
The Impact of Green Human Resource Management on Organizational performance: A Case of Manufacturing Industry

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ABSTRACT

Keywords:

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. The study aims to investigate the impact of perceived green human resource management on organizational performance. The data were collected through a structured questionnaire from 198 human resource personnel of manufacturing firms operating in the industrial area of Khyber Pakhtunkhwa (KP). The data were analyzed using the SPSS software package. The results indicated that there is a positive impact of green recruitment & selection on organization performance. Likewise, green pay & rewards and green involvement have positively predicted organization performance. on firm performance. However, green performance management recorded negative and green rewards have no impact on organization performance. The study has significant implications for academic and industrial practitioners regarding the implementation of green human resource management and organization performance. The study also fills the gap and provides social implications.

INTRODUCTION

Considering the damaging effects caused by industries in terms of pollution, toxic chemicals, and other waste materials, certain rules and regulations are being promoted by NGO's as well as government to avert the destruction of natural resources and their negative effect on the living beings, communities and society at large (Christmann & Taylor, 2002; Yong, Yusliza, Ramayah, & Fawehinmi, 2019). The authors further noticed that there is an increased concern for climate change by the world economies and almost all the sectors including business organizations (Abbott & Wilson, 2014). Specific treaties have emerged showing significant interest in environmentalism around the globe to combat climate change (Shah, 2019a; Shi et al., 2012). In this regard, both strong leaderships, as well as the concrete process, is required so that the corporate strategies concerning sustainability may be implemented successfully.

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Issues regarding sustainability are moving up quite fast on the priority list of leaders of corporations as the concept of “Green” has been incorporated into the corporate strategy but still, most of the practitioners are not comfortable with the human resource topic. Human resources are an important and valuable asset of a corporation that is dealt with by the human resource function of management. The concept of sustainability is applied to the context of HRM. Expanding the proposition, the most vital element of the concept of sustainability is Green HRM.

This paper inclusively focuses on green HRM which is considered responsible for environmental management within the organization. Green HRM has defined the use of HRM policies so that resources may be encouraged to be used sustainably and the cause of environmentalism may be promoted so that the morale and satisfaction of employees may be further boosted up (Mampra, 2013). Green HRM is described by others as using HRM policies, procedures, practices, and philosophies so that business resources may be promoted in a sustainable way (Deshwal, 2015). The wider programs adopted as corporate social responsibility are enhanced by green initiatives that are taken within the HRM unit. Green HRM comprises two major essential elements i.e. environmentally friendly HR practices and knowledge capital preservation (Mandip, 2012; Pham et al., 2019). Within a corporation, the basic foundation for any business is formed by the HR systems. Eco-friendly practices and policies have to be planned and executed by the business entities as their responsibility so that a green environment may be created. It is also argued that going green would be quite difficult without providing facilitation to human resources and the implementation of sustainable procedures and practices. By focusing on the contextual aspects of the study very little work has been done in the context of Pakistan concerning its practical implications that may help the organizations to get sustainable through green HRM practices (Shah, 2019b). The study has also practical implications for the top management such as policymakers of the companies, the security exchange commission of Pakistan (SECP) to incorporate green practices in business operations of Pakistani firms.

LITERATURE REVIEW

Green HRM

Green HRM creates a green workforce which in turn promotes a green culture within an organization. Moreover, green objectives can be achieved by practicing green initiatives through the entire process of recruitment, selection, training and development, compensation, and employee relation (Dutta, 2012; Shah, 2019a). A significant role is played by the HR department of a company for the establishment and development of sustainable culture within an organization (Linnenluecke & Griffiths, 2010). The

policies relevant to green HR are translated into practice by the HR processes (Pham et al., 2019; D. Renwick et al., 2008). Thus, the importance of human capital cannot be denied for the fulfillment of objectives related to corporate sustainable development (Sudin, 2011). It is mentioned that the process of recruitment, selection, compensation, and employee involvement is detrimental to the success of a company (Delaney & Huselid, 1996). Consequently, organizational change can be realized by the HR function. An acknowledgment is needed that in such a rapid development era, new areas include the intersection of sustainability and HRM. But the certain developed body of writings could not characterize it as stated by (Jackson et al., 2011). It is pointed out that the alignment of HR systems is required so that organizational strategies may be implemented successfully. It has been identified in the study conducted by (Cherian & Jacob, 2012) that a contribution is made towards implementing management principles based on green initiatives by focusing on human dimensions i.e. employee orientation, motivation, recruitment, and rewards, etc. It has been found that modification of HRM functions is required to get the right individuals for green performance (Opatha & Arulrajah, 2014). The Green HRM practices are become an important driver for corporate sustainable development within the organization by aligning integration such as top management commitment and ethical leadership (Aykan, 2017).

Green HRM Practices

Green HRM and Organization Performance

Green Recruitment and selection: One of the key challenges HR faces today is to get hold of high-quality staff (Renwick, Redman, & Maguire, 2013). Recruitment and retention are the most vital aspects of HR and sustainability as argued by (Holtom et al., 2008). The organizations get reputed for green management through consistently following environmental activities such as corporations like Siemens, BASF, and Bayer. Environmental concern and interest of prospective candidates are considered by organizations while selecting them for the vacant positions through a process wherein the candidates are evaluated also on environmental issues besides other job-related assessments. These represent some of the good green practices regarding the selection of candidates that can be adopted by any organization for the selection of environment-friendly people along with following the selection criteria that are formally adopted and that relates to specific job duties being considered.

Green Training and Development HR practices cater to different training needs of the employees including the development of their knowledge, skills, and attitudes and at the same time prevent the

deterioration of skills and attitudes that are related to environmental management (Jackson et al., 2011).

Green Compensation Employees are appreciated and encouraged on attaining good performance through reward and compensation. This is the practice whereby the interests of the organization can be aligned with the interests of individuals in an organization. Similarly, in green HRM, the rewards and compensation are considered as essential tools by which environmental activities are encouraged in organizations.

Green Performance Management One of the most important dimensions of performance management is performance appraisal. Employees respond through their valuable input during the process of performance appraisal on the environmental outcomes of the organizations (Jackson et al., 2011).

Theoretical framework

The theoretical framework of this study is underpinned using the RBV theory. The logic of RBV theory has been mostly used or implemented in the strategic management and related fields. In which the most important field is the human resource management. The studies in different settings examine how different types of functional resources affect the performance of the company in ways that are compatible with the intestines of RBV. This RBV theory suggests that firms should have socially complex and capable resources to achieve sustained competitive advantage (J. B. Barney & Clark, 2007). As human resources are socially complex that is why no need to surprise that most of HR theorist used RBV to examine the impact of human resources on organization performance (Wright & McMahan, 1992), for the effect of forming substantial firms-pacific humanoid capital investments (Becker & Huselid, 2006) to enhance the understanding of critical human aspects when accepting new organizational practices (Wright et al., 1994), for the improvement of organization performance (Delaney & Huselid, 1996), and to maintain the competitive advantage of companies which will not easy for competitors to copy (Barney & Barney, 2016).

Green HRM and Organization Performance

This research is based on the resource-based theory (RBV) of a firm. With the help of RBV organizations reinforce competitive advantage by establishing strategy and core competencies that are considered as intermittent, exceptional, and which are not substitutable or transferable (J. Barney et al., 2001). These core competencies and resources determine and indicate organizational performance and success. Organizational strategies are their exceptional abilities which are in addition to their tangible resources, human resource, and organizational symbols or goodwill, and technological savvy. The abilities and

competencies of organizations are inevitable and which are exposed to the environment in which organizations not only operate but also get influenced. The organizations are under constant burden both from inside and outside to adjust their business practices with environmental sustainability issues and to achieve green goals. Owing to the importance of environmental issues by customers, stakeholders, competitors, employees, government organizations, and environmental agencies, the firms are forced to signify and consider the importance of environmentally responsive business operations. This has resulted in blending the business practices and operations with environmental sustainability such as producing green products, implementing green supply chain management and green technologies.

RBV aims at complete coordination and harmony among different organizational resources to achieve synchronization and which turns into getting the ultimate competitive advantage and to lead the market (Rothenberg et al., 2017). Organizations that engage in environmentally friendly practices through the implementation of modified programs are more likely to achieve success and to decrease the adverse impacts of the production of products on the environment. Strategic human resource management together with sustainability practices relating to the environment results in achieving critical issues in the world. The business organizations can achieve optimal performance through the implementation of green human resource management in different areas like green training & development, green learning, the green process of hiring, and induction. Though contemporary research has focused on the importance of human resource management practices in favor of environmental sustainability (Renwick, Redman, & Maguire, 2013b), however, the studies on this count are not yet cultured. Conducted research to find out the relationship of firm performance with human resource management practices and environmental sustainability and observed a significant direct relationship. Hence, organizations with strengthened human resource practices aligned with environmental issues are more successful. Hence the study assumes the following hypotheses.

H1: Green recruitment and selection will positively influence organizational performance.

H2: Green training and development will positively influence organizational performance.

H3: Green compensation will positively influence organizational performance.

H4: Green performance management will positively influence organizational performance.

METHODOLOGY

Sample Size & Data Collection

The population of the study was consisting of human resource personnel of manufacturing firms

operating in the industrial area of Khyber Pakhtunkhwa (KP). Due to the unknown population, the study applied power analysis using G*Power software. The software suggested a sample size of 180. However, the study collected data from 200 respondents, keeping in view the response and missing values in the data. The data were collected using a questionnaire. Green HRM items were adapted from the previous literature see Table 1 for detail.

Table 1: Measurements of variables

S.No.	Construct	Dimensions	Items	Sources
1.	GHRM Practices	Green recruitment & selection Green Training & development Green Compensation Green performance management	05 05 05 05	(Shah, 2019b; Tang et al., 2018; Yong, Yusliza, Ramayah, Chiappetta Jabbour, et al., 2019)
2.	Organizational Performance	-	06	(El-kassar & Kumar, 2018)

$$OSP = \beta_0 + \beta_1GRS + \beta_2 GTD + \beta_4GC + \beta_5 GPM + \varepsilon \dots\dots (Equation 1)$$

Where:

β = Beta

OP = Organizational Performance

GRS = Green Recruitment & Selection

GT = Green Training & Development

GC = Green Compensation

GPM = Green Performance Management

ε = Error term

Findings

Demographic Details

The data was collected from respondents having various professional and experience levels, educational backgrounds and diverse sectors. The respondents included individuals holding a position in the company's HR department representing their organization. The demographic details of the respondents are shown in the table below.

Table 2: Demographic Detail

Description		Count	%
Gender	Male	160	78.8%
	Female	43	21.2%
Age	20 or fewer years old	12	5.9%
	21-30 years old	151	74.4%
	31-40 years old	16	7.9%
	41-50 years old	14	6.9%
	More than 50 years old	10	4.9%
Education	Bachelor	11	5.4%
	Master Degree	154	75.9%
	MPhil	35	17.2%

Experience	Ph.D. and Above	3	1.5%
	< 1 year	6	3.0%
	1-5 years	30	14.8%
	6-10 years	68	33.5%
	11-15 years	21	10.3%
	16-20 years	43	21.2%
	21-25 years	35	17.2%

It is obvious from the table that among 193 participants, 78.8% were male while 21.2% of respondents were females. The reason for the lower ratio of the female respondents is less job orientation of Pakistani women. The table also indicates that most of the participants i.e. 74.4% were between 21-30 years of age while the least count was of the participants belonging to the age group of 50 years or above. Respondents were from different educational levels ranging from Bachelor's degree to Ph.D. The results indicate that most of the participants held a Master's degree which comprises 75.9% of the total sample, 17.2% had M.Phil. 1.5% with a Ph.D. degree. There is diversity regarding the experience of the respondents. A large number of respondents falls in 6-10 years' experience tab which consists of 33.5% while the lowest number was in below one year i.e. 3.0%. Among the participants, 17.2% had more than 20 years' experience.

Reliability Analysis

Reliability analysis was conducted to examine the internal consistency of each measure by analyzing the Cronbach's Alpha coefficients. According to Field (2005), the scale is above 0.6 considered as good. The results of the reliability tests conducted for each construct are summarized in the Table 3 below.

Table 3: Descriptive and Correlation Matrix

	Mean	SD	Cronbach's Alpha	(1)	(2)	(3)	(4)	(5)
ORP	3.512	.652	0.796	1				
GRS	3.720	.771	0.663	.584**	1			
GTD	3.777	.658	0.729	.094	.252**	1		
GC	3.850	.790	0.711	.658**	.649**	.273**	1	
GPM	3.730	.731	0.806	.646**	.699**	.257**	.661**	1

The reliability statistics table shows that the Cronbach's Alpha ranges between 0.66 and 0.80. It means there is high consistency among the items of the construct. Since, all items are considered valuable and reliable for computing scales, none of the items was being deleted. The data was collected through a five-point Likert scale questionnaire ranged from strongly disagree to strongly agree. Mean values are between 3.51 and 3.85 i.e. closer to 4 which means most of the respondents agreed to the items. The results of the correlation table indicate that three independent variables are significantly correlated with the dependent variable and the correlation of green performance management with the dependent

variable is not significant. The correlation coefficients range from 0.09 to 0.658 and no value is greater than 0.9, therefore there is no problem of multicollinearity. According to the strong correlation Table by Cohen (1988), the associations of three independent variables say green recruitment, green performance reward and green involvement with the organizational performance are strong as all correlation coefficients were higher than 0.5, while green performance management is weakly correlated with the value of 0.09.

Table 4: Analysis of Variance Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.085	5	9.217	45.414	.000 ^b
	Residual	39.982	197	.203	R	R Square
	Total	86.066	202		.732	.535

Analysis of variance (ANOVA) table shows that the value of R-Square is greater than 0.5 which means that the combined effect of explained variables of this study is greater than 50% and error terms contribute only 46.5% to dependent variable hence the model is a good fit. The significance value is less than 0.01 therefore model is highly significant as well.

Regression Analysis

Additionally, multiple regression analysis was conducted to test the hypotheses and predict the relationships of the variables.

Table 5: Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.247	.225		5.532	.000
	GRS	.117	.063	.139	1.852	.065
	GTD	-.131	.051	-.132	-2.587	.010
	GC	.326	.060	.395	5.423	.000
	GPM	.300	.073	.336	4.100	.000

- a. Dependent Variable: Organization Performance
- b. Predictors: (Constant), GI, GPM, GPR, GRS, GR

The regression table above shows that the effect of all the independent variables on the dependent variable is significant at 1% except green recruitment and selection which shows the significance at 10% confidence interval. Standardized beta values show that the impact of green training and development on organizational performance is negative while all other variables have a positive impact on the

dependent variable.

DISCUSSION AND CONCLUSION

The study aimed to investigate the relationship between green human resources management and organizational performance. The data were collected from the manufacturing industries of KP. The study found a relationship between green human resources management practices such as green recruitment and selection, green training and development, green compensation, green performance management, and organization performance. The study hypothesized the significant relationship among these variables and these hypotheses were mostly accepted. The study found that there were positive impacts of green recruitment and selection, green compensation, and green performance management. Unexpectedly, however, the study was observed the negative impact of green training and development on organization performance. The findings further postulate that the companies should focus on the recruitment and selection of employees who have green intentions. For that one of the criteria, to select those employees having education or taught the subject related to green criteria such as social responsibilities, sustainability, green human resource practices among them. Likewise, the organizations should focus on the green compensation and performance management of the employees by giving them targets and achievement of key performance indicators (KPIs). Similarly, the organization should compensate those employees who are good at green practices. In contrast, however, in our case, green training postulates unexpected negative impacts. One of the possible reasons, green training has less worth for those employees to achieve organizational performance. The findings of the study have contributions in several ways. Firstly, the study has theoretical significance as the link between green HRM and organization performance had rarely been investigated particularly in the Pakistani context. Secondly, the study has significant implications for policymakers such as top management of the companies, the security exchange commission of Pakistan (SECP) to incorporate green practices in business operations of Pakistani firms. Finally, the study has a practical implication for the broader stakeholders to achieve sustainable industrialization in the country.

Alongside, implications the study has some limitations. First, the study investigated a comparatively low sample size focusing on a particular industry such as manufacturing of a KP province. In future studies, the large sample size of multiple clusters should be considered. Secondly, the study investigates the direct relationship of green HRM and organization performance, hence, in future studies, other variables such as firm sustainable practices, organization culture, strategic orientation, and green employees' behavior should be considered in the above relationship. Finally, in future studies, secondary data

sources also are considered such as data from annual reports through content analysis procedure.

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