

# Effects of Green Human Resources Management on Firm Performance: An Empirical Study on Pakistani Firms

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## Abstract

The present study aims to investigate the impact of Green Human Resource like green recruitment, green training and development and green learning on the Firm Performance in Pakistan. Responses are gathered from 376 Pakistani firms. The HR Managers provided the information regarding green HRM in their firms. All the responses were collected on five point likert scale using a close ended questionnaire. The data was analyzed using SPSS. Multiple regression analysis is applied to test the effect of green HRM variables; green recruitment, green training and development and green learning on firm performance. The result indicates that all variables significantly affect the performance of the firm. The results are very useful for HR department and top management to develop their policies of green HRM. Future research can be conducted on other functions of HRM and its relation with employees and firm performance.

**Keywords:** green human resource mangement, firm perfomance, green recruitment, green tranining & development, green learning

## Introduction

Environmental performance is concern with the degree of protection for natural environment in terms of output of the firm. The environmental protection and environmental performance of the firm can be measure by number of activities performed by the firm in the domain of waste management, pollution control systems, recycling and mitigating environmental releases (Lober 1996). The rise of sustainable development by the mean of environmental management, green human resource management (GHRM) is becoming most important and critical area of research in contemporary research issues. GHRM is not only dealing with environmental issues but also it take in to account the development of economic and social wellbeing of the humans in real life. The paradigmatic comprehension of “triple-bottom-line” concept is supported by the green HRM. The field of GHRM is emerging research area (Renwick, Redman, & Maguire, 2013) and it deals with the policies and practices in line with the social, economic and environmental issues, which constitute the three pillars of sustainability (Muster & Schrader, 2011).

There is a significant gap in literature in terms of GHRM as the previous studies are found only in European organizations, so it is a potential research topic for emerging and developing countries. As an area of management research, GHRM is an emerging issue in management, but unfortunately there is scarcity of research in this area that shows an imbalance in industrial problems, emerging trends and academic research. The literature gap exist in the form of the coverage of GHRM, models of GHRM, and scope of GHRM (Muster & Schrader, 2011).

Currently, business organizations are focusing on environmental management and green management and including these areas as a part of their organizational policy and strategic goals. Due to the fact of globalization of corporate world, the economy has shifted from traditional financial and economic system to more up to date, modern and capacity based economic system. This take into consideration of green management and green economics (Ahmad, 2015).

The focus of current organizations are green human resource management, where human resource department is engaging in greening the culture of the organizations by maintaining green offices and green practices. In order to achieve organizational environmental goals of going green, green HRM is very vital factor. This can be achieved by hiring and maintaining green employees, having sufficient knowledge and skills of green employees (Ramus, 2002; Sudin., 2011). So there is a research gap in this particular area in terms of knowing the green competencies and skills to be possessed by the both green employees and green management. This gap in literature necessitates the research to be conducted in this area. Hence, the aim of this paper is to highlight the importance of greening the human resource management and investigate the effects of green human resource management on firm performance from Pakistani firms’ perspective and further more to examine the effect of green learning and, training and development on firm performance in Pakistan.

## Literature review

The GHRM is relative new concepts for academicians, professionals and many other people who are not well aware about this concept. The GHRM was introduced by Wehrmeyer (1996) in his book, where he define GHRM as

*“Green HRM is the use of HRM policies to promote the sustainable use of resources within organizations and, more generally promotes the causes of environment sustainability”* (Marhatta & Adhikari, 2013).

The sustainability and environmental issues are becoming the critical factor of HRM practices, but there is less evidence in the form of literature and academic research. The HR practices must be align to environmental and sustainability issues in order to get competitive edge and achieve environmental sustainability of the organization (Ulrich, Brockbank, and Johnson, 2009). Human resource management practices are one of the main factor in achieving green organizational goals and sustainable performance. The overall HRM practices such as, training, selection, recruitment, compensation are aligned to green practices Cherian and Jacob (2012). The green performance can be achieved by ensuring green process in HRM practices from selection of green employees to compensation of green employees, thus organizational green performance can be delivered (Opatha & Arulrajah, 2014).

Scholars in the field of research are focusing on Green HRM and green practices (Berrone & Gomez-Mejia, 2009; Jabbour, Santos, & Nagano, 2010; Massoud, Daily, & Bishop, 2008; Renwick, 2008; Stringer, 2009). The decisions and behavior of human resource executives is reflecting the green HRM practices and organizational sustainability performance (green signatures; Jackson, Renwick, Jabbour, & Muller-Camen, 2011). Environmental management system (EMS) is necessary for the organizations to design and develop corporate environmental strategies and to achieve the environmental goals (Haden et al., 2009). Researcher believes that human resource management and practices are very effective tool for developing human capital, which can be transformed into organizational development and sustainable performance and give competitive edge in the industry (Boselie, Paauwe, & Jansen, 2001). Renwick 2008 concluded that HRM plays an important role in achieving organizational environmental objectives by involving employees (Renwick, 2008). In order to implement green HRM, employees need technical and management skills (Daily et al., 2007; Unnikrishnan & Hegde, 2007). Some researcher argue that implementation of green HRM requires the development of new tools and techniques related to environmental management, which enhance organizational environmental and sustainable performance and give competitive edge (Hart, 1997; Lin, Jones, & Hsieh, 2001). The framework of green HRM is added up to HRM practices in recruitment (Grolleau, Mzoughi, & Pekovic, 2012), performance management (Jabbour, Govindan, Teixeira, & Freitas, 2013, green culture in organization (Jabbour et al., 2013) training and development (Unnikrishnan & Hegde, 2007). This framework incorporate green culture in the organization and it is linked to organizational environmental policy and strategy in order to achieve green standard. The above literature discussed that whatever the tool is applied for going green it is important to link HRM practices and functions with green management in the corporation.

Primarily this study concentrates on the effect of HRM practices on firm performance from Pakistani firm's perspective. Green human resources refer to using every employee touch point/interface to promote sustainable practices and increase employee awareness and commitments on the issues of sustainability (Mandip, 2012). Human resource department make it possible to incorporate environmental responsibility in their mission statement. Green HRM develop employees for adopting green culture and understanding green culture, which they can practice in in their private life (Muster & Schrader, 2011).

## Recruitment

The most challenging issue face by HR managers is to hire and sustain highly skilled and professional employees in global environment. MNCs are now market themselves as Green HRM practioner in order to attract highly skilled and talented employees, who also have a great knowledge and understanding of green practices and sustainability issues (Ehnert 2009). On the other hand job seekers also making themselves prepare according to international standards of green culture and try to possess the skills required as green employees. Employees also prefer those organizations which have concern about environment and socially responsible. According to research findings of Wehrmeyer, 1996 and Oates, 1996, in UK, employees and job seekers decision of joining a particular job or not heavily depends upon the organizational reputation in term of environmental policies and environmental protection. Accorind to research findings of The Chartered Institute of Personnel and Development (CIPD), organizations can attract and sustain reputed and good profile employees by marketing them as environmental protecting organization and environmental sustainable organizations (CIPD, 2007). The environmental performance of the organization is affected by recruitment of green employees and following green recruitment process in recruitment. The human resources must be made green first in the organizations in order to show high environmental performance.

### **Training**

The second key element of HRM is training, which make employees to learn about environmental issues and linking organizational practices to green practices. It make them enable to use their work related skills according to green standards (Bansal and Roth 2000). These skills include mitigation of wastage (May and Flannery 1995), and expertise in environmental protection and environmental literacy (Roy and Therin 2008). Front line employees are dealing with data management, and these trainings give them managerial skills of waste management in their routine activities. There exist direct and significant relationship between training and development and organizational performance, due to the fact that these trainings and development develop skills and knowledge of employee, which can be translate to achieve organizational goals and to achieve its sustainable performance. The skill development along exploratory learning leads to innovations in an organization (Zakaria, 2012).

Renwick et al, (2008 and 2013) recommended some suggestions trainings for the development of employees and making them green. These training programs include green analysis of workplace, job rotations for potential green managers within the organization, environmental management trainings and programs, trainings on recycling, waste management, energy efficiency and safety, and training of frictionally unemployed people.

### **Learning**

Another area of research is finding hurdles and problems in implementing successful environmental training programs. There are number of factors which leads to failure of environmental training programs. These may include unwillingness of the trainer on the issue of green environment, inefficient demand and need analysis, lack of perceived or actual commitment to training objectives in top management, leadership and even in employees (Wehrmeyer & Vickerstaff, 1996). Low training willingness is one of the major issue of research, as several studies suggest that if the problem of low readiness exist in training it will adversely affect the training outcome, whereas, learning opportunities were found effective whenever there is a high motivation psychologically acceptance of trainings from the employees (Goldstein & Ford, 2001). Therefore, environmental training initiatives can be improved by incorporating effective environmental learning readiness assessments. However, research is needed on the assessment of individual green environmental readiness and ways to enhance learning readiness for employees.

### **Firm performance**

The resource base theory view (RBV) explains that synergy is created by synchronizing organizational resources, in order to gain competitive advantage and become market leader (Ployhart, 2012). The degree of success to implement environment friendly programs by the organization is an indicator of environmental performance leading to reduce the negative effects of manufacturing processes on the environment (Wong et al , 2013).

The combination of Strategic HRM and environmental sustainability is addressing a critical problem of the global world (Jackson & Seo, 2010). The organizational performance can be enhanced and improved by the implementing the green practices in human resource management in the form of green recruitment and selection, green trainings and developments, and green learning programs. Although, the significance of HRM practices for better environmental results are focused in contemporary research (e.g., Jackson et al. 2011; Jackson and Seo 2010; Renwick et al. 2013), but, research in this issue is still not very sophisticated.

Paillé (2014) found that there is a direct and significant relationship between HRM practices, environmental performance and organizational performance. Therefore, an organization having strong HRM will have better firm's performance due to the fact that its environmental strategies are in line with HR activities.

Based on the literature review the following hypotheses are tested in this research:

**H1:** Adopted green recruitment by Pakistani firms will enhance the firm performance

**H2:** Adopted green Training and development by Pakistani firms will enhance the firm performance

**H3:** Adopted green learning by Pakistani firms will enhance the firm performance

### **Research Methodology**

In order to develop objectives of the research a comprehensive literature reviewed was conducted. The objective of literature review was to understand the possible relationships between green human resources management and organizational performance. On this basis we have developed the hypothesis, and a methodology was designed to test the hypothesis by using multiple-regression analysis in SPSS. We developed a close end questionnaire to collect primary data regarding green HRM practices and firm performance.

The questionnaire is divided into two parts, the first part contain the demographical profile of the respondents including, gender, age etc. The second part consisted of questions regarding Green HRM practices and firm performance using the interval scale with five-points from strongly disagree to strongly agree. The total 500 questionnaires were sent to collect the responses however the completed questionnaires were 376 with the response rate of 75%.

## Results and Analysis

### Reliability Analysis

Reliability analysis was conducted to examine the internal consistency of each measure by analyzing the Cronbach's Alpha coefficients. According to Malhotra (2004), the ideal scale is above 0.7. The results of the reliability tests conducted for each construct were summarised in Table below.

Construct	Cronbach's Alpha	No of Items
FP	.816	5
REC	.900	4
TnD	.818	5
LR	.829	4

It can be observed from the reliability statistics table above that the Cronbach's Alpha varies between the range 0.818 and 0.9. This shows high consistency among the items of the construct. Since all items are considered useful and reliable for computing scales, no items were being deleted.

### Correlation Analysis

	REC	TnD	LR
FP Pearson Correlation	.623**	.718**	.711**
Sig. (2-tailed)	.000	.000	.000
N	376	376	376

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result of the correlation analysis shows that all three independent variables are highly significantly correlated with the dependent variable. Table indicates the relationship between recruitment and performance with the values ( $r = .623, p < .01$ ). The relationship between training and performance is ( $r = .718, p < .01$ ) and learning is associated with performance having the values ( $r = .711, p < .01$ ).

According to the strength correlation table by Cohen (1988), the associations of all independent variables say recruitment, training and development, and learning with the performance are strong as all correlation coefficients were higher than 0.5.

To further test the hypotheses, multiple regression analysis was conducted to predict the relationships between the variables, based on the relationships that exist between the variables. This method specifically examined how the three independent variables are related to the dependent variable.

Regression Analysis of green HRM on Firm Performance				
Independent Variables		Coefficients	t-stat	P-value
Recruitment		.193	2.858	.005
Training and development		.271	3.619	.000
Learning		.388	5.629	.000
<b>R-square</b>	<b>0.603</b>			
<b>Adjusted R-Square</b>	<b>0.597</b>			
<b>F-statistics</b>	<b>107.627</b>			
Dependent Variable: Firm Performance				

From the regression Table above, it can be observed that the R-square value is 0.603, which means that the independent variables (i.e. recruitment, training and development and learning) explain 60% of the variance (R Square) in firm performance. The R value signifies the dependent variable quality of prediction. It represents the multiple correlation coefficients. The higher the value of R, the more closely related the independent variables towards the dependent variable. From the table above, it can be said that the R value was observed to be 77.6% and indicates the F-value of 107 with  $p\text{-value} < .01$  showing the overall significance of the model as shown in Table.

It can be observed that the variable Learning reported the highest beta value 0.388, as well as a significance value of 0.000. The higher the score on this scale signifies a higher effect on the firm performance.

The variable recruitment was observed to have a beta value of 0.193, with a p-value of 0.005. The variable training and development on the other hand revealed that the beta value 0.271, with a p-value of .000. This shows the variable training and development is observed to be statistically significant towards firm performance. All the dependent variables are having significant positive relationship with the firm performance.

The summary of the hypotheses testing is tabulated in Table below.

### Summary of hypotheses

Hypothesis	Determinants of firm performance	Findings
H1	Recruitment	Positive and statistically significant
H2	Training and development	Positive and statistically significant
H3	Learning	Positive and statistically significant

### Discussion

The purpose of the study was to find the relationship between green human resources management and firm performance. We conducted this research from employee's point of view to find the relationship between GHRM and firm performance, considering all the HRM practices, including, recruitment, selection, training and development and learning. We hypothesized the significant relationship among these variables and our hypothesis have been accepted in the analysis. This research has filled the gap between Green HRM and firm performance. As hypothesized, we found positive relationship between recruitment and organizational performance. Same positive and significant relationship was also found between training and development on organizational performance. Additionally, we found that learning has significant impact on organizational performance in green HRM. Our findings contribute to the literature in three important ways. We found the relationship between green HRM and firm performance, which is found rare in literature. Hence, our analysis and findings contribute to the new dimensions of HRM practices and environmental performance. More specifically, the findings indicate that firms can improve performance by adopting GHRM.

Based on data collected from Pakistani companies, the present paper empirically tests and confirms the claim that a firm's GHRM practices contribute to the improvement of performance.

We found that by aligning the HR function to organizational environmental policy, the organization can achieve superior performance. This potential positive role of green HRM was first introduced by Daily et al. (2009), as discussed in the literature. Current research in this area advise that volunteerism and discretionary role of employees in environmental initiatives is a best tool for achieving organizational long term environmental sustainability performance (e.g., Boiral and Paille', 2012; Daily et al. 2009; Ramus and Killmer 2007). This contribute that green behavior of employees in work place is a critical factor in achieving organizational green policy and better performance. These finding also found in literature like, Jiang and Bansal, 2003 found that efficiency of EMS heavily depends upon the working and skills of frontline employees. Other researchers also found that same finding in term of green HRM practices and firm performance, like Jabbour et al. 2008, 2010, found the significant relationship between EMS and Green HRM practices.

### Conclusion

The concept of green HRM is still new and at its infancy stage, but organizations have started realizing the importance of these practices and aligning their strategic goals to environment-friendly HR practices. These organizations are focusing on waste management, recycling, and using green products for the organizations. Majority of the employees prefer those organizations which are ready to go green and practices green HRM. Their job satisfaction and work commitments of employees is also very high in those firms where green practices are carried out at organizational level. The effects of GHRM practices are complex and need constant monitoring to recognize their potential impact on HRM issues. The most critical phase for HR managers is to define the scope and depth of green practices in their organizations, when deciding for going green, which lead the organization to set its goals and strategies related to green practices. HR practices ranging from recruitment, training, and learning play a vital role in achieving high environmental performance in the organization. Green HRM practices are very crucial for selection and sustain green employees for innovative behavior and attitude as a green employees. The organization cannot achieve or sustain sustainable environmental performance without proper green HRM practices.

### Limitations and Future Research

There are many limitation of this study which can be used as a future research. We employed subjective measure of organizational performance rather than actual performance measures. No doubt in literature there exist subjective measures of performance in management research (Ketokivi and Schroeder 2004), but still there can be differences in subjective measures and actual measures of performance. Future research can be conducted considering objective measures or actual measures of the organizational performance. The second limitation is that this study is based on employee's perspective of green HRM practices and organizational performance, considering recruitment, training and development and learning. The future direction of research can be a combination of both employee's perspective and strategic perspective, as strategic or managerial perspective in order to draw more comprehensive effect of green HRM on organizational performance. Additionally, future studies scan take into account other practices of HRM along with three practices that we have used in our study, to know the most important and critical practices for green HRM and environmental performance. This study is



dealing with one point of time, future studies can be done on longitudinal time. Finally, we examined the unique institutional environment in Pakistan. This may limit the generalizability of our conclusions on institutional effects, though Pakistan is one of the developing economies and has the potential to tap into the global business world.

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