Revisiting the impact of green human resource management practices on the sustainable environmental performance: An emerging economy perspective

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Abstract
The study examined the Green Human Resource Management (GHRM) practices that are significantly influential to the sustainable environmental performance of organizations. The study employed a quantitative method to analyze data, collected from 143 HR professionals of different establishments from ready-made garments & steel industries in Bangladesh. The purpose of the study is to investigate the connection and impact of GHRM practices on organizational sustainable environmental performance, to an extent, to identify the degree of the factor's stimulus sustainability. Following previous works on this area, the study has revealed significant impacts of green reward & incentives, green training & development, green performance & management, and knowing green HRM, green organizational culture, and insignificant impact of green recruitment & selection on the sustainable environmental performance of organizations. The findings of the study might help HR managers and leaders in the organization by providing a constructive view of HR management practices. Furthermore, the contribution of this paper lies in enriching the scope and depth of green HRM in the emerging sustainable environmental performance of organizations.

Keywords Sustainability, Green HRM, Environmental performance, Ready-made garments, Steel industries, Bangladesh

Paper type Research paper

1. Introduction
Human Resource Management (HRM) in the 21st century seeks sustainable organizational growth rather minimal use of human resource to achieve superior profitability. Nowadays, most of the organizations incorporated green practices in their HRM functions to achieve the environmental sustainability, which is generally encompassed by governments, business leaders, consumers and communities (Jackson, Renwick, Jabbour, & Muller-Camen, 2011). In contrary, in the conventional views about the role of organization prioritize economic activity over environmental responsibility in environmental sustainability (Ones & Dilchert, 2012). In this age, green human resource management (GHRM) became the global
concern regarding environment-friendly performance in both, developed and developing countries (Sharma & Gupta, 2015). To deal with this quickly changing industrial world, must develop HR in conformity with the business strategies in the labor-intensive manufacturing companies (Ahmad, Khan, Abdullah, & Rashid, 2017; Chowdhury, Othman, Khan, & Sulaiman, 2020). However, very few organizations of Bangladesh concern about the GHRM practices in their organizations, where are 4560 garments factories & 400 steel industries doing their business. The previous study by Renwick, Redman, and Maguire 2008, identified that distinguished policies in the field of recruitment, performance and appraisal management, training and personnel development, employee relations, and reward systems are considered powerful tools for aligning employees with a company’s environmental strategy. GHRM depends on the unique and identifiable patterns of green decisions and behaviors of HR managers (Jackson, Renwick, Jabbour, & Muller-Camen, 2011). The understanding and studies on green HRM in recent years amplified by various contemporary scholars (Berrone & Gomez-Mejia, 2009; Jabbour, Santos, & Nagano, 2010; Massoud, Daily, & Bishop, 2008; Stringer, 2009). The literature has suggested, to improve environmental performance in organizations and several competitiveness dimensions, management and employee environmental training and awareness can simultaneously make it possible (Alberti, Caini, Calabrese, & Rossi, 2000; Bunge, Cohen-Rosenthal, & Ruiz-Quintanilla., 1995). GHRM is an environment friendly initiative that works ensure work efficiencies, lesser cost, and heightened employee engagement levels (Rani & Mishra, 2014).

The GHRM practices in ready-made garments and steel industries yet to be addressed intensively. This study discussed the impact of GHRM practices in achieving environmental sustainability, in addition to it has outlined the factors should be included in the HRM functions to create an environment friendly workplace. Prioritizing issues that may affect the organization adversely in achieving environmental goals that scrutinized identified the effects on the organization.

2. Literature review
2.1. Green Human Resource Management
Green Human Resources Management (GHRM) can be defined as the set of policies, practices, and systems that stimulate the green behavior of a company’s employees in order to create an environmentally sensitive, resource-efficient and socially responsible workplace and overall organization. In other words, GHRM is the use of policies, philosophies, and
practices of HRM to promote sustainable use of resources and prevent adverse impacts arising from environmental causes within business organizations (Zoogah, 2011). Human resource practices which consist of preservation of environmental management, whole execution and systems in the organizations that is required to achieve effective environmental performance of organizations (Jabbour & Santos, 2008), that the idea of GHRM refers developing human resource management practices regarding the environmental sustainability through increasing the employee’s commitment to the issues of environmental sustainability. These practices include functions have been practiced in nowadays organizations, these are recruitment and selection, training and development, reward and incentives, compensation, performance appraisal, induction aim to achieve organization goal of environmental sustainability (Khan, Ali, Arefeen, 2014; Khan & Jahur, 2007), also the statements supported by Renwick, Redman, and Maguire (2013) and added It has been proposed that green HRM can be measured by considering its multidimensional nature. In the empirical study conducted by Opatha and Arulrajah (2014) outlined that green HRM practices are imperative in organizations to reduce global warming, minimizing natural disasters avoiding informal, harmful and greedy usage of natural resources for production and consumption, resisting health diseases due to pollution, minimizing harms to lives in the earth by ensuring appropriate balance of relationships among plants, animals, people, and their environment, and through all of these ensuring sustainability of humans and business organizations for a prolonged period of time.

2.2. Green recruitment and selection
HRM practices can think of as required instruments for producing, fortifying, and sustaining employee actions in line with organizational capabilities or culture in group level job competencies or norms, and individual motivation, opportunity (Buller & McEvoy, 2012; 52). In creating an environmental oriented workforce, companies have two options: First is focused on green recruitment. Second is providing required environmental protection related awareness, education, training and development of the existing workforce (Arulrajah, Opatha, & Nawaratne, 2015). Among the various types of HRM practices, recruitment is that, organizations adopt to attract and increase the number of qualified applicants (Delery, 1998; Jiang, Lepak, Han, Hong, Kim, & Winkler, 2012; Khan, Hoque, & Shahabuddin, 2019). Green recruitment is systematic steps of recruiting new competent candidates who are aware of sustainable process, environmental schemes and familiar with words of preservation and ecological environment, world
renowned organizations (google, Timberland, yes) adopted the green recruitment process in their acquisition criteria (Bangwal & Tiwari, 2015). Recruitment in respect of greening, makes it sure that new talents are familiar with the green practices and environmental system that will support the effective environmental management within the organization (Wehrmeyer, 1996) regarding environmental performances, nowadays organizations are attracting new employees through the digital applications, separated in effective and ineffective recruitment process (Guerci, Montanari, Scapolan, & Epifanio, 2016). The recruitment websites of major European recruiter set significant outline on the environmental activity of the organization (Ehnert, 2009). To make sure improvement of environmental management systems, acquisition process should be designed containing enough information of environmental culture & values. Studies reveal that applicants are concerned about organizational practice & decision makings regarding sustainable organizational performance (Wehrmeyer, 1996; Stringer, 2009). The Chartered Institute of Personnel and Development (CIPD) believes in that becoming a green employer may improve employer brand value, Goodwill and is a useful way to attract potential employees who have an environmental orientation.

Hypothesis 1: Green recruitment & selection has significant impact on organizational environmental sustainability

2.3. Green reward and incentives
Offering reward and incentives to employees is one of the major practices in HRM, which influences individuals to be more likely to perform the task repeatedly with more enthusiasm. Regarding green practices, the organizational sustainability of the organization’s highly linked with green reward management practices of the organizations. Green reward management plays a significant role to motivate employees on corporate environmental management initiatives (Arulrajah, Opatha, & Nawaratne, 2015). There is a positive relationship between pay and rewards and environmental performance. Reward and pay system have encouraging impact on the productivity of the manufacturing industries (Masri, & Jaaron, 2017). Rewarding employees for their outstanding contribution towards the organization’s environmental performance, accelerate the goal achievement (Jabour & Santos, 2008; Jabour, & de Sousa Jabour, 2016), Also this practice can be used to inspire employees to share some innovative and green creative ideas relating to their individual jobs (Ahmad, 2015). Employees who contribute the most to environmental sustainability enjoy a different sort of
reward practices concerning the adaptation of new green skill. Money-based EM (Environmental management) rewards (bonus cash, premiums), and it has been discussed that sometimes employees may feel more driven by offering nonfinancial rewards through green pay and reward, such as recognition and praise (Jabbour & Santos, 2008; Jackson, Renwick, Jabbour, & Muller-Camen, 2011). Some well-practiced non-monetary based EM rewards (sabbaticals, leave, gifts), recognition-based EM rewards (awards, dinners, publicity, external roles, daily praise), and positive rewards in EM (feedback), All of these kinds of rewards have been practiced nowadays (Renwick, Redman, & Maguire., 2013) Incentives and rewards may be more powerful measures of aligning employees' performance with the firm's goals than other practices in the HRM system. However, in general, combining monetary and nonmonetary rewards are significantly effective in motivating employees, acknowledged by the most of the researchers (Jabbour & Santos, 2008; Renwick, Redman, & Maguire., 2013).

2.4. Green training and development
Training is a sequence of experiences or opportunities designed to modify behavior in order to attain a stated objective. Training and development aim at developing competences such as technical, human, conceptual and managerial for the furtherance of individual and organization growth (Khan & Ali, 2014, 2015). Green training & development is a series of actions that provoke employees to learn new skills of environment protections, also it focuses on environmental issues in the organization (Jabbour, 2011). Training and development deals with the improvement of employees' knowledge, skills then bring changes in attitude (Khan & Jahur, 2007; Khan, Ali, Arefeen, 2014; Uddin, Khan, & Solaiman, 2014). However, GTD focuses on conserve energy, reduce waste, diffuse environmental by educating employees about the value of environmental management (Zoogah, 2011). The organization should provide Training on necessary skills to achieve green goal, and develop employees for future requirement. This practice delivers training on green working method to engage employees in environmental problem solving (Zoogah, 2011). A green management system closely dependent on GTD, stated after a significant survey on 437 employees, conducted by Daily, Bishop, and Steiner (2007), another study says it has strong impact environment practices (Daily, Bishop, & Massoud, 2012), but one of recent studies says TD has least influence on green human resource management (GHRM) of organizations (Masri, & Jaaron, 2017). Hosain and Rahman (2016) suggested that TD process can be designed by incorporating programs, workshops, seminars, sessions and presentations.
aiming to enhance competencies and skills in environment management. In another observation is to achieve sustainability effectively in the organization GHRM should design training program concerning environmental awareness, attitudes, knowledge and values (Cherian & Jacob, 2012; Dumont, Shen, & Deng, 2017).

**Hypothesis 2: GTD has a positive relation with the environmental sustainability**

2.5. Green performance management and appraisal

Performance appraisal as the dimension of human resources which is used to analyze an employees' performance based on their responsibilities defined by Ivancevich (1995). Performance management is an enduring process of maintaining a communication between supervisor and an employee over the year to assist in organizational strategic goal achievement (Khan, Hoque, & Shahabuddin, 2019; Bangwal & Tiwari, 2015). Green performance management (GPMA) plays a very important role in the effectiveness of green management work over passage of time because they guide employee performance to the environmental performances need by the organization (Jabbour & Santos, 2008). Environmental performance standards and indicators have to be developed in PMS to supplement green HR practices (Mehta & Chugan, 2015). This can be initiated by linking performance evaluation to green goals and tasks specified in the job description (Mehta & Chugan, 2015). Total performance management system should be developed Considering Key Performance Areas (KPA) and Key Performance Index (KPI) to achieve environmental sustainability (Hosain & Rahman, 2016). GPM practices aim at make even the employees' behaviors with the organization's environmental goals (Govindarajulu & Daily, 2004; Harvey, Williams, & Probert, 2013).

2.6. Knowing on green HRM

Narrative of green HRM is still in an early stage with hypothesis about its effect on employee workplace outcomes (Dumont, Shen, & Deng, 2017). Green knowledge can lead to understanding and helping individuals to behave in particular ways, it can be learnt from mass media or environmental training and development resulting in better understanding of environmental impacts (Rayner & Morgan, 2018). Environmental knowledge (EK) denotes the knowledge and awareness about environmental issues and solutions (Zsóka, Szerényi, Széchy, & Kocsis, 2013). EK has a positive relation to green practices of organizations (Rayner & Morgan, 2018). A significant number of respondents agreed on the existing structure of job positions empower
the acquisition of knowledge about the environmental management programs inserted in some companies (Jabbour, 2011). EK and awareness is found to affect employee’s intentions to implement pro environmental practices (Safari, Salehzadeh, Panahi, & Abolghasemian, 2018).

Hypothesis 3: Sound knowledge on green HRM positively influence in achieving environmental sustainability

2.7. Green organizational culture and practice at work
Concerning sustainability, the HR department plays a significant role in developing a culture in organizations (Harmon, Fairfield, & Wirtenberg, 2010). Green culture means green values and people’s recognitions and evaluation about green environmental value (Margaretha & Saragih, 2013). The organization environmental culture can be considered as the set of assumptions, values, symbols, and organizational artifacts that reflect the desire or necessity of being an environmentally correct organization (Harris & Crane, 2002). Harris and Crane (2002) said an organization, promoting a green culture which must be supported by environmentally responsible beliefs, assumptions, and behaviors. Therefore, the organizations seem more attractive to skilled and efficient employees when it has an effective environmental management reinforced by strong environment friendly culture, managers appear to engage in more eco-friendly behaviors than non-managers, and the effect is even stronger for higher level leaders (Ones, Dilchert, Biga, & Gibby, 2010). Pro-environmental organizational culture be likely to be more powerful when the company has a team of environmentally attentive workforce (Fernandez, Junquera, & Ordiz, 2003). Green value of an organization develops, based on several features, for instance green knowledge, and awareness of human demonstrated actions to natural environment, in addition green enterprises, green products, green consumption, green environment, green trade, green life, green technology considered as green culture in this century (Li, Jin, Hua, Kong, & Lin, 2011). Culture is a crucial attribute of an organization which may provide competitive advantage to a particular firm in achieving sustainability (Barney, 1986).

Hypothesis 4: Green organizational culture has a positive relationship with environmental sustainability in organization

2.8. Environmental sustainability
As world economies and organizations transform to abate, diminish, and
neutralize their environmental impact and adapt to environmental sustainability, industrial and organizational psychologists are uniquely positioned to aid in these efforts (Ones & Dilchert, 2012). Sustainable development and sustainability are most commonly defined as meeting the needs of the present generation without compromising the needs of future generations (Sarkis, 2001). Regarding the sustainability, most of the organization have taken some initiatives, these are recycling, reducing the use of energy and natural resources (Accenture, 2011; SHRM, & Aurosoorya, 2011; Zibarras & Ballinger, 2011), and switching to environmentally responsible products or processes (D’Mello, Ones, Klein, Wiernik, & Dilchert, 2011). Several organizations are implementing recycling program as a part of green initiatives to increase the number of recycled products and reduction the amount of waste, in addition to have a measurable environmental impact, offices are conserve energy (Ahmad, 2015). The organizations around the globe are significantly opting for green building as their workplace and offices replacing traditional offices, green buildings include some improved features linked to green practices such as energy efficiency, renewable energy, and storm water management (Ahmad, 2015). Sustainable practices that assist in fixing a society more competitive including waste reduction, recycling, reuse and waste diversion are being continued after by more companies as they locate inefficiencies in their operations (Sarkis, Meade, & Presley, 2006) and it has become strategic weapon and a vital for most occupations in the twenty-first century and has become a fundamental market force affecting long-term financial viability and success (Preston, 2001). There are three steps to measure sustainability impact of firm, first one is environmental influence on land, air, water, and ecosystems what are most visible to consumer (being “green”). 2nd is economic impact in subsidizing to the feasibility of large economic system and 3rd one is social equity impact on the indigenous groups in which the firm operating business (Reilly & Weirup, 2012).

![Figure 1. Conceptual framework & model](image-url)
3. Methodology
The study requires a comprehensive survey, which conducted by a questionnaire containing 41 questions under six independent variables, and a dependent variable. This survey tried to reveal impact of these six independent variables (green recruitment, and staffing, green reward and incentives, green training and development, green performance management & appraisal, knowing on green HRM, green organizational culture) on organizational environmental sustainability. Survey methodology is one of the most implemented and effective methods of study (Khan & Ali, 2014, 2015; Veal, 2005), and survey research aimed at explanation asks about the relationships between variables (Pinsonneault & Kraemer, 1993). This survey went on 143 HR professionals in different organizations, the questionnaires were provided for themselves after describing research motive.

3.1. Sample and procedure
This study collected data utilizing an extensive questionnaire, developed focusing on HR professionals serving in ready-made garment factories and steel industries in Chittagong. The survey respondents are from large manufacturing companies, because of their sensitivity to environmental issues, also they are subjected to government rules as they have formalized HR practices (Guerci, Longoni, & Luzzini, 2016; Tzafrir, 2005). To collect data from the respondents continued for seven weeks of June & July, and the researcher conducted interviews by own selves. Most of the respondents from the participants of Bangladesh Institute of Management, employed as HR professionals in different organizations. 200 of hard copies of questionnaire were provided and received 167 of them, finally allowed 143 for the data analysis. The development was throughout the process, the study has maintained confidence and clarity in developing a questionnaire, provided autonomy with the understandable explanation of a research objective, motive, and meaning of every single section. There is a common phenomenon, if someone committed to the research, respondents will answer questions even when they have no knowledge (Baker, 2003). The participation in the study was voluntary, and no remuneration or incentives were being provided.

3.2. Measures
The measure of this quantitative data analysis questionnaire was adapted from the previous research work on Green Human Resource Management practices. This questionnaire is segmented in seven sections, six sets of questionnaires are on independent variables and another one is on
environmental sustainability performance, all of the sections of the measures were designed in 5-Point Likert Scale (1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree) and the dependent variable scale distributed in (1-Much worse, 2-Worse, 3-Neutral, 4-Better, 5-Much Better). The instruments were checked by veteran researcher and rectified following their instructions. The dependent variable 5 items questionnaire were adapted from Masri and Jaaron (2017), concerning environmentally sustainable performance, in the reliability test the value of Cronbach’s Alpha coefficient is 0.702. Cronbach's Alpha coefficient values of green recruitment & selection is 0.892, where the items were adapted from Jabbour, Santos, and Nagano (2010), Masri and Jaaron (2017). Seven questions were adapted in the section green reward & incentives from Arulrajah, Opatha, and Nawaratne (2015), Jabbour, (2011), Saeed, Afsar, Hafeez, Khan, Tahir, and Afridi (2019), Masri and Jaaron (2017), Cronbach's Alpha coefficient value is 0.903. In the section of green training & development, five items questionnaire were collected from previous work by Bangwal, Tiwari (2015), Cook and Seith (1992), North (1997), Renwick, Redman, and Maguire (2008, 2013) and reliability test values is 0.939. Measures of green performance appraisal & management adapted from the works done by Dumont, Shen, and Deng (2017), Masri and Jaaron (2016), Renwick, Redman, and Maguire (2008, 2013), in extent set of questionnaires Alpha value is 0.926. Saeed, Afsar, Hafeez, Khan, Tahir, and Afridi (2018) worked on knowing on green HRM, set of questions were adapted from Jabbour, Santos, and Nagano (2010), the Cronbach’s Alpha coefficient value of this set is 0.856. The set of questionnaires on green organizational culture adapted from Bangwal, Tiwari, and Chamola, (2017), these sets of measures reliability result is 0.834.

3.3. Data analysis and results

Table 1. Demographics

<table>
<thead>
<tr>
<th>Measures</th>
<th>Particulars</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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<tr>
<td>Current Position In Executive</td>
<td>74</td>
<td>51.4</td>
<td>51.4</td>
<td>51.4</td>
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<tr>
<td>Job</td>
<td>Assistant Manager</td>
<td>33</td>
<td>22.9</td>
<td>22.9</td>
<td>74.3</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>12</td>
<td>8.6</td>
<td>8.6</td>
<td>82.9</td>
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<tr>
<td></td>
<td>HR officer</td>
<td>24</td>
<td>17.1</td>
<td>17.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>143</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Last Achieved Bachelor</td>
<td>33</td>
<td>22.9</td>
<td>22.9</td>
<td>22.9</td>
<td></td>
</tr>
<tr>
<td>Academic Degree</td>
<td>Masters</td>
<td>110</td>
<td>77.1</td>
<td>77.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>143</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
exposed in the 4th hypothesis and supported by recent study piloted that is .000 < 0.05. This hypothesis also supported by Ramus (2002), Frick, significance is better than the other variables in this regard where the p-value As the study expected that Knowing on green HRM could play a vital backed by Ramus (2002) that the survey of managers, on best management Another hypothesis was on green training & development has a positive management practice. recruitment & selection practices can support to make effective in ensuring environmental sustainability. However, it may make may The results expose that green recruitment & selection is not adequately professionals in different organizational supported some of these achievement. Empirical study & intensive survey analysis on 143 HR culture has a positive impact on organizational environmental sustainability. The study has hypnotized that green recruitment & selection, green reward & incentives, green training and development, green performance management & appraisal, green organizational culture. The organization environmental culture can be considered as the set of evaluation about green environmental value (Margaretha & Saragih, 2013). Concerning sustainability, the HR department plays a significant role in 2.7. Green organizational culture and practice at work assumptions, values, symbols, and organizational artifacts that reflect the The organization environmental culture can be considered as the set of and Nawaratne (2015), Jabbour, (2011), Saeed, Afsar, Hafeez, Khan, Tahir, Dilchert, Biga, & Gibby, 2010). Pro-environmental organizational culture be considered as green culture in this century (Li, Jin, Hua, Kong, & Lin, 2011). The organization environmental culture can be considered as the set of evaluation about green environmental value (Margaretha & Saragih, 2013). Concerning sustainability, the HR department plays a significant role in Bartlett's Test is .845 that indicates adequate sampling (Cerny, & Kaiser, 3.4. Factor analysis The study assessed by the factor analysis (FA), at first the value of KMO and Bartlett's Test is .845 that indicates adequate sampling (Cerny, & Kaiser, 1977) with a significant value of Bartlett's Test of Sphericity (Chi-Square-144.494, p<0.05), that does mean there are significant correlation among variables and positively correlated to each other, expressed in the Table no. 2 and Table no. 3. Table 1 shows that most of the respondents are male, age range lies in 25 to 35. Comparing with others significant number of employees have completed their master's degree, near to half of respondents' length of services in the job above 5 years.

3.4. Factor analysis
The study assessed by the factor analysis (FA), at first the value of KMO and Bartlett's Test is .845 that indicates adequate sampling (Cerny, & Kaiser, 1977) with a significant value of Bartlett's Test of Sphericity (Chi-Square-144.494, p<0.05), that does mean there are significant correlation among variables and positively correlated to each other, expressed in the Table no. 2 and Table no. 3.

Table 2. Correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<td>Recruitment &amp; Staffing Function</td>
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<tr>
<td>Green reward &amp; Incentives</td>
<td>.702**</td>
<td></td>
<td></td>
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<td>Green training &amp; Development</td>
<td>.698**</td>
<td>.749**</td>
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<tr>
<td>Performance management &amp; appraisal</td>
<td>.752**</td>
<td>.794**</td>
<td>.795**</td>
<td></td>
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</tr>
<tr>
<td>Knowing on Green HRM Practices</td>
<td>.372*</td>
<td>.517**</td>
<td>.409*</td>
<td>.474**</td>
<td></td>
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<tr>
<td>Green Organizational Culture</td>
<td>.604**</td>
<td>.632**</td>
<td>.500**</td>
<td>.679**</td>
<td>.666**</td>
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<tr>
<td>Commitment to the Environmental sustainability</td>
<td>.070</td>
<td>.131</td>
<td>.067</td>
<td>.051</td>
<td>.467**</td>
<td>.310</td>
<td>1</td>
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**, Correlation is significant at the 0.01 level (2-tailed).
*, Correlation is significant at the 0.05 level (2-tailed).
The impact of green HRM performance on environmental sustainability
Multiple regression analysis is employed to analyze the impact of green human resource management practices on achieving organization environmental sustainability. In the Tables 5 & 6 show variation among variables is pretty bigger than the study expected where (0.145 > P). At least one of group in independent variables has more impact on the environmental organizational sustainability.

Table 5. Model Summery

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F</th>
<th>Sig. F</th>
<th>Durbin-Watson</th>
</tr>
</thead>
</table>

a. Predictors: (Constant), GC, GTD, GKG, GRS, GRI, GPMA
b. Dependent Variable: GEP
Green HRM and sustainable environment

Table 6. ANOVA analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>3.527</td>
<td>25</td>
<td>.588</td>
<td>1.756</td>
<td>.145b</td>
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<tr>
<td>Residual</td>
<td>9.375</td>
<td>117</td>
<td>.335</td>
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<tr>
<td>Total</td>
<td>12.903</td>
<td>142</td>
<td></td>
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</tbody>
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a. Dependent Variable: GEP  
b. Predictors: (Constant), GC, GTD, GKG, GRS, GRI, GPMA

Table 7. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>Sig</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.691</td>
<td>.784</td>
<td>2.156</td>
<td>.040</td>
</tr>
<tr>
<td>GRS</td>
<td>-.010</td>
<td>.171</td>
<td>-.016</td>
<td>-.059</td>
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<td>GRI</td>
<td>.034</td>
<td>.180</td>
<td>.055</td>
<td>.190</td>
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<tr>
<td>GTD</td>
<td>.150</td>
<td>.161</td>
<td>.045</td>
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<td>GPMA</td>
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<td>.200</td>
<td>-.378</td>
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<td>GKG</td>
<td>.504</td>
<td>.243</td>
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<td>4.075</td>
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<tr>
<td>GC</td>
<td>.159</td>
<td>.208</td>
<td>.209</td>
<td>2.766</td>
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</table>

a. Dependent Variable: GEP

The study conducted multiple regression analysis to predict $\beta_0$ (environmental sustainability), variability depends on + $\beta_1$ (green recruitment & selection) + $\beta_2$ (Green Reward & Incentives) + $\beta_3$ (green training & development) + $\beta_4$ (green performance management & appraisal) + $\beta_5$ (knowing on green HRM) + $\beta_6$ (green organizational culture). In the Table-7 the analysis shows there is a significant impact on criteria variable of GTD, GPMA, GKG, GC where the p values are (0.021, 0.010, 0.000, 0.020 < .05), values of weighted Beta 0.045, -0.378, 0.465, 0.209 respectively. In the contrary, there are no significant impacts of green recruitment & selection, green reward & incentives identified on environmental sustainability where values (0.053, 0.80 > 0.05) with Beta values are -0.016, 0.055 correspondingly.

4. Discussion

The study labored to identify the impacts of green human resource management practices on achieving organizational environmental sustainability, GHRM consists of green recruitment & selection, green reward & incentives, green training & development, green performance appraisal & management, knowing on green HRM, and green organizational
culture. The study has hypnotized that green recruitment & selection, green training & development, knowing on green HRM, and green organizational culture has a positive impact on organizational environmental sustainability achievement. Empirical study & intensive survey analysis on 143 HR professionals in different organizational supported some of these hypotheses.

The results expose that green recruitment & selection is not adequately effective in ensuring environmental sustainability. However, it may make may create a positive value of organization regarding green human resource management practice. recruitment & selection practices can support to make sure that new candidates are familiar with an organization's environmental culture and are capable of maintaining their environmental values (Wehrmeyer, 1996). The previous study, conducted by Grolleau, Mzoughi, and Pekovic, (2012) reveals that the environmental criteria of a company for the recruitment of an employee enriches the profile of a company's environmental commitment.

Another hypothesis was on green training & development has a positive impact on environmental sustainability, then the study found a significant relationship between these variables, the green training & development greatly stimulus in environmental sustainability achievement. This statement backed by Ramus (2002) that the survey of managers, on best management practices concluded by stating that it has significance in HRM processes along with a amid green culture that facilitates the achievement of environmental goals. In extent, Sarkis, Gonzalez-Torre, and Adenso-Diaz (2010) emphasize that training plays a crucial role in building organizational capacities and competency of the workers, qualifying employees to understand how the environment will affect and is affected by their duties and decisions.

As the study expected that Knowing on green HRM could play a vital role in the environmental performance in the organizational sustainability achievement, the statistics and study also support the statement. That shows significance is better than the other variables in this regard where the p-value is .000 < 0.05. This hypothesis also supported by Ramus (2002), Frick, Kaiser, and Wilson (2004), and the recent study conducted by Afsar, Badir, and Kiani, (2016) evident that collaboration of environmental knowledge with green HRM practices is expected to increase employees' participation in environmentally friendly behaviors.

Lastly, the study found that organizational culture has an impact on sustainable environmental performance at a significant level. This outcome exposed in the 4th hypothesis and supported by recent study piloted that
organizational culture recognized as a more powerful factor in employees’ participation in improvement in the environmental management in organizations (Rothenberg, 2003). In extent Margaretha and Saragih (2013) has underlined that organizations initiating greener corporate culture, concentrating on environmentally sustainable business practices resulting in greater efficiencies, creating an atmosphere of better employee engagement in an economic way.

The result shows that the green reward & incentive doesn’t influence in a significant way, but the practice may inspire employees to contribute to sustainability achievement. However, green performance management & appraisal effects considerably. Considering necessity Ahmad (2015) recommended that human resources departments should incorporate a performance appraisal system to be able to evaluate employees on their competencies related to environmental sustainability.

5. Implications
5.1. Theoretical application
Considering the concurrent reality, green human resource management practice becomes the contemporary global issue (Norton, Zacher, & Ashkanasy, 2014). This study has identified some of the crucial aspects of environmental performance in the organization to achieve sustainability. Theoretically, this study will help to emerge to corporate leaders to develop plans, policies, and strategy to train employees of organizations, in extent it will help to have a transparent notion enduring practice and they require practice to face imminent challenges. A growing number of researchers (e.g., Jackson & Seo, 2010; Kumari, 2012; Renwick, Redman, & Maguire 2013) has suggested that organizations should incorporate green practices to effectively and successfully implement organizational green policies. This empirical study successfully reveals the correlation between factors that may affect environmental sustainability, also identified the degree Influence of green recruitment & selection, green reward & incentives, green employee management & performance appraisal, green training & development, knowledge on GRHM & green organizational culture. In the process of the study engaged HR Professionals who are the key partner of these changes that helps to get a perception. In essence, this empirical study would be the outline for the stakeholders of this issue.

5.2. Practical implications
This research has noteworthy practical implications for human resource management practices, this study reveals key factors that should be adopted
by organizations to respond to the emerging environmental issues. This empirical study assesses stimuli of green practices on environmental performance and found green training & development, knowing on green HRM, and green organizational culture effects organizations considerably. Organizations outlined the significance level of green practices and identified organizations require to bring changes in the training & development procedure incorporating holistic environmental aspects, with the aim of employees stay prepared to meet the current & future needs to achieve organizational sustainability. In extent, it has discussed the role of green environmental culture in achieving sustainability, what can organizations develop by imposing new rules & regulations with an integrated employee orientation regarding greening.

Our study also deals with the factors may affect sustainability and found, having sound knowledge of GHRM among employees another precondition of environmental sustainability achievement, where study got most of the HR professionals are aware of the greening & performance of those firms comparatively better in this regard. However, green recruitment & selection procedure helps to build an image of the firms towards newcomers that may attract competent candidates to make choice based on environmental concern. Most importantly, the green performance management & appraisal system helps to manage employees by environmental goal where green reward & incentives system motivates to be more efficient in the workplace. The study has revealed, environmentally concerned organizations already incorporated these parameters in their organization.

In essence, this study is a vibrant framework for the policymakers, leaders, and managers in setting an action plan to deal with the approaching challenges, and the factors discussed in this research would be great weapons in the environmental goals achievement.

6. Limitations & directions for future research

The research is not free of Limitations. Firstly, respondents are from ready-made garments and steel industries that may the reason of not reflecting overall scenario of green HRM practices. A future researcher can work on this area in other sectors comparing this extent. Besides, this study may be influenced by demographic & cultural factor, because process went on the perspective of Bangladesh. The research can get biased partially through the possible bias and respondents also may biased that the researcher may carry (McKinnon, 1988). This empirical study just worked on some of variables where other variables are also important in this area, and future study has opportunities to work with more variables considering
across the practices of green human resource management in developed and underdeveloped countries.

References


Green HRM and sustainable environment 143


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