
2	1	1	1	3	0	1	1	4	1	3
3	1	2	2	2	0	1	4	5	1	2
4	2	1	4	1	0	2	1	4	2	2
5	1	1	3	3	1	4	1	5	5	4
6	1	1	1	5	1	3	3	3	3	3
7	1	2	1	4	0	3	3	3	3	3
8	1	1	1	2	1	4	4	4	2	3
9	2	1	4	5	0	3	3	3	3	3
10	1	2	2	3	0	2	1	3	4	5
11	1	1	1	5	0	5	3	3	3	3
12	1	1	2	2	0	3	4	5	2	2
13	1	1	2	2	1	3	2	4	4	4
14	1	1	3	5	0	3	3	5	5	3
15	2	1	4	2	0	1	3	4	5	4
16	1	2	1	5	1	2	3	4	4	3
17	1	1	2	2	1	4	3	5	4	5
18	1	1	4	5	0	4	3	5	3	2
19	2	1	4	1	1	3	3	4	3	4
20	1	2	2	2	1	3	2	5	3	4
21	1	2	2	3	0	5	3	5	5	4
22	2	1	3	1	1	4	4	4	4	3
23	2	2	3	1	1	4	4	5	5	5
24	1	1	4	1	1	3	4	4	4	3

SPSS_data.sav [DataSet1] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	Age	Numeric	2	0		{1, 24-30 y}...	None	12	Right	Nominal	Input
2	Gender	Numeric	2	0		{1, Male}...	None	12	Right	Nominal	Input
3	Tenure_of_...	Numeric	2	0		{1, <1 year}...	None	12	Right	Ordinal	Input
4	IndustrySec...	Numeric	2	0	Industry Sector	{1, Manufac...	None	12	Right	Nominal	Input
5	GRM_concept	Numeric	2	0	GRM_concept	{0, No}...	None	12	Right	Nominal	Input
6	RS_1	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
7	RS_2	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
8	RS_3	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
9	TD_1	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
10	TD_2	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
11	TD_3	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
12	PMA_1	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
13	PMA_2	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
14	PMA_3	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
15	CR_1	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
16	CR_2	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
17	CR_3	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
18	OC_1	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
19	OC_2	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
20	SH_1	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
21	SH_2	Numeric	2	0		{1, Strongly ...	None	12	Right	Ordinal	Input
22	SOD	Numeric	8	2		None	None	10	Right	Scale	Input
23	RS	Numeric	8	2		None	None	10	Right	Scale	Input
24	TD	Numeric	8	2		None	None	10	Right	Scale	Input
25	PMA	Numeric	8	2		None	None	11	Right	Scale	Input
26	CR	Numeric	8	2		None	None	10	Right	Scale	Input