

Research Article

Impact of Green Human Resource Management Practices on Sustainable Organizational Performance: Evidence from Pakistani Manufacturing Industries

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ABSTRACT

Due to increase in environmental issues organizations are taking keen interest to initiate green objectives. Manufacturing sector is one of the main sectors contributing towards economically as well as major source of pollution as well. Organizations need to initiate green policies because increasing pressure from stakeholders, and customers are willing to pay more for eco-friendly products and services. Increase in pollution and environmental issues are one of the negligence of human behavior. Previously organizations overlooked importance and significance of human resource now organizations realized importance of human resources and want to hire those professionals who have awareness and knowledge of environmental issues and how to attain competitive advantage and sustainable organizational performance. Sustainable performance deals with financial matters, well-being of stakeholders and reducing environmental issues. Purpose of this study is to find the relationship between green human resource management practices and sustainable performance. For this purpose self-administered questionnaire was distributed. Population of the study was manufacturing sector in KP state Pakistan. Data of the study was cross-sectional. Sample was selected using snow ball technique. Correlation and regression analysis were run to test hypotheses. Results indicate GRS and green performance appraisal are positively related with sustainability while green training and development and green rewards are insignificantly related with sustainability. Managers must raise awareness about benefits of green training and development and provide rewards to employees on achieving green objectives.

KEYWORDS

Green Human Resource Management Practices, Green Recruitment and Selection, Green Training and Development, Green Performance appraisal, Green Rewards, Sustainability

1 | INTRODUCTION

Green human resource management practices are getting attention of researchers now days. The firms are taking keen interest to hire those talented professionals who are aware about how environmental safety is related with sustainable performance (Zhao Liu, & Sun 2020). Due to increase in pollution, emission of carbon dioxide gas, waste of water, power, energy, papers, natural resources organizations want to initiate green objectives, it gives the firms competitive advantage and help to obtain sustainable performance. Increasing environmental concerns are due to negligence of human behavior has consequences for sustainability (Roca-Puig, 2019). Manufacturing firms are more concerned with pollution, and waste of natural resources. Concept of sustainability was introduced in Brundtland (1987) later it was called triple bottom line principle. It includes economic, environmental and social performance. Matters of financial, natural resources and well-being of employees is called triple bottom line principle. Initially it takes some expenses to initiate green objectives but in the long run it help firms to attract more customers, and customers are willing to pay for eco-friendly products and services. Firms goodwill could be enhanced (Alkhateeb, 2018). It helps firms to attract investors and talented staff members. Employees being part of environmental friendly firms feel proud to be member of such firms. Firms can reduce cost by implementing green policies, for this purpose firms need to hire those workers who already have knowledge and awareness of green activities (Dal-Mas, 2019). For existing employees firms have to provide them training so that they must be motivated to help firms to achieve organizational green objectives, those employees who achieve environmental objective must be provided green rewards and managers should be careful in performance assessment of such talented employees (Malik et al., 2021). Resource based view theory explained the organizations tangible and intangible assets. Tangible assets are land, buildings while intangible assets are trademark, goodwill, reputation and human resources are also intangible assets of firm which cannot be imitate by competitors. Human resources help firms to obtain competitive advantage and sustainable organizational performance. In resource based view (RBV) natural and environmental factor was ignored. Therefore, natural resource based view (NRBV) was introduced by Hart (1995). It adds environmental issues and linked human resources who have awareness and knowledge how to reduce these issues. Therefore the current study is novel in its nature and had tried to fill the gap using NRBV theory. The existing study has tried to answer following research question:

RQ₁: Does green HRM help firms to obtain sustainable performance?

Apart from this the current study offers following contribution:

1. Limited evidence is available on GHRM and sustainable performance.
2. Investigation through lens of NRBV is limited
3. Data collected from small firms is overlooked.

2 | LITERATURE REVIEW GREEN HUMAN RESOURCE MANAGEMENT (GHRM)

Firms are combination of human and non human resources as per resource based view theory (RBV). These resources are the main sources of firms' competitive advantage and sustainable performance. The competitors cannot imitate these resources. Human resources are the assets of any organization. Firms possess several assets among these human resources are the most valuable ones. Some assets are intangible while some are tangible like building, machines, equipments are tangible but goodwill, image, reputation and human resources are the most important one (Cankaya & Sezen, 2019). Organizations that are going to extend their operations they are now taking keen interest to produce eco-friendly products. Apart from the competitive advantage firms get more profits, increase in sales, goodwill, attracting investors. Green human resources management has four dimensions green recruitment and selection which deals with attracting talented staff member who already aware about benefits of green initiatives and help firms to get the environmental objectives. It is not an easy task. While advertising the job on website organizations have to provide sufficient information about environmental activities so that more people must be attracted. Furthermore green training and development (GTD) is second attribute of GHRM. It is second most important dimensions to motivate employees and retain them for long time. Through GTD firms may add values and skills among their employees. Training bring two main changes one is modifying the behavior of

employees and other is informing employees about policies of green initiatives of the firms. Third is green performance evaluation or assessment. Managers must be very careful while assessing their talented and hardworking workers. If there is any mistake it would result in losing the talented staff. Therefore, managers have to check how many environmental objectives have been achieved, this would help the firms to give grades and also management can identify the strengths and weaknesses of their employees. Last one is green rewards (GR). Pay for performance. Actual output and standard output should be matched and employees' performance should be linked with performance. Employees must be encouraged to bring novel ideas and those who bring fruitful ideas must be rewarded. Rewards and awards can be in any form promotion, flexible working hours etc (Akhtar et al., 2018).

2.1 | Green Recruitment and Selection

Green recruitment means generating a pool of applicants and candidates and shortlist them for interview and test while green selection means selection of those talented candidates who are aware about how to achieve sustainable performance and willing to work on firms green agenda (Saeed et al., 2019).

2.2 | Green Training and Development

Green training and development means adding values for both management and employees to give them (old and new) employees knowledge about rising pollution, environmental issues and how to reduce these issues (Farrukh et al., 2022). Organizations have to conduct training sessions at regular intervals it enhances motivation though it needs huge cost to invest in training session in long run it help firms to produce cost effective products and services.

2.3 | Green Performance Management and Green Rewards

Evaluating and assessment needs lot of skills and experience. Managers should be careful while assessing their productive and talented employees. Little mistake could lead to lose productive employees. On achievement of green targets firms must provide employees with different rewards and financial awards to motivate them for future (Yusoff & Nejati, Kee & Amran, 2018).

2.4 | Sustainable Organizational Performance

4.0 industrial revolutions have raised many issues and among those one is environmental issue. That is why firms want to implement green policies so that these issues can be controlled by taking care of requirements of future people (The World Commission on Environment and Economic Development (WECD). Elington (1994) called it TBL. It has economic performance (financial matters) social (well-being of employees) and environmental performance (controlling degradation of natural resources) and reduces pollution due to manufacturing process. Studies (Malik et al., 2021) reported that limited evidence is available about ethical practices initiated by Pakistani manufacturing industries. Changes in climate and pressure from consumers and stakeholders firms want to initiate green policies so that they may achieve sustainability. Senior managers are taking it seriously to obtain sustainability. Sustainability deals with all social, financial and environmental issues. Increasing concerns of consumers as well as stakeholders pushed the firms to initiate green activities. Consumers are ready to pay high prices for eco-friendly products. Due to human negligence in manufacturing sector there is significant increase in water and air pollution, waste of natural resources like water, energy, are the issues which need immediate focus and attention of the firms. That is why concept of sustainable organizational performance was introduced. In future those organizations would be able to survive in the competitive market if they initiate green objectives to handle environmental issues. These firms would be able to attract talented and hardworking employees as well as able to attract investors and customers. Sustainable organizations can compete in the market.

2.5 | Hypotheses Development

Green recruitment and selection help firms to shortlist and select those employees who have knowledge of environmental issues and they are willing to help firms to achieve their objectives. By initiating and implementing green policies and objectives firms can attract such motivated employees who have awareness to reduce the depletion of natural resources. Further after selection green training and development gives more knowledge to new and existing employees to cope with environmental issues and to attain sustainability. Moreover, green performance assessment helps managers to reward those employees who go beyond the expectation and achieved green objectives and sustainable performance. There is positive and significant relationship found between green HRM practices and sustainability (Yusliza et al., 2020;Yong et al., 2019). Implementing green practices could enhance sustainability (Malik et al., 2021). Moreover Azam et al (2022) also reported that there is significant relationship between green practices and sustainable performance. Moreover Anwar et al (2020) also claimed to have positive and significant relationship between green HRM and sustainability.

On the basis of above discussions following hypotheses are developed:

- H₁: SOP is positively related by GRS
- H₂: SOP is positively related by GTD
- H₃: SOP is positively related by GPE
- H₄: SOP is positively related by GR
- H₅: SOP is predicted by GRS
- H₆: SOP is predicted by GTD
- H₇: SOP is predicted by GPE
- H₈: SOP is predicted by GR

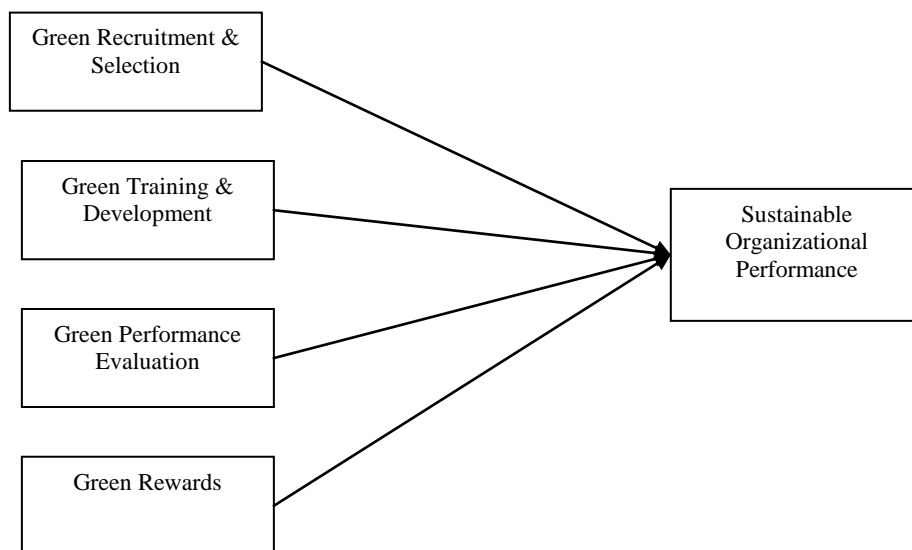


Figure 1 Theoretical Framework

3 | RESEARCH METHODS

3.1 | Research Design and Sampling

This study is quantitative in nature. Survey approach is used. Closed ended self-administered questionnaire is used for data collection. Primary data is collected. It is first hand data which is not collected before. Nature of data is cross-sectional. It means data collected at one time. Population of this study is manufacturing firms in Pakistan. It

includes cement, textile, sugar, pharmaceutical, plastic, food, beverages, wood, furniture, bricks, and leather automobile. Reason for choosing this manufacturing sector is first it has a huge contribution towards economy and second they are major contributor towards environmental pollution. List of those firms already initiated green policies is taken from Pakistan Stock Exchange (PXE). As number of firms is high sampling is essential. Non-probability snow ball sampling technique is used to select appropriate sample size.

3.2 | Measures

Instrument of green human resources is adopted from Malik, Cao, Mughal, Kundi, Mughal, Ramayah, (2021). 2 items for GR and two for GS, 3 items for green training, 3 for GPA, and two items for green rewards. Sustainable performance scale is adopted from Yusliza, Yong, Tanveer, Ramayah, Faezah & Muhammad (2020) it has fifteen items, 5 for one on 5 scale.

3.3 | Data Analysis Techniques

SPSS is used for data analysis. Demographic information of respondents is also added in the tables. Frequency and percentage of demographic information is added. Composite reliability and exploratory factor analyses are run for reliability and validity. In order to test hypotheses correlation and regression analysis is run. Bootstrapping is run.

4 | RESULTS

In survey respondents were asked about gender, education, age, nationality, and length of service i.e. experience. Results about demographic information of respondents are presented in Table 1. Majority of male respondents participated in this study 214 (51.44%) followed by females 202(48.56%). Regarding education 204 (49%) respondents had undergraduate degrees while 171 (41.1%) had master degrees and only 14(9.9%) had doctoral degrees. Further analyses of results revealed that highest number of respondents have age group of 20-30 years (60.6%) followed by those having age between 31-40 years 134 (32.2%) and only 30 (7.2%) respondents have age more than 40 years. 305 (73.3%) respondents are working in national companies while 111 (26.7%) belong to multinational companies. Regarding experience 384 (92.3%) have less than five years of experience while 29 (7%) have between six to fifteen years of experience and only 1 has 16-25 years of experience and 2 respondents have more than 25 years of experience.

Table 1

Demographic Information

Variables	Frequency	Percentage
Male	214	51.44
Female	202	48.56
Undergraduate	204	49.0
Master	171	41.1
PhD	41	9.9
20-30 Years	252	60.6
31-40 Years	134	32.2
Above 40 Years	30	7.2
National	305	73.3
Multinational	111	26.7
Less than 5 years	384	92.3
6 to 15 years	29	7.0
16 to 25 years	1	.2
25 years and above	2	.5

Reliability and validity analysis is presented in Table 2. Exploratory factor analysis is run in SPSS. A threshold criterion for factor loadings for each item is set at 0.50. Those items less than 0.5 are excluded in the analysis Hair et al., (2017). From the analysis it is evident that green recruitment and selection has one item1 has loading less than 0.5 therefore it was excluded from the analysis. On basis of loadings composite reliability is calculated and cut off level for composite reliability (CR) is >0.70 . For green human resources management practices all constructs have items higher than 0.5 and CR is 0.879 >0.70 thus scale for green HRM is considered reliable and valid. Moreover scale of sustainable performance is also presented in Table 2. Item number 3 and 4 of environmental performance is found problematic thus excluded from analysis and remaining all items of social, economic and environmental performances have loadings >0.50 and composite reliability of economic performance is 0.831, environmental performance is 0.811 and social performance is 0.839 thus both scales are found reliable and valid and researcher can proceed to further analysis.

Table 2
Reliability and Validity Analysis

Constructs	Items	Loadings	CR
Green Recruitment Selection	GRS1	0.440	
	GRS2	0.538	
	GRS3	0.676	
	GRS4	0.695	
Green Training	GT1	0.527	0.879
	GT2	0.581	
	GT3	0.761	
Green Performance assessment	GPA1	0.612	0.831
	GPA2	0.619	
	GPA3	0.680	
Green Rewards Sustainability	GR1	0.593	0.811
	GR2	0.731	
	EP1	0.709	
	EP2	0.689	
	EP3	0.723	
	EP4	0.566	
	EP5	0.821	
	NP1	0.793	
	NP2	0.680	
	NP3	0.131	
Social Performance	NP4	0.369	0.839
	NP5	0.824	
	SP1	0.835	
	SP2	0.719	
	SP3	0.721	
	SP4	0.655	
	SP5	0.630	

The relationship among variables is investigated through Pearson correlation. Relationship between GRS and SOP is found significant $r = 0.124$, $p < 0.05$ moreover green training and development and sustainable performance is not significant $r = 0.044$, $p > 0.05$ further findings explained that green performance appraisal and SOP is also found positive and significant $r = 0.136$, $p < 0.05$ while green rewards does not have any significant relationship with sustainable performance $r = 0.020$. Thus H_1 and H_3 are substantiated while H_2 and H_4 are rejected. See Table 3. Positive relationship is an indication that increase or decrease in one variable would cause the increase or decrease in other criterion variables.

Table 3
Correlation Results

Variables	1	2	3	4	5
GRS	1				
GTD	.088	1			
GPA	.017	.361**	1		
G Rewards	.141**	.254**	.464**	1	
SP	.124*	.044	.136**	.020	1

** . Correlation is significant at the 0.01 & 0.05level (2-tailed).

4.1 | Regression Analysis

To test hypotheses H_{5,8} linear regression is run. Table 4 presents findings of linear regression. It is found that green recruitment and selection explained variance on SP R²= 0.015 1.5% goodness of fit F= 6.491, p<0.05, green training and development has no significant influence upon sustainable performance R²= 0.002, F=0.802, p>0.05, green performance appraisal has significant effect on sustainable performance R²= 0.018 i.e. 1.8% variance is explained by green performance appraisal on sustainable performance goodness of fit F= 7.8, p<0.05, on the contrary green rewards have insignificant impact on SP R²= 0.000, F=0.164, p>0.05. Thus H₅ and H₇ are accepted while H₆ and H₈ are not substantiated. On the basis of regression results the most dominant factor is green recruitment and selection on the basis of highest beta value. Followed by green performance assessment.

Table 4
Direct Effects

Criterion	Predictor	R	R square	F	β	p	Support
SP	Constant	0.124	0.015	6.491		0.011	Yes
	GRS				0.124		
SP	Constant	0.044	0.002	0.802		0.371	No
	GTD				0.044		
SP	Constant	0.136	0.018	7.800		0.005	Yes
	GPA				0.136		
SP	Constant	0.020	0.000	0.164		0.686	No
	GR				0.020		

5 | DISCUSSION

Aim of this study was to investigate the relationship between green human resource practices and sustainable performance. It was found that green recruitment and selection has positive and significant relationship with sustainable performance these findings are in line with study of Malik et al., (2021). While green training and development has no significant relationship as well as no influence on sustainability the reason is training and development needs financial resources and manufacturing firms in Pakistan does not have financial resources or they considered it as expense and decrease in their profits. There is need to increase awareness of green training and development so that firms take benefit by adding values and enhances skills of their employees. Findings of this study are in line with Yusliza et al., (2019). Moreover green performance appraisal is significantly related with sustainability one must be careful while assessing their employees. Findings of this study are in line with Azam et al., (2022). Further analysis of results revealed that green rewards do not have any impact on sustainability. Findings of this study are in line with findings of Yong et al., (2019). Green human resources management helps firms to initiate green policies to obtain sustainability. Customers are willing to pay more for eco-friendly products. Employees are assets of the firms, one must be careful while assessing their talented and hard working employees.

6 | CONCLUSIONS

Manufacturing firms are biggest contributor towards economy and pollution as well. Due to climate change and increasing issues in environment Pakistani manufacturing sector has to seriously implement green objectives in their green shared vision. It could help firms as well as all stakeholders. It could help them to obtain sustainability and advantage over competitors. Therefore organizations need to attract talented and motivated staff members who can help firms to achieve green objectives and provide them training to add values and on achievement of green objectives provide those rewards. Initiating green policies help firms to reduce cost. Initially it needs capital to invest in new technology but it is beneficial for firms in long run.

7 | PRACTICAL IMPLICATIONS

Managers in manufacturing sector should insist to add green objectives in their green shared vision. Managers need to focus on cost effective methods which could be possible through GHR. Importance of new green activities must be raised in training sessions and seminars.

8 | THEORETICAL IMPLICATIONS

This is the novel study in its nature. Very limited empirical evidences are available in Pakistani manufacturing sector who have initiated green activities. Scarcy and sparse literature is available. This study has successfully implemented NRBV in manufacturing sector in Pakistan.

9 | LIMITATIONS AND FUTURE DIRECTIONS

Limitations need to be addressed. This study is conducted on manufacturing sector so findings can be generalized only to manufacturing sector so one must be careful while generalizing results to other sector. Second this study is cross-sectional so it is better to conduct interviews and cross-sectional i.e. mix methods so have better understanding of problem. Likewise longitudinal data could be useful for better insights. Third moderators and mediators can be added in this framework. Like green intellectual capital, green corporate social responsibility, supply chain information integration.

Conflict of Interest: Author declares there is no competing interest.

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