**GREEN HUMAN RESOURCE PRACTICES AND ENVIRONMENTAL PERFORMANCE OF FIRMS: A REVIEW OF LITERATURE AND RESEARCH AGENDA**

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**Abstract:** This paper aims to provide conceptual and empirical literature on green human resource practices and environmental performance of firms. The paper adopted conceptual and theoretical approaches to achieving its objective. This was done by critically reviewing extant literature on green human resource practices and environmental performance of firms. Based on the review of extant literature, it was observed that green human resource practices stimulate the environmentally sustainable performance of firms. The paper identified research gaps for future studies based on the methodological gaps of extant studies identified. It is recommended that the link between green human resource practices such as green recruitment and selection, green performance appraisal, green compensation and benefits, and green training and development and the environmentally sustainable performance of oil firms in Nigeria should be further explore.

**Keywords:** Environmental Performance, Green Human Resource Practices, Green Recruitment and Selection, Green Performance Appraisal, Green Reward and Compensation, Green Training and Development.

**JEL Classification:** N5, O15.

1. **Introduction**

Environmental pollution occasioned by daily operations of organizations has brought untold significant climate change, carbon emission and global warming that is increasingly threatening the lives of humans, plants, agriculture, and wildlife (Chaudhary, 2019). These harmful effects have drawn the attention of policymakers across the globe to develop a wide range of environmentally-friendly laws and policies including cutting emission and gas flaring which is rampant in manufacturing (Pham, Tuckova & Jabbour, 2019). Most countries, especially developed countries offer tax incentives to firms to encourage them to develop and use green energy. These laws and policies though are rightly directed to curb the devastating effects of incessant emission which has resulted in the frequent occurrence of earthquakes, floods, the disappearance of certain species and stunted growth of animal and agricultural live stocks, experts have argued and pushed forward the adoption of green human resource practices as a step in the right direction that might help in preventing and minimizing environmental pollution emanating from the operations of firms (Pham, Hoang, & Phan, 2019). This is because green human resources practices stimulate organizations toward the implementation of an eco-friendly environment and cleaner production policies, which is central in safeguarding the natural environment for future generations and preventing the destructive effects of climate change (Nawangsari & Sutawijaya, 2019).

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Green human resource practices focus on how best human resource practices can be deployed to prevent pollution and reduce the environmental effects caused by the operations of firms (Tang, et al., 2018). These are eco-environmental friendly human resource practices, which is done by aligning the environmental goals with the traditional human resources practices. Green human resource practices have been decomposed into green recruitment and selection, green training and development, green performance management/appraisal, green reward and compensation (Adjei-Bamfo, et al., 2019). Each of these HRM practices is believed to condition the mental-cognitive of employees working in an organization to engage in eco-environmentally friendly behaviours to help their organizations achieve and sustain a reduction of emissions emanating from their operations (Iqbal, et al., 2018). They have also been linked to environmental sustainable performance, which is defined as the extent to which a firm excels in protecting the environment through its carbon footprint emanating from its operations and compliance to regulatory laws of reducing emissions (Rawashdeh, 2018).

Past studies link green human resource practices with decreased pollution of the natural environment. In Nigeria, oil firms have been recognized to engage in dangerous practices such as environmental pollution through the emission of toxic waste, oil spills and gas flares. A practical example is the Niger Delta region, where the geochemical composition of the soil of the host communities have been greatly polluted and poisoned. The harmful effect of oil spillage by oil firms in the Niger delta is visible in the farmlands of host communities resulting in poor farm yields, low fishing activities, polluted waters and invariably an increase in water-borne diseases. These have resulted in increased studies on green human resource practices and environmentally sustainable performance in many local and international journals by Nigerian researchers and management experts in that field of study. However, the extent to which oil firms engage in green human practices in host communities in the Niger Delta given the level of environmental degradation host communities suffers every time toxic organic and inorganic compounds are released into the natural environment over the years is yet to be fully known. Also, the effect of such human resource practices on the environmental performance of oil firms has not been fully explored. This paper reviews conceptual and empirical studies on green human resource practices (GHRM) and the environmental performance of firms.

2. Review of Literature

2.1. Environmental Performance

The construct, environmental performance is explained as the extent to which a firm excels in protecting the environment through carbon footprint emanating from its operations (Rawashdeh, 2018). It is more of environmental care by a constant reduction in emissions, eliminating toxicity and spillage as well as compliance to regulatory laws (Owino & Kwasira, 2016). Environmental performance is also viewed as the continuous recycling of waste products, reduction of energy use, and continued reduction in carbon credits and emissions in firm operations (Obeidat, Al Bakri, & Elbanna, 2018). It is a measure of the production process that minimizes cost and resources while reducing the emission of toxic waste into the ecosystem (Iqbal, et al., 2018).

Green HRM Practices

Green human resource practices have been defined in similar ways by different authors as the extent to which an organization ensures its human resources are ecologically balanced and environmentally affable through effective integration of environmental sustainable goals with traditional HR practices (Chaudhary, 2019). Green HRM is a situation in which employees are trained and encouraged to engage in work behaviour and HRM practices that conform with green HRM. Areas of interest as it pertains to green HRM practices includes
selection and training, performance appraisal and promotion, training and development, rewards and staff disciplinary procedures (Dumont, Shen, & Deng, 2017; Iqbal, et al., 2018; Saeed, et al., 2019). In essence, organizations that practice green HRM encourages organizational members to engage in green HRM behaviour. Employees who engage in green behaviour in their daily work activities are reinforced positively through the offer of rewards, favourable performance appraisals and promotion among others.

Green HRM practices are simply greening functional dimensions of HR practices with the environmental objective of sustainable utilization of natural resources, reduction in carbon footprints, and avoiding the release of pollutants and degradation of the environment. It is aligning the content of HR practices with the environmental goal of developing the workforce’s capacity to behave in an eco-environmental friendly manner toward enhancing the environmental performance of the firms for the benefit of the society (Mishra, 2017). Green human resource practices are alignments and integration of environmentally sustainable development into the recruitment and selection process, training and development, reward system, and performance management of a firm.

**Green recruitment and selection:** This is the extent to which the organization attracts and chooses applicants who are conscious of environment-friendly activities and the effect of operations of the organization on the environment (Pham & Paillé, 2019). It deals with the recruitment and selection of prospective applicants who are conscious and knowledgeable in the area of sustainable development and green HRM practices (Moktadir, et al., 2020). Green recruitment and selection is simply an integration of environmentally sustainable development into the recruitment process by screening prospective applicants based on the knowledge they have towards green practices, green branding of their employers, and how their personality fits into it (Pham Tučková & Phan, 2019).

The practice of green recruitment and selection usually start by evaluating and selecting job applicants based on their skills and ensuring that their personality matches the environmental aspects in their job descriptions (Adjei-Bamfo, et al., 2019). This selection is done by conducting a series of tests to elicit the information from job applicants about green awareness, green employer branding (image and reputation of employer-related to environmental management) and perceive a good fit between their own and an organization’s values of green practices (Pham & Paillé, 2019). The information elicited from the job applicants about an organization’s environmental aspects in job descriptions and employee specifications can be used as criteria for attracting, selecting, recruiting and employing prospective applicants (Nawangsari & Sutawijaya, 2019). The success of such recruitment will help an organization to have a workforce that is familiar with the green practices and environmental systems that support the effective environmental management of the organization (Adjei-Bamfo, Bempong, Osei, & Kusi-Sarpong 2019). Moreover, green selection can be put into practice by considering job applicants who possessed certification and awards on environment social responsibility for job interviews and employment. It can also be practiced by interviewing video-conferencing, teleconferencing and online tests among other e-recruitment practices (Rawashdeh, 2018). Similarly, directing job applicants to submit their criteria and resumes through the employer’s website to eliminate papers and their effect on environmental hazards has been considered as eco-friendly ways of hiring, recruiting and selecting job applicants (Dumont, Shen, & Deng, 2017).

**Green Training and Development:** This is the extent to which the firm consciously designs the content of training and developmental programs to reflect environmental friendly behaviours aimed at reducing waste, optimizing usage of organizational resources, conserving energy and addressing the source of environmental degradation and pollution (Obaid & Alias, 2015). It includes the continuous education of organizational members about environmental management to have adequate knowledge and awareness about environmental issues and how the operations of the organization threaten or benefits its
immediate environment (Naqvi & Siddiqui, 2019). In addition, it deals with how employees can assist their organizations to protect, control, and prevent identified sources of pollution. Moreover, green training and development are aimed at broadening the employees' knowledge, attitude, and skills needed to help the organization minimize environmental pollution (Masri & Jaaron, 2017). Effective training employees on green practices enhance the capabilities and self-efficacy of employees to engage in green behaviour energy (Chaudhary, 2018). The training usually begins with the organization's HR professionals identifying the training needs of employees in the light of environmental demands (Masri & Jaaron, 2017). The information elicited about environmental training needs can be used to design the content of training and development programs that will guide trainees in imparting the right environmentally problem-solving skills, knowledge and attitude to employees to engage in environmentally friendly best practices (Masri & Jaaron, 2017). Such practices usually take in form of long-distance business travel reduction, recycling of waste products, use of clean energy and frequent use of soft copies rather than hard copies and online workshops to reduce the effect of paper usage on emission (Chaudhary, 2018). Educating and training employees on techniques and how best to conserve energy, dispose of wastes and engage in other green use ecological behaviours, can help in environmental waste management, energy conservation, carbon footprints reduction, which could help the organization achieve a sustainable environment to live (Mishra, 2017).

**Green Performance Management and Appraisal:** It is the inclusion of environmental issues in employees' job descriptions performance evaluation by rating employees based on how they perform in reduction of carbon emissions, communicating environmental concerns, and generating new initiatives that help the organizations reduce emissions emanating from the firm's operation is responsible for environmental degradation (Pham, Hoang, & Phan, 2019). It also covers the rating of employees based on green skills acquired and pro-environmental behaviours that impact positively on the environment (Fawehinmi, et al., 2020). Such behaviours have been referred to as green behaviour, which can be directed to promote green task job descriptions or outside the green task job description by proactively taking initiative that goes beyond prescribed task to educate, influence and motivate other individuals to engage in environmentally beneficial actions (Dumont, Shen & Deng, 2017). The green behaviours usually evaluate and rewarded in the course of green performance appraisal are those direct to sustaining and conserving the environment through reusing, recycling, repurposing and reducing the use of raw materials as well as conservation of energy (Iqbal, et al., 2018). The behaviours also include working sustainably, which is defined as meeting the present employer's needs without harming the environment through the pollution of the ecosystem (Saeed, et al., 2019).

**Green Reward and Compensation:** This is the practice of rewarding organizational members who are aware and make conscious efforts to reduce the harmful effect of environmental pollution through the application of green behaviours in executing their daily job tasks and assignments (Pham, Tučková, & Phan, 2019). It is the practice of rewarding employees who engage in environment-friendly lifestyles. Such lifestyles can take in form of frequent and efficient utilization of resources (Pham, Tučková, & Phan, 2019). This includes switching off electrical appliances at the close of the day's activities, making use of the refuse bin and printing on both sides of sheets of paper. Green reward and compensation include designing reward system to incorporate green travel benefits and green tax to those employees making use of less polluting cars and making a conscious effort to recycle and eliminate operations that are generating toxic waste that is environment harmful (Yusoff, Nejati, Kee & Amran, 2018). The green reward can take in form of monetary (green travel benefits, green tax) and non-monastery (green recognition) rewards (Chaudhary, 2019). The green monetary rewards can be in form of financial compensation such as salary increments, paid vacations, bonuses, special discounts on certain items purchased for engaging in green behaviours (Tang, et al., 2018). The non-monetary rewards usually take
the form of wide publicity, public praise, and appreciation of green efforts by top management as well as special recognition, awards and promotions for those employees encouraging and upholding green behaviour (Rawashdeh, 2018). The practice of rewarding green behaviour toward environmental sustainable performance can encourage employees to be green-conscious even outside their workplace. It can condition the meta-cognitive of employees to develop a habit of recycling, saving energy and using less polluting vehicles, energy, and appliances (Saeed, et al., 2019). This is especially when the organization extend the rewards to employees' household equipment and transportation (Obeidat, Al Bakri, & Elbanna, 2018).

2.2. Green Human Resource Practices and Environmental Performance of Firms

The link between HRM practices and voluntary green behaviours and task behaviours was examined by Chaudhary (2019). Results indicate that the HRM practices examined influenced significantly voluntary green behaviours and task behaviours of organizational participants in India. Chaudhary (2019) further demonstrated that employees have higher intent in pursuing a career in an organization adopting green HRM practices and policies using hierarchical regression. This intent is especially stronger when the organization is attractive and employees have a personal environmental orientation. In a separate study, Chaudhary (2018) revealed that there is a significant relationship between green HRM practices and the job pursuit intention of prospective applicants and this is influenced by organizational prestige and not gender.

Yusoff, et al. (2018) revealed that except for green performance appraisal other dimensions of green HRM practice (green training and development, green compensation, green recruitment, and selection) are positively related to environmental performance. Using data that was elicited from 327 respondents in the health sector in Jordan, Rawashdeh (2018) showed that while green recruitment and selection strongly and significantly influence environmental performance, green training and development, green reward and compensation are not significantly related to environmental performance. Owino and Kwasira (2016) subjected data collected from 163 employees to regression analysis and showed that green performance management and green occupation health and safety significantly influence environmental sustainability. They however revealed that green training and development does not have a significant influence on environmental sustainability.

Dumont, Shen, and Deng (2017) examined the link between green HRM and green behaviour at the workplace and found a positive relationship between both variables. The findings of the study empirically establish a strong positive link between green HRM and in-role employee behaviour. Yong and Mohd-Yusoff (2016) investigated green HRM practices using data from 87 professionals in Malaysia and showed that there is a significant relationship between strategic positioner HRM and green HRM practice. Specifically, the results of the study showed that strategic positioner HRM has a significant influence on green selection, green reward and green performance. A study by Ahmad and Umrani (2019) revealed that the link between ethical leadership style and job satisfaction is mediated by Green HRM and psychological safety. Pham and Paillé (2019) discovered that expectation of favourable treatment and perceived organizational green reputation/prestige mediate the link between green recruitment-selection practices and attractiveness of the origination to job seekers. Iqbal et al., (2018) examined the influence of employees’ green behaviours on environmental sustainability in the banking industry. Using regression to test data from 332 employees in the banking industry in developing countries, Iqbal et al., (2018) established that employee’s green behaviours significantly influence environmental sustainability, thus suggesting the need to engage in training programs that will create
awareness and enlighten employees on the need to engage in green behaviour in executing job tasks.

Mishra (2017) examined green HRM practices and challenges in India through data collected from manufacturing organizations. Mishra (2017) found that green HRM practices such as green recruitment, and green performance appraisal encourages pro-environmental behaviours among organizational participants. Moreover, Mishra (2017) observed that management support at the top/corporate/strategic level facilitates green behaviours among employees.

Fawehinmi, et al. (2020) ascertained the influence of green HRM on employee green behaviour and how this influence is mediated by environmental knowledge among academics in Malaysia. Using SEM to test data from 425 employees, Fawehinmi, et al. (2020) further established that green HRM practices have a significant impact on green behaviour of employees through the full mediation of environmental knowledge. Naqvi and Siddiqui (2019) examined the influence of green HRM on the job performance of employees. Using SEM to test data collected from 300 employees, Naqvi and Siddiqui (2019) observed that green HRM practices significantly influence the green lifestyle of employees and the job performance of employees.

Zaid, Jaaron, and Bon (2018) employed SEM in testing the data generated from 121 manufacturing firms in Pakistan, and the result of their study showed that green HRM practices have a significant influence on sustainable performance decomposed into financial social and environmental performance. Moreover, they found that green HRM practices influence green supply chain practices, which in turn mediate the influence of green HRM on the sustainable performance of firms. Masri and Jaaron (2017) ascertain that each of the dimensions of green HRM practices investigated has a significant and positive relationship with environmental performance. The results further revealed that green recruitment has the highest impact on environmental performance, while green training commands the least influence on the environmental performance of firms.

Yong, et al. (2019) examined the influence of green intellectual capital, that is green human capital, green relational capital and green structural capital, on green HRM practices using data from SEM to test data from 112 large manufacturing firms in Malaysia. They observed that except for green structural capital, the other two dimensions of green intellectual capital influenced green HRM practices. Saeed, et al. (2019) examined the influence of selected green HRM practices on the pro-environmental behaviour of employees. They also investigated how this influence is mediated by pro-environmental psychological capital. Results indicate that green HRM practices have enhanced employees’ pro-environmental behaviour and that environmental psychological capital mediated this link. Similarly, they found that the link between green HRM practices and pro-environmental behaviour is moderated by employees’ environmental knowledge.

Nawangsari and Sutawijaya (2019) examined green HRM and ascertain its link with the competitive advantage of SMEs. The result of data collected from 100 employees of SMEs in Jakarta, Indonesia and analyzed using SEM revealed that except for green reward and compensation other dimensions of green HRM practices investigated have a direct and positive relationship with green performance, which in turn influences the competitive advantage of SMEs. Results also showed that green reward and compensation in addition to green performance management and appraisal and green employee retention positively and significantly influence competitive advantage. It was however found that green recruitment and selection and green training and development do not exert significant influence on the competitive advantage of SMEs. The antecedents and consequences of green HRM practices were explored by Obeidat, Al Bakri and Elbanna (2018). The findings of the study showed clearly that management support at the corporate level and internal environmental orientation positively influence green HRM, which in turn has a significant positive impact on environmental performance. Moreover, they established the positive relationship between environmental performance and organizational performance of firms in the oil and gas
sector. Pham, Tučková, and Phan (2019) explore the indirect and interactive effects of GHRM practices (training, reward, and organizational culture) on employee environmental commitment and reported that the three GHRM practices investigated influences employee’s commitment to engage in environmentally friendly behaviours. Donohue and Torugsa (2015) examined the influence of Green’s HRM on proactive environmental management and firms’ financial performance and found that Green HRM mediates the influence of proactive environmental management on financial performance positively.

In Nigeria, Oyedokun (2019) examined the relationship between green human resource management (GHRM) and sustainable competitive edge and found that green recruitment practices, green training and development practices, green compensation structure and green employee relations, all have a positive and significant effect on the sustainable competitive edge. Ogbru Edeh and Okwurume (2019) examined the influence of green HRM practices on organizational sustainability using regression in testing cross-sectional data collected from forty-one managers of deposit money banks in Nigeria. They found that each of the three green HRM practices investigated, that is (green recruitment, green training, and green employee relations, has a positive influence on organizational sustainability.

### 2.3. Conclusions and Future Research Directions

Based on the review of extant literature, this paper concludes that green human resource practices stimulate the environmentally sustainable performance of firms. A number of antecedents of green human resource practices exists in extant literature and they include green recruitment and selection, green performance appraisal, green compensation and benefits, green training and development, green intellectual capital. Future studies should further examine the link between these antecedents and environmental sustainable performance of firms. While Oyedokun (2019) and Ogbru, Edeh and Okwurume (2019) that investigated the influence of green human resources practices on the sustainable competitive advantage of Dangote conglomerates and Deposit Money Banks (DMBs) in Nigeria respectively, the antecedents and consequences of green human resource practices and its link with environmental sustainable performance of firms. In particular, Oyedokun (2019) and Ogbru, Edeh and Okwurume (2019) failed to explore green HRM practices and environmental performance of oil firms in Nigeria, which accounted for the bulk of environmental pollution in the country in the past decades. Against this backdrop, it is suggested that future studies should empirically examine the influence of green human resource practices on the environmentally sustainable performance of oil firms in Nigeria. Specifically, the link between green human resource practices such as green recruitment and selection, green performance appraisal, green compensation and benefits, and green training and development and the environmentally sustainable performance of oil firms in Nigeria.

### References


**Bio-note**

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