An Insight into Green HRM Practices for Sustainable Workplace in the Banking Sector of Bangladesh: The Role of Electronic HRM

NISHATH ANJUM[1], MD. SAIDUR RAHAMAN*[2], MAHMUDUL ISLAM CHOUDHURY[3] and MD. MIZANUR RAHMAN[4]

[1,2,3]Department of Business Administration, Metropolitan University, Sylhet, Bangladesh.
[4]BRAC Business School, BRAC University, Dhaka, Bangladesh.

Abstract

This study aims to get insight into Green HRM practices in Bangladesh's banking sector using electronic HRM to contribute to workplace sustainability. The study also looks at the challenges in such practices and proposes some suggestions for successful adoption of GHRM through E-HRM in the banking industry. The study employed the inclusive one-to-one interview approach for collecting data from the banking professionals. A semi-structured in-depth interview with fifteen banking professionals was done by the researchers. The study was thematic with the goal of making meaning of the participants' reactions. The study relied on the manual analysis to draw its conclusions due to the small sample size. The results indicate that most banks have already embraced the Green HRM functions with the help of E-HRM. However, the significant barriers in adopting GHRM using E-HRM in the banking sector are lack of knowledge, cost factor, technical issues, poor organizational support, etc. The study recommended some solutions as creating awareness, ensuring organizational support, developing technical skills, effective monitoring, rewarding etc. for effectively adopting GHRM practices through E-HRM. The study will surely be beneficial for the policymakers to understand the current scenario of GHRM and E-HRM practices in the banking sector of Bangladesh and therefore take appropriate measures to ensure workplace sustainability.

CONTACT Md. Saidur Rahaman ✉ saidurmgt@gmail.com 📍 Department of Business Administration, Metropolitan University, Sylhet, Bangladesh.

Background of the study

Over the last decade, the interest in environmental sustainability has arisen significantly around the world (Jabbar and Abid, 2015; Jackson *et al*., 2011). To achieve long term sustainability, the environmental impacts of business decisions must be considered and effectively managed (Liu, 2018; Arzaman *et al*., 2018). Hence, business organizations play a key role in environmental management issues; business leaders worldwide are trying to find ways to deal with environmental problems by creating a sustainable culture within the organization. A sustainable workplace includes practices that reduce or eliminate its negative impact on the environment and its elements (Dumont *et al*., 2017). The Human Resource Department (HRD) plays a vital role in creating a sustainable workplace (Harmon *et al*., 2010). The HRD can implement various policies and programs to reduce negative environmental impacts to encourage environmentalism and improve the organizations' sustainable performance (Rahman *et al*., 2019, Rahman and Iqbal, 2013; Renwick *et al*., 2013).

Green Human Resource Management (GHRM) is the positive movement towards sustainability and environment-friendly workplace (Opatha and Arulrajah, 2014; Mampra, 2013; Mahmood *et al*., 2016). It is about using the human resource management policies to support the sustainable use of resources within the organization (Ahuja, 2015). GHRM is a systematic and planned alignment of conventional HRM practices with the organizations' sustainability goals (Jabbour, 2011). The aim of GHRM is to use every employee in a way that promotes and maintains sustainable HRM practices with a view to create a sustainable workplace (Zoogah, 2011; Opatha, 2013). Distinguished policies are used in HR planning, recruitment and selection, training and human resource development, performance appraisal, and compensation management for aligning employees with an organizations' environmental strategy (Uddin *et al*., 2020, Rahman *et al*., 2017; Uddin *et al*., 2014; Renwick *et al*., 2008). Thus, the strength of a firms' human resource policies affects its intensity of adopting environmental management system (Abdul *et al*., 2018, Rahman *et al*., 2013). Today, the concept of Green HRM is not only limited to the awareness of environmental affairs but also includes the social

and economic well-being of the organization and its employees (Dumont *et al*., 2017).

Like the initial concern, modern technology has led organizations to adopt electronic system for environmental management issues (Bhuiyan and Rahman, 2013; Parry, 2011). During the last years, using information and communication technology (ICT) by HR departments has found a common phenomenon known as Electronic Human Resource Management (Anjum and Islam, 2020). It is a system of using computer technology, interactive electronic media, and telecommunications network to conduct the human resource activities of an organization (Strohmeier, 2009). The primary functions of Electronic Human Resource Management (E-HRM) are E-HR planning, E-recruiting, E-selection, E-training, E-performance appraisal, E-compensation, etc. (Parry, 2011). Thus, E-HRM ensures all the administrative support and strategic functions of HR with the help of technology (Anjum and Islam, 2020; Uddin *et al*., 2017; Johnson *et al*., 2016). The benefits of E-HRM includes reducing cost, increasing productivity, minimizing paperwork, speeding up processes, improving quality etc. (Strohmeier, 2009). Through lessening paperwork, wastage reduction, minimizing carbon footprints as well as with the increased use of technological tools to conduct the HRM functions, E-HRM meets the environmental sustainability requirements and therefore, has a significant impact on the practices of Green HRM by an organization (Alabaddi *et al*., 2020).

Along with the developed countries, the awareness about creating a sustainable workplace has increased in developing countries too (Hossen *et al*., 2014). The government of Bangladesh has already settled long-term sustainable development goals (UN, 2019). Consequently, organizational management accepts the paradigm shift from traditional to digital systems (Hossen *et al*., 2018). In Bangladesh, the digital media and web-based system have magically transformed traditional HRM practices through impinging online channels (Ahmad *et al*., 2013). By following the central bank's policy, the banking sector of Bangladesh has started adopting green practices in its overall operations with the help of E-HRM (Hossen *et al*., 2018; Rahman *et al*., 2013). However, adopting GHRM practices

through electronic human resource management has been identified as challenging for organizations due to various obstacles (Guerci and Carollo, 2016). Applying technological tools in HR functions and building such infrastructure requires huge investment compared to other banking functions which is a major challenge in E-HRM adoption. The risk comes with the technology adoption such as privacy or security issues, technical failure etc. also acts as great concern for banks as the HR information are considered as most confidential in any organization. Sometimes, management shows reluctant behavior in technology adoption as many of them do not have proper IT knowledge or awareness about the benefits of E-HRM and GHRM (Jafri, 2012; Paillé, *et al.*, 2014; Fayyazi *et al.*, 2015); Some employees may also resists to adopt such change because of their fear of personal loss (Anjum and Putul, 2021). Several researchers also proposed ways for successful adoption of E-HRM as financial support, IT training, developing awareness, effective monitoring, ensuring strong security etc. (Masum, 2015; Islam *et al.*, 2020; Parry, 2011).

GHRM & E-HRM is a comparatively new idea for Bangladesh. Though many companies have started to implement these practices but the initiation and implementation are innovative since it is still in its infancy (Islam *et al.*, 2020). Though a great extent of existing literature deals with the concept GHRM, there is still a gap in the research in knowing the role that E-HRM plays in adopting GHRM, especially in the banking sector of Bangladesh (Rahman *et al.*, 2013). This article comprehends how the banks in Bangladesh have adopted GHRM practices using E-HRM and the complexities of adopting such practices. It also looks for suggestions for effectively applying GHRM practices in the banking sector. The study will benefit all the concerned, from employees to policy-making authority as well as the greater society.

Research Methods, Techniques, and Tools
The study is qualitative in nature. The researchers conducted a semi-structured in-depth interview of banking professionals. An in-depth interview can be thought of as a dialogue between one respondent and an interviewer, with a time frame. The word "depth" refers to gaining fundamental insights into the factors that influence individual attitudes and behavior. In-depth interviews are selected and

used as the preferred form of data collection when it's crucial to have face-to-face contact, when the researchers need more detailed information or need to follow up and when investigating complex questions with the suspicion that other approaches aren't providing with the complete picture. The in-depth interviewing method is explained by concentrating the steps to be taken in the research process one at a time. The semi-structured method can be divided into the following steps:
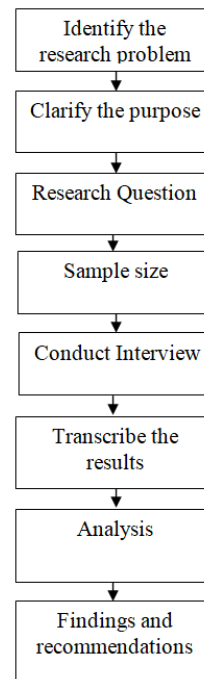
Fig.1: Research Process
Source: Self- developed

A convenient sample is used in this study since participants' versatility was crucial due to their busy schedules. Moreover, convenience sampling was chosen to explore the views and perspectives of the participants' with broad expertise and practical experience while still being simple to implement (Sedgwick, 2013). Each interviewee were asked three questions regarding applying GHRM practices with the help of E-HRM in their respective banks-

Question No. 1
To what extent, your bank has adopted Green HRM practices to ensure workplace sustainability? What is the role of E-HRM in such practices?

Question No. 2
What are the challenges of implementing E-HRM as a tool for ensuring GHRM?

Question No. 3
Provide any suggestion(s) for effective adoption of GHRM by using E-HRM.

For the convenience of the interpretation, each conversation has been recorded with the permission of the participants. The study was thematic based on the respondents' opinion. Due to the small size of the sample, the study applied manual analysis to draw the findings. To begin the coding process, the researchers defined the threads to construct categories which served as the foundation for developing the topics for interpretation and discussion (Islam *et al.*, 2020). The primary data gathered from the interviews were converted into transcripts then. The data presentation was classified into three parts. In the first part, GHRM practices through E-HRM in the banking sector (HR Planning & Job Design, Recruitment & Selection, Training & Development, Performance Appraisal, Compensation & benefit) has been analyzed and presented. In the second part, the challenges in GHRM adoption using E-HRM has been explored and finally, in the third part, the respondents' recommendations for effective adoption of GHRM practices through E-HRM has been presented in a summarized form.

The Respondents' Demographic Information
The sample of the study consists of 15 banking professionals from different commercials banks in Bangladesh. The critical criterion was to choose participants with at least five years of experience in banking industry. This is due to the fact that in Bangladesh, experienced staffs are more involved in decision-making processes and the application or creation of any strategy for the betterment of the firms (Kazi, 2009). Rather than focusing on the officers from HR department only, the researchers selected banking professionals working in other areas of the bank to understand the actual scenario of GHRM practices by using E-HRM in their respective banks. The researchers believe that, regardless of the role, all employees should be encouraged to contribute environment friendly ideas and increase their interest in the workplace sustainability. Furthermore, the researchers ensured a diverse group of positions (Managers, Sub-manager, Principal Officer, Senior Officer, Junior Officer, Officer, Assistant Officer, Vice-President) from different public and private commercial banks to appreciate better various problems and solutions in implementing GHRM activities in the banking sector of Bangladesh.

Table 1: Demographic and interview information

Participant	Designation	Years in Service	Type of the Bank	Interview Duration (Minutes)
1	Manager	5	Private Commercial Bank	32:39
2	Manager	7	Private Commercial Bank	11:36
3	Principal Officer	8	Public Commercial Bank	16:19
4	Senior Officer	5.7	Public Commercial Bank	15:18
5	Manager	6	Public Commercial Bank	18:13
6	Senior Officer	5.5	Public Commercial Bank	09:44
7	Junior officer	8	Private Commercial Bank	08:04
8	Assistant Officer	5.8	Private Commercial Bank	08:52
9	Officer	8.5	Private Commercial Bank	11:15
10	Manager	9	Private Commercial Bank	09:43
11	First Assistant VP	18	Private Commercial Bank	20:43
12	Officer	6	Public Commercial Bank	10:57
13	Principle Officer	10	Private Commercial Bank	09:01
14	Officer	6	Private Commercial Bank	09:46
15	Sub-Manager	10	Private Commercial Bank	11:30

Source: Authors survey

Analysis & Results
Part-1: GHRM Practices for Workplace Sustainability and the Role of E-HRM

Most of the banks in Bangladesh have already adopted the green concept either fully or partially to conduct their functions through E-HRM. As a governing body of all banks, Bangladesh bank has enforced the green policies for a sustainable workplace and recommended all public and private banks to follow the green concept in their operations.

"We are strictly following the green policies prescribed by Bangladesh Bank in our banking operations. We encourage every employee to practice green while conducting their activities" (Respondent 4, 12 & 15).

In this light, one of the respondents stated that,

"As per the regulations of the central bank of Bangladesh, we are gradually adopting green practices in our operations and are coming up with more environment-friendly initiatives in the near future" (Respondent 8).

Banks are trying to minimize the use of paper and shifting their activities to electronic media. Many banks have ensured paperless banking with the maximum use of email.

"We are instructed to use both sides of the paper while printing to minimize paper, ink, and toner wastage. In addition, our HRD always encourages sharing soft document rather than hard copies" (Respondent 12 & 15).

Some of the banks have implemented green policies through IT in certain HRM functions. Still, they use conventional methods for other activities as they feel it's a bit difficult to shift all the banking operations in digital media.

"We are trying to focus on green practices and the HRD recently has shifted the training, meeting and seminar virtually. However, we still need to use papers for various activities which are not possible to conduct otherwise" (Respondent 3, 6 & 13).

Respondent 3, in this regard, said that,

"We have not yet fully shifted to green practices, but the bank is on its way to digitalize as our bank has many branches all over the country, so it is complex for HRD to adopt green practices in every function at a time" (Respondent 3).

Practice-1: HR Planning and Job Design

The banking sector of Bangladesh has started incorporating environmental issues while designing each job (Jahan, 2014). They are trying to include the green policies of the bank in their job circular and environment protection-related issues in each job description. Many banks also prioritize the candidates with green competencies.

"The HR department of our bank provides the job circular by following the green practices. The bank included environment- saving duties on each job description" (Respondent 9, 10 & 12).

While joining, banks are also making the employees aware about the sustainability issues,

"We provide job description to the employees via email while joining and encourage them to follow environment-friendly initiatives at the workplace" (Respondent 4, 7 & 13).

Many banks are using specific software for storing and maintaining all HR-related data. This is enabling them to forecast the human resource demand and supply accurately. Management Information System has also contributed much in HR planning. This system discourages the need to use any register book and ensures smooth flow of information inside the bank (Respondent 5, 7, 11, 13).

Practice-2: Recruitment and Selection

To encourage E-HRM through paperless banking, almost all the banks in Bangladesh are now publishing their job circular online. Every bank has its websites where the applicants can find information about available vacancies. There are also many online job sites in Bangladesh (Bdjobs.com, Careerjet.com, Chakri.com, etc.) which are also supporting the banks in attracting potential candidates. Some banks are using both online and paper based media to publish job circulars.

"Our bank posts job circular in bdjobs.com as well as in our own website. We avoid using papers for this purpose. All the details about the vacant post along with the job description are mentioned in the circular" (Respondent 3, 9, 10 & 11).

The applicants are instructed to fill the online form and apply for their desired position. The banks are not accepting any paper document rather using online application form, CV and scanned documents from the applicants. They are using their own system or websites and email for this purpose.

"We used to receive paper CV earlier, but now we are using our system, HRMS or even Bdjobs.com, for collecting CV from prospective candidates. We also avoid printing CVs and conduct all sorting activities using software" (Respondent 10, 13 & 14).

However, most of the banks are still conducting the selection process using paper based system. Competitive written exams and interviews are taken physically.

"We haven't shifted our selection process online yet. We take the candidates' written exam and final viva or interview physically so that we can judge them well" (Respondent 7, 9 & 12).

Respondent 1, in this light, said that,

"In our bank, a physical interview session is still being conducted for the final candidates. Nevertheless, our HR department conducts the preliminary selection via questionnaire through email and also use telephonic conversation for initial judgment"(Respondent 1).

To secure green practice, many banks have successfully shifted the candidates' evaluation system virtually through a computer-based scoring system. All the communication between the HRD and the candidates is done through email or other electronic media. However, after the selection, the HRD takes paper documents (original certificates & other essentials) from the selected candidates for further verification and joining purpose. The bank also provides hard copies of the appointment letter and other guidelines to them (Respondent 1, 9, 14 & 15).

Practice-3: Training and Development
E-training involves using web based channels to create and transfer of knowledge such as virtual class rooms, online collaboration and resource sharing which contribute toward workplace sustainability. Though it is impossible to shift all training-related activities online, the interviewees' of this study agreed that many banks in Bangladesh currently using the electronic (online) platform for training purposes (Respondent 3, 4, 6, 7 & 14). These initiatives help reduce wasting environmental resources, save materials, and encourage GHRM practices.

"We use both physical and virtual methods for training purposes. Nowadays, we are emphasizing more on virtual training program and online resource sharing" (Respondent 2, 10 & 12).

In this regard, Respondent 1 quoted that,

"We have partially adopted E-training in our bank. Either the training program is done through video-conferencing, or we upload the lectures into our internal system from where the employee may view and download the materials" (Respondent 1).

By supporting this statement, Respondent 8 stated that,

"We conducts training sessions physically, but training materials are delivered through email. We avoid using papers in training programs with the maximum use of projector and slide sharing" (Respondent 8).

The banks use various online platforms such as Zoom, Cisco-WebEx, Google meet, etc., for conducting training sessions. Some of the banks have also developed their own training portal for this purpose.

"We have our training portal known as E-learning process to conduct the training virtually. We also use zoom, WebEx and related apps for conducting seminars and workshops" (Respondent 2, 9 & 15).

After training, the employees are asked to participate in online examination so that the trainer can evaluate their performance.

"After the training, the participants are given prescribed questions to answer and submit online within the specified time. Sometimes they are also given tasks to be submitted later. The bank then provides feedback about their training performance" (Respondent 5, 12 & 15).

Banks are also including workplace sustainability related issues in the training syllabus to create environmental awareness among the employees. Specific training is also given to improve the IT skills of the employees; such trainings enabling them to use the electronic media appropriately which in turn support the banks green initiatives (Respondent 6, 9).

Practice-4: Compensation and Benefits

In the context of GHRM, employees can assume rewards and compensation as potential tools for supporting environment-friendly activities in organization. Some interviewees informed that, along with fixed salaries, few banks are providing their employees with incentives for initiating green behavior (Respondent 1, 6, 12). From the respondents' statements, it is found that all the banks in Bangladesh are currently dealing with employee compensation issues through electronic media. Salaries and other employee benefits are automatically transferred to their respective bank account without any hassle.

"We use E-payment for compensation. The salary, benefit, and increment are credited to the individual account of the employee" (Respondent 7, 12 & 14).

Many banks are using specific software to compute salaries and the number of bonuses or incentives. In this regard, some accounting software are contributing hugely. Though some banks are still using registers to keep the salary record, others have already moved from papers to electronic media to store and manage all compensation-related data.

"We use software to calculate salaries and other incentives when employee fulfill their targets. Our MIS manages all compensation data and to encourage paperless practice; we don't use any register for this purpose (Respondent 4, 8 & 10).

Respondent 4 added that,

"Earlier, we used to maintain payroll in vouchers, but currently, we use our EHRM system software to maintain the payroll. Moreover, our auditors discourage keeping the record in the traditional format" (Respondent 4).

Employees get all payment-related notifications through email or text messages. They can also access salary data or certificates using online tools.

"When any payment is credited to our account, we get the notification through text message. We also get salary documents in our mail when required. Earlier, we used to get a pay slip, but now the accounts section provide us with soft copy instead" (Respondent 4, 8 & 11).

To encourage paperless banking, almost all the banks in Bangladesh are currently offering various types of e-cards (debit card, credit card etc.) to withdraw money without using any cheque book (Respondent 15).

Practice-5: Performance Appraisal

HR managers who integrate the environment into performance management systems, according to Epstein and Roy (1997), protect organizations' environment from damage and ensure workplace sustainability. Effective performance appraisal provide employees with valuable feedback while also assists the organization in improving its environmental outcomes over time (Saeed *et al.*, 2019). Bangladesh's banking sector uses the Annual Confidential Report (ACR) framework to evaluate employees' performance. It is a report by the managers' on subordinates' performance (Anjum and Rahman, 2021). ACR ratings are now done by the banks, using their own software or electronic system. With the use of E-performance appraisal system, the practice of submitting hard copies of reports to the HRD has replaced with the soft copies of documents (Respondent 2, 5, 7 & 11). The HR Departments also use electronic sources (web, apps) to keep the employees' performance records for future concerns.

"Earlier, our ACR was prepared manually, and we had to submit the hard copies of the form to the HRD. But now, the process is done electronically. The manager downloads the form

from the website, fills it up based on pre-set criteria, and then submits it online. The HRD also uses software for final scoring and merit listing" (Respondent 9 & 15).

In this regard, Respondent 6 added that,

"We submit two appraisals in a year, one is half-yearly, and another is yearly. Specific software is used for performance evaluation, and our EMIS is dedicated to this purpose. We also use this system to determine the performance bonus or increment based on an appraisal" (Respondent 6).

Respondent 3 informed that their bank has converted the ACR into PER (Performance Evaluation Report) which is a completely automated system with dedicated software. Along with ACR, banks generally provide employees with targets and performances in this case and are measured based on the achievement of these targets (Anjum and Rahman, 2021). In addition to key performance indicators, some banks have also incorporated green practices as criteria for employee evaluation. This addition has made the employees accountable for environment management performances (Respondent 4, 9 & 15). Every employee has their own account at bank portal where their individual performance goals are mentioned and the achievements are also updated regularly.

"Every employee of our bank has their account with individual personal ID on the bank portal. The bank fixes specific targets (both performance & green practice indicators) for everyone at the beginning of the year. The targets are visible on each employees' account, and the accomplishments are also continually updated there. Based on the achievement of these targets, the employees' are evaluated at the end of the year (Respondent 1, 6, 8 & 11).

Part-2: Challenges in Implementing E-HRM as a tool of GHRM
The HR department of commercial bank faces many challenges in adopting GHRM and E-HRM effectively. The major obstacles in adopting green practices through E-HRM in the banking sector are explored in this study with the help of the interviewees' opinions.

Challenge 1: Green Culture and Organizational Support
Lack of green policy is acknowledged as a major obstacle in applying Green HRM by the respondents. In many cases, the management and the employees of banks are not aware of the importance of workplace sustainability (Islam *et al.*, 2020; Karande and Bihade, 2018; Levine and Strube, 2012). Respondent 11 quoted that,

"Our management is not that much aware of the significance of sustainable workplace. For example, there is no separate training to learn about environment-friendly behavior. The managers also shows reluctant behavior in adopting green practices as they do not want to take any more responsibilities" (Respondent 11).

Moreover, many employees do not find the motivation to adopt new behaviors due to low organizational support. The employees, thus, do not want to shift from conventional methods to electronic media (Anjum and Putul, 2021). Respondent 13 said that,

"Employee sees adopting new behavior as cumbersome and wants to continue conventional ways of doing things. The use of rewards or recognition for initiating green behavior is also shallow in banks. Thus the employees' knowledge and/or motivation to practice green, is not improving" (Respondent 13).

Challenge 2: Technical Issues
Most interviewees' indicate network interruption and system error as the main obstacles in E-HRM adoption (Respondent 6, 8, 9 & 12). Many banks do not have high-speed network connections with specialized IT departments which causes consuming more time to conduct the E-HRM functions (Bombiak, 2020). Respondent 4 stated that,

"The main problem we face in adopting E-HRM is system error and network interruption. Sometimes slow network causes more time to complete the task; we also experienced postponing important tasks due to such problem" (Respondent 4).

Challenge 3: Cost Factor
The adoption of electronic HRM is quite expensive (Karande and Bihade, 2018; Islam *et al.*, 2020).

Many respondents highlighted the cost factor as a major obstacle in implementing E-HRM. Purchasing suitable E-HRM software, installation and maintenance requires huge investment (Bamel *et al*., 2014). Moreover, organizations also need to develop proper IT infrastructure with specialist people, which also costs huge.

"For adopting GHRM through electronic media, our bank faces some extra costs. Software development, continuous maintenance, employee training and hiring IT experts are quite expensive" (Respondent 2, 7, 8, 11, 13).

Challenge 4: IT knowledge
Lack of IT knowledge is a significant barrier in E-HRM adoption (Bamel *et al*., 2014). The employees of the HR department are not only limited to adopt the E-HRM system, but all the employees of the banks need to have sufficient IT knowledge for successful adoption of E-HRM (Bombiak, 2020). While the younger employees sometimes face challenges in adjusting to the new system, it is quite difficult for the old aged workers to cope with the modern system.

"The employees with less technological knowledge often face troubles in operating the system. However, the old aged workers face quite difficulties to adjust with the change of technological system." (Respondent 4, 9 & 12).

Challenge 5: Security & Privacy
Some interviewees' feel that it is not authentic to conduct all the functions of HRM in electronic media. As many information of human resource management are kept confidential by organizations, using electronic media may increase the risk of hacking or information leakage which will affect the privacy issues (Vahdati, 2018; Islam *et al*., 2020). They emphasized using both paper and/or electronic devices for this purpose. Respondent 5 quoted that,

"In many cases, we need to keep record both in paper and software for the justification and verification of authenticity. For instance, personal files and performance appraisal forms are still kept on paper media (Respondent 5).

Challenge 6: Complexity in Practice
Respondents perceived some disadvantages of using E-HRM in certain HRM functions, such as

training or performance evaluation. Respondent 3 said that,

"We often face trouble in online training as it is quite difficult to keep consistent concentration in online media for a longer time. There is also a lack of engagement or collaboration between the trainer and the trainee. Many employees also engage in unfair means in the evaluation process, ultimately bringing no positive outcome" (Respondent 3).

While mentioning the difficulties in performance evaluation through online tools, Respondent 11 quoted that,

"We face problem in measuring employee performances online. There is chances of mistake or error and also scope for bias in electronic media" (Respondent 11).

Surprisingly, two of the respondents informed that their banks are not facing any obstacles in using E-HRM and adopting green practices They also ensured that their management always assists them in this case (Respondent 14 & 15).

Part-3: Suggestions for Effective GHRM Adoption by using E-HRM
Organizations must take appropriate measures to achieve workplace sustainability through effective adoption of GHRM and E-HRM (Phillips, 2007). This is a continuous process with the combined efforts to succeed rather than a single strategy (Pillai and Sivathanu, 2014; Stringer, 2009). To ensure a sustainable workplace, all the concerned must be aware of environmental issues (Fernandez, *et al*., 2003). Thus, it is essential to enrich both the management and the employees' knowledge about Green HRM and E-HRM along with their practices and substantial benefits (Respondents 1, 6, 9, 11 & 12). Furthermore, the banks should emphasize on developing the employees technological skills to ensure smooth and faster adoption of electronic practices (Andreasson, 2015; Masum *et al*., 2013; Respondent 15). The management of the bank must develop HR policies that support environmental sustainability. It should establish a culture that encourages employees to adopt and practice green behavior (Dutta, 2012). Proper rules and effective monitoring on green initiatives must be developed

to ensure the effective adoption of GHRM (Cherian and Jacob, 2012). While appreciating and rewarding employees for initiating green behavior, banks could also apply punishments for those who do not comply with the regulations (Respondents 1, 3, 10 & 15). Therefore, cooperation from top management is undoubtedly an essential tool for ensuring the success of GHRM.

Banks should benchmark GHRM and E-HRM practices and focus on progressively moving towards the target (Respondent 8 & 14). While adopting a new initiative for human resource management, the bank should not wait for its competitors' response, instead, it should rely on own R & D section (Masum *et al*., 2015). Computerized system should be applied in all HRM functions to ensure paperless banking (Respondent 2; Rodríguez and Ventura, 2003). It is high time for banks to create a complete online platform to deliver all the banking operations (Respondent 6). It will reduce carbon footprints and will keep the bank ahead towards environmental sustainability (Respondent 9). On the other hand, the software used for E-HRM practices must be developed in user a friendly way (Bamel, 2014). However, the privacy issues should be maintained strictly (Respondent 13 & 15). There must be a back-up system with huge storage capacity and extra security to stay safe from hackers (Respondent 5, 7 & 11). To ensure smooth service, the IT department of banks must be more concerned about fixing technical errors and software interruptions and keeping the system regularly upgraded (Respondent 3, 9 & 12). Finally, the respondents' suggested that the management and employees of banks should keep patience and being consistent with green practices as it takes more time to become a fully green organization that supports environmental sustainability in every possible way.

Discussions and Implications

Green HRM plays a significant role in promoting environmental sustainability and E-HRM plays a crucial role in the adoption of GHRM by organizations. This study provides an insight into the Green HRM practices by using electronic HRM in the banking sector of Bangladesh. From the interviewees' responses, it is found that, the banking sector of Bangladesh has already adopted GHRM practices to some extent and have recognized the role of E-HRM in this case. Bangladeshi banks are using green

concepts in HR planning and use electronic media to recruit their employees. Recruiting applicants with green mindset makes it easier for organizations to have professionals familiar with sustainable practices (Grolleau *et al*., 2012). Similarly, green training and development makes employees aware about environmental issues (Zoogah, 2011). Using online media for training purpose can help in reducing the carbon footprint and using more online course materials rather than printed books can ensure paperless practices. Additionally, green performance appraisal by banks is concerned with linking employee performance with the company's environmental affair policies; for instance, organizations include green tasks as performance target (Renwick *et al*., 2013) and also use electronic method to conduct employee appraisal. Moreover, rewards and compensation are possible mechanisms for promoting sustainable programs in organizations (Ramus, 2002; Liebowitz, 2010). Banks are trying to foster green behaviors among workers by integrating elements of green practices into their compensation package. Moreover, the usage of e-compensation helps banks in compensation planning, fund management, payment calculation, transfer of funds etc. in a paperless way.

The study also identifies the major challenges in implementing GHRM practices with the help of E-HRM in banking sector of Bangladesh. From the interviewees' viewpoint, the major challenges in adopting E-HRM are lack of green culture and support from management, technical issues, higher cost of adopting electronic services, knowledge gap among workers, security concern regarding online tools, and complexity in electronic practices. These findings are similar to some prior research findings (Islam *et al*., 2020; Karande and Bihade, 2018; Levine and Strube, 2012; Bombiak, 2020).

Finally, the interviewees' suggested that, the banks should give more emphasize on developing a green culture, hence, organizational and management support is essential for effective adoption of GHRM and E-HRM. Environmental awareness must be developed among all the stakeholders. Additionally, applying computerized system in all banking operations and developing employees IT skills is of great important in ensuring workplace sustainability. Along with strict rules and regulations, rewards are also effective tools for motivating employees

in adopting green practices. Moreover, building a proper IT infrastructure to deal with the technical and security issues effectively is also of paramount importance. Such recommendations are also given by some previous researchers (Hossain *et al.*, 2020; Fernandez, *et al.*, 2003 Andreasson, 2015; Dutta, 2012; Islam *et al.*, 2020; Masum, 2015; Masum *et al.*, 2013).

Though many HR departments of the banks has adopted paperless and electronic practices, there is still much room for improvement in this field. All advantages of E-HRM can realize if the method is effectively and successfully adopted in an organization. The researchers believe that the study will assist banking authorities in further understanding the problems and developing strategies in creating a healthy workplace as well as to realize the critical role of E-HRM in the successful adoption of GHRM. The findings will drive Bangladeshi banking authority to prepare for a smooth transition from conventional HRM to E-HRM and thus contribute to a sustainable workplace practicing GHRM.

Conclusion

The need for green organizational practices is growing with the rapid changes of worldwide environmental concern. Thus, the need to integrate environmental sustainability practices with the human resource management functions within an organization is increasing (Nijhawan, 2014). Today, organizations are implementing and consolidating green initiatives in their agenda with the help of their human resources. The HR managers are responsible for incorporating the green concepts in the organizations' HR policies and translate those policies into practice. This study contributes toward the understanding of Green HRM concepts and practices and the role of E-HRM to ensure workplace sustainability in the banking sector of Bangladesh. The study found that the banking sector of Bangladesh has already adopted GHRM practices in accordance with the instructions from the central bank of Bangladesh. All the public and private banks of the country are taking various measures to ensure workplace sustainability. Electronic HRM, in this regard, is playing an important role in ensuring paperless banking with the maximum use of the internet to conduct all HRM functions. Therefore,

to adopt Green HRM practices in any organization, the role of E-HRM is imperative. So it can be said that, the higher the level of electronic HRM usage in an organization, the higher the level of green HRM practices in that organization (Alabaddi *et al.*, 2020). However, the banks are facing some challenges in the adoption of these practices and the study suggesting to take immediate actions to overcome the obstacles for effective adoption of green practices. The study concludes that, along with the banking sector, every other organization should have its own green policy and act accordingly to cooperate the government in attaining its sustainable development goals (SDG).

Limitations and Future Research Directions

Although the current research is excellent, it has some limitations. First, the study relied heavily on data gathered from a single source, leading to a standard method variance problem. Second, the respondents came from a single industry or even a single nation may make it difficult to draw broad conclusions about the topic. Nevertheless, the authors agree that this research is one of the most critical in the region and will contribute to the current GHRM and E-HRM literature. The relationship between GHRM and environmental sustainability should focus on in future studies. Further investigation may also be done into the moderating impact of various GHRM and E-HRM functions on employee performance. Last but not least, future research may compare private and government banks and other sectors as well.

Conflict of Interest

The authors declare that they have no competing interests.

References

1. Abdul, M., Rahman, M. M., Ali, N. A., Mansor, Z., Uddin, M. J., & Saidur, M. (2018). The Nexus between job satisfactions and human resource management (HRM) practices: A perceptual analysis of commercial banks in Bangladesh. *International Journal of Economics and Management*, 12(S2), 377-386

2. Ahmad, F., Zayed, N. M., & Harun, M. (2013). Factors behind the adoption of green banking by Bangladeshi commercial banks. *ASA University Review*, 7(2).

3. Ahuja, D. (2015). Green HRM: Management of people through commitment towards environmental sustainability. *International Journal of Research in Finance and Marketing,* 5(7), 50-54.

4. Alabaddi, Z.A., Rahahleh, A.H., Muflih, M.A., Sana'a, N.A.N. and Salah, A.A. (2020). The role of electronic human resource management on the practices of green human resource management. *European Journal of Business and Management,* 12(1), 55-72.

5. Andreasson, K. (Ed.). (2015). Digital divides: the new challenges and opportunities of e-inclusion (Vol. 195). CRC Press.

6. Anjum, N. & Islam, M.A. (2020). Employees' behavioral intention to adopt e-HRM system-an approach to extend technology acceptance model. *International Journal of Academic Research In Accounting, Finance And Management Sciences*, 10(3), 544-561.

7. Anjum, N. & Putul, M. K. N. (2021). Is the Human Side of Organizational Change Hard to Manage? -Implications for Dealing with Employee Resistance. Research and Review: *Human Resource and Labor Management,* 2(2), 58-65.

8. Anjum, N. & Rahman, M.M. (2021). Performance appraisal and promotion practices of public commercial banks in Bangladesh-a case study on ACR method. *SEISENSE Journal of Management,* 4(3), 1-16.

9. Arzaman, A. F. B. M., Omar, S. S. B., & Khalid, S. B. B. (2018). Green Human Resource Management Practices in Manufacturing Industry: Cases of Firms in the Southern Part of Malaysia. *The Journal of Social Sciences Research*, 347-356.

10. Bamel, N., Bamel, U. K., Sahay, V., & Thite, M. (2014). Usage, benefits and barriers of human resource information system in universities. VINE: *The journal of information and knowledge management systems.*

11. Bhuiyan, M. S. R., & Rahman, M. M. (2013). Implementation of mobile banking in Bangladesh: opportunities and challenges. *IOSR Journal of Electronics Communication Engineering*, 15(4), 53-58.

12. Bombiak, E. (2020), "Advances in the implementation of the model of sustainable human resource management: Polish companies' experiences", *Entrepreneurship and Sustainability Issues*, 7(3),1667-1687.

13. Cherian, J., & Jacob, J. (2012). A study of green HR practices and its effective implementation in the organization: A review. *International journal of business and Management,* 7(21), 25-33.

14. Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human resource management,* 56(4), 613-627.

15. Dutta, D. (2012). Greening people: A strategic dimension. *ZENITH International Journal of Business Economics & Management Research*, 2(2), 143-148.

16. Epstein, M. J., & Roy, M. J. (1997). Using ISO 14000 for improved organizational learning and environmental management. *Environmental Quality Management*, 7(1), 21-30.

17. Fayyazi, M., Shahbazmoradi, S., Afshar, Z., & Shahbazmoradi, M. (2015). Investigating the barriers of the green human resource management implementation in oil industry. *Management science letters,* 5(1), 101-108.

18. Fernández, E., Junquera, B., & Ordiz, M. (2003). Organizational culture and human resources in the environmental issue: a review of the literature. *International Journal of Human Resource Management,* 14(4), 634-656.

19. Grolleau, G., Mzoughi, N., & Pekovic, S. (2012). Green not (only) for profit: An empirical examination of the effect of environmental-related standards on employees' recruitment.

Resource and Energy Economics, 34(1), 74-92.

20. Guerci, M., & Carollo, L. (2016). A paradox view on green human resource management: Insights from the Italian context. *The International Journal of Human Resource Management,* 27(2), 212-238.

21. Harmon, J., Fairfield, K. D., & Wirtenberg, J. (2010). Missing an opportunity: HR leadership and sustainability. *People and strategy*, 33(1), 16-21.

22. Hossain, M. I., Polas, M. R. H., Rahman, M. M., Islam, T., & Jamadar, Y. (2020). An exploration of COVID-19 pandemic and its consequences on FMCG industry in Bangladesh. *Journal of Management Info,* 7(3), 145-155.

23. Hossen, M.M., Ashadullah, M., .& Islam, R. (2018). Green human resource management practices in Bangladesh: A study on the banking sector. *The Jahangirnagar Journal of Business Studies*, 7(1), 81-98.

24. Hossen, M.M., Uddin, M.N., Hossain, A. (2014). E-commerce: A scrutiny about upgrading environmental commerce through securing environmental sustainability. *Bup Journal*, 1(2), 83-103.

25. Islam, M. A., Hunt, A., Jantan, A. H., Hashim, H., & Chong, C. W. (2020). Exploring challenges and solutions in applying green human resource management practices for the sustainable workplace in the ready-made garment industry in Bangladesh. *Business Strategy & Development,* 3(3), 332-343.

26. Jabbar, M. H., & Abid, M. (2015). A study of green HR practices and its impact on environmental performance: A review. *Management Research Report,* 3(8), 142-154.

27. Jabbour, C.J.C. (2011). How green are HRM practices, organizational culture, learning and teamwork? A Brazilian study. *Industrial and Commercial Training,* 43(2), 98-105.

28. Jackson, A., Boswell, K., & Davis, D. (2011). Sustainability and triple bottom line reporting– What is it all about. *International Journal of Business, Humanities and Technology*, 1(3), 55-59.

29. Jafri, S. (2012). Green HR practices: an empirical study of certain automobile organizations of India. *Human resource management*, 42(4), 6193-6198.

30. Jahan, S.S. (2014). Human resources information system (HRIS): A theoretical perspective. *Journal of Human Resource and Sustainability Studies*, 2(2), 33-39.

31. Johnson, R. D., Lukaszewski, K. M., & Stone, D. L. (2016). The evolution of the field of human resource information systems: Co-evolution of technology and HR processes. Communications of the Association for Information Systems, 38(1), 28.

32. Karande, S., & Bihade, V. (2018). Green HRM practices in corporate sectors for environmental sustainability. *International Journal of Innovative Science and Research Technology,* 3(7), 258-265.

33. Kazi, S. (2009). Managerial Decision-Making Behavior and Impact of Culture. Experience from Three Countries: India, Bangladesh and Finland.

34. Levine, D. S., & Strube, M. J. (2012). Environmental attitudes, knowledge, intentions and behaviors among college students. The Journal of social psychology, 152(3), 308-326.

35. Liebowitz, J. (2010). The role of HR in achieving a sustainability culture. *Journal of sustainable development*, 3(4), 50-57.

36. Liu, Y. (2018). Introduction to land use and rural sustainability in China. Land use policy, 74, 1-4.

37. Mahmood, A., Sandhu, M. A., Kanwal, S., & Iqbal, J. (2016). The Effect of Green HRM Practices on Sustainability: Evidence from Manufacturing Companies in Pakistan. *Pakistan Journal of Social Sciences* (PJSS), 36(1), 177-188.

38. Mampra, M. (2013, January). Green HRM: Does it help to build a competitive service sector? A study. *In Proceedings of tenth AIMS International Conference on Management* (Vol. 3, No. 8, pp. 1273-1281).

39. Masum, A.K.M., Bhuiyan, F., & Kabir, R. (2013). HRIS practices in universities: An exploratory study on the private universities in Bangladesh. *Global Journal of Human- Social Science Research*, 13(7), 25-29.

40. Masum, A. K. M., Kabir, M. J., & Chowdhury, M. M. (2015). Determinants that influencing the adoption of E-HRM: An empirical study on Bangladesh. *Asian Social Science*, 11(21), 117.

41. Masum, A. K. M. (2015). Adoption Factors of Electronic Human Resource Management (e-HRM) in Banking Industry of Bangladesh. *Journal of Social Sciences/Sosyal Bilimler Dergisi,* 11(1).1-6

42. Nijhawan, G. (2014). Green HRM-A requirement for sustainable Organization. *Paripex-Indian Journal of Research*, 3(1), 69-70.

43. Opatha, H.H.P. and Arulrajah, A.A. (2014), "Green human resource management: Simplified general reflections", *International Business Research*, Vol. 7 No. 8, pp.101-112.

44. Opatha, H.H.D.N.P. (2013). Green human resource management a simplified introduction, HR Dialogue, Department of HRM" Faculty of Management Studies and Commerce.University of Sri Jayewardenepura, 1(1), 22-41.

45. Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee-level study. *Journal of Business Ethics*, 121(3), 451-466.

46. Parry, E. (2011). An examination of e-HRM as a means to increase the value of the HR function. *The International Journal of Human Resource Management*, 22(05), 1146-1162.

47. Phillips, L. (2007). Go green to gain the edge over rivals. People Management, 23(9), 1-9.

48. Pillai, R., & Sivathanu, B. (2014). Green Human Resource Management. *Zenith International Journal of Multidisciplinary Research,* 4(1), 72-82.

49. Rahman, M. M., Uddin, M. J., & Rahaman, S. (2019). Work-family, family-work conflict and subjective well-being of commercial bank employees in Bangladesh: The moderating effects of organisational supports. *Advances in Management and Applied Economics*, 9(6), 77-96.

50. Rahman, M. M., Abdul, M., Ali, N. A., Uddin, M. J., & Rahman, M. S. (2017). Employees' Retention Strategy on Quality of Work Life (QWL) Dimensions of Private Commercial Banks in Bangladesh. *Pertanika Journal of Social Sciences & Humanities,* 25(2), 647-662

51. Rahman, M. M., Uddin, M. J., & Miah, M. S. (2013). The role of human resource management practices on job satisfaction and organizational commitment in banking sector of Bangladesh-A comparative analysis. *Journal of the Faculty of Business Administration JFBA), Islamic University Studies,* 10(1), 1-13.

52. Rahman, M., & Iqbal, F. (2013). Corporate social responsibility practices and private commercial banks: a case study on Bangladesh. *International Journal of Science and Research* (IJSR) 2 (1), 1-6.

53. Rahman, M.M., Ahsan, M.A., Hossain, M.M., & Hoq, M.R. (2013). Green banking Prospects in Bangladesh. *Asian Business Review,* 2(2), 59-63.

54. Ramus, C. A. (2002). Encouraging innovative environmental actions: what companies and managers must do. *Journal of world business,* 37(2), 151-164.

55. Renwick, D. W., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International journal of management reviews,* 15(1), 1-14.

56. Renwick, D., Redman, T., & Maguire, S. (2008). Green HRM: A review, process model, and research agenda. *University of Sheffield Management School Discussion Paper,* (1)1, 1-46.

57. Rodríguez, J. M., & Ventura, J. (2003). Human resource management systems and organizational performance: an analysis of the Spanish manufacturing industry. The *International Journal of Human Resource Management,* 14(7), 1206-1226.

58. Saeed, B. B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M. A. (2019). Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management,* 26(2), 424-438.

59. Sedgwick, P., 2013. Convenience sampling. Bmj, 347.

60. Stringer, K. (2009). Introduction to Green HRM: Review Paper. *Journal of Management Research,* 23(1), 671-700.

61. Strohmeier, S. (2009). Concepts of e-HRM consequences: a categorisation, review and suggestion. *The International Journal of Human Resource Management,* 20(3), 528-543.

62. Uddin, M.J., Rahman, M.M., & Rahman, M. (2020). Convergent Effect of Work Family Conflict on Job Satisfaction of commercial Banks Employees in Bangladesh: does gender role moderate the effect?., *Independent Business Review,* 10(1-2), 65-84.

63. Uddin, M. J., & Rahman, M. M. (2014, December). Measurement of Employees' Job Satisfaction on HRM Practices of Commercial Banks in Bangladesh. In Proceeding of 11th Asian Business Research Conference, BIAM Foundation (pp. 26-27).

64. Uddin, M. J., Miah, M. A. S., Rahman, M. M., & Rahaman, M. S. (2017). Mediation role of job satisfaction on hrm. Operational performance relationship: a three-way moderation effect by gender. *The Journal of Developing Areas,* 51(3), 437.

65. UN, 2019. Arrangements for capacity-building and technology transfer.Online Available at: https://sustainable development.un.org/ partnership/?p=28083. (Accessed on 12/11/2018).

66. Vahdati, S. (2018). Identifying the obstacles to green human resource management practices in Iran. *International Journal of Human Capital in Urban Management*, 3 (1), 9-18.

67. Zoogah, D. B. (2011). The dynamics of Green HRM behaviors: A cognitive social information processing approach. *German Journal of Human Resource Management, 25(2), 117-139.*