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The Nexus Between Green HRM Practices and Organizational Sustainability Performance: Evidence from Indonesia

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Abstract

Green Human Resource Management (GHRM) is a management approach that pursues to integrate an environmental perspective into conventional human resource activities. This approach is characterized by a systematic and scheduled synchronization with the organization's environmental priorities, which is viewed as providing a balanced perspective that aligns employees with the organization's environmental policy. Introducing, enforcing, and embracing systemic changes among employees is one of the most important GHRM objectives, as green-based activities are frequently difficult to implement. GHRM practices serve a crucial role in the context of organizational sustainable development in achieving sustainability objectives. Prior research has evaluated GHRM as a unidimensional or second-order construct consisting of three or four dimensions. However, the current study extends previous research by identifying six categories of GHRM practices and empirically evaluating the impact of each of these elements on corporate sustainability. The study collected data from 347 HR directors working in Indonesian organizations and analyzed the data using SmartPLS 3.2.8. The findings revealed that three out of the six GHRM activities were significantly related to organizational sustainability performance. The study offers theoretical and practical implications for potential researchers and HR managers, particularly in the Indonesian context.

Keywords— Organizational sustainability performance; Green human resource management practices

Abstrak

Manajemen Sumber Daya Manusia Ramah Lingkungan (GHRM) adalah pendekatan manajemen yang berupaya mengintegrasikan pertimbangan lingkungan ke dalam aktivitas sumber daya manusia konvensional. Pendekatan ini ditandai dengan sinkronisasi yang sistematis dan terjadwal dengan prioritas lingkungan organisasi, yang dipandang memberikan perspektif seimbang yang menyelaraskan karyawan dengan kebijakan lingkungan hidup organisasi. Memperkenalkan, menegakkan, dan menerima perubahan sistemik di kalangan karyawan adalah salah satu tujuan GHRM yang paling penting, karena aktivitas berbasis lingkungan seringkali sulit diterapkan. Praktik GHRM mempunyai peran penting dalam konteks pembangunan berkelanjutan organisasi dalam mencapai tujuan keberlanjutan. Penelitian sebelumnya telah mengevaluasi GHRM sebagai konstruksi unidimensi atau orde kedua yang terdiri dari tiga atau empat dimensi. Namun, penelitian ini memperluas penelitian sebelumnya dengan mengidentifikasi enam kategori praktik GHRM dan secara empiris mengevaluasi dampak masing-masing elemen tersebut terhadap keberlanjutan perusahaan. Studi ini mengumpulkan data dari 347 direktur SDM yang bekerja di organisasi di Indonesia dan menganalisis data menggunakan SmartPLS 3.2.8. Temuannya mengungkapkan bahwa tiga dari enam kegiatan GHRM berhubungan secara signifikan dengan kinerja keberlanjutan organisasi. Studi ini menawarkan implikasi teoritis dan praktis bagi calon peneliti dan manajer SDM, khususnya dalam konteks Indonesia.

Kata kunci— Kinerja keberlanjutan organisasi; Praktik manajemen sumber daya manusia ramah lingkungan

I. INTRODUCTION

Numerous driving forces might inspire businesses to implement sustainability initiatives. In general, an organization can strive to reduce its environmental and social impacts in line with the international conventions and regulatory structures that are endorsed and propagated by different nations. (Ketprapakorn & Kantabutra, 2019). Actually, businesses whose corporate strategies are in line with sustainability premises are the determinants of resource circularity. (Bocken & Geradts, 2020). Their operational frameworks, therefore, need employees who are focused on sustainable development issues. (Al Mehrzi & Singh, 2016; van der Waal & Thijssens, 2020). New product releases and relevant procedures or the management of a viable supply chain need workers with sufficient values, perceptions, actions, and decision-making abilities. Moreover, this workforce needs to be able to provide goods and services to the community to benefit and be significant for the survival of the earth. (Farooq et al., 2019). In brief, green management of human capital is on the run.

According to the perspective of the resource-based view (RBV), a company's human resources are seen as special resources; they cannot be replicated quickly by rivals and thus establish a unique strategic edge for companies. (Kostopoulos, 2002; Shibin et al., 2020). In this sense, the alignment of human capital and environmental concerns within organizations will have mutually beneficial consequences. This indicates a range of steps, from the recruiting of environmentally conscious workers to expenditure in discerning procedures that test an applicant's dedication and environmental consistency, providing training that illustrates ecological and societal pledges and positions of the organization, and success reviews and incentives that respect sustainable business objectives. (Song et al., 2020).

GHRM activities provide an essential adaptation in the manufacturing sector. GHRM measures that facilitate environmental management (EM), reduce environmental destruction, and enable protection and regeneration (Zhang et al., 2019). GHRM appears to be in the early stages of growth, and several businesses are utilizing GHRM as a human resources tool to help the pro-environmental management (Song et al., 2020). In addition, Chaudhary (2020) It suggests that businesses that are constructive in terms of 'greening' will be more profitable and have a strategic advantage. Conversely, businesses lacking an extensive GHRM policy may have shortcomings that contribute to inadequate environmental protection. (Paillé et al., 2020). Environmental HR activities help strengthen operations by improving performance, reducing environmental pollution, and encouraging green behavior, which will result in increased productivity and cost-cutting. It is uncertain if an organization is dedicated to sustainability growth and/or motivated by GHRM activities, for instance, "green analysis and job description (GA&JD), green training (GT), green recruiting (GR), green performance assessment (GPA), green selection (GS), and green rewards (GRw)".

There is minimal literature on GHRM and sustainability and mixed performance. For example, for the creation of six activities of green management that have constructive ties to sustainable development, (Yong et al., 2020) Examine the linkage between GHRM and sustainability in developed nations. On the other side, Jirawuttinunt and Limsuwan (2020) This indicates that "green structural capital" is not relevant to GHRM in organizations operating in Indonesia. Others agree that potential research is necessary to explore this relationship for sustainable development and the community as a whole.

The RBV theory posits that a corporation's resources are comprised of both tangible and intangible characteristics, which are inherently linked to the business in a semi-permanent manner. Examples include in-house experience, a professional workforce, brand names, productive processes, equipment, and industrial contracts. There are precious, unique commodities that can't be readily imitated by anyone. The ownership of such tools gives strategic comparative advantages over industry rivals. (Du & Sen, 2016). Over time, past studies have emphasized the increasing value of internal capital as a "source of competitive advantage" and, specifically, as an internal resource that is of strategic importance to the growth and survival of an organization. (Côrte-Real et al., 2017). In addition, the applications and ramifications of RBV have contributed to a more convergent strategic HRM and strategic management in general in the literature on strategy management. (Ehnert et al., 2013). General HR practices, especially those that are consistent with a company's strategic objectives, may facilitate the establishment of a competitive edge.

The increased focus of scientists on environmental strategy has highlighted the value of HR activities and sustainability (Nugraha et al., 2022). Through the RBV lens, Chaudhary (2020) described the correlation between HR and the sustainability of an organization. Institutional and social constraints, growth, regeneration, corporate competition, and the need to maximize natural capital whenever possible are the emphasis of managers on the human qualities that lead to sustainability for companies (Song et al., 2020). HR divisions are developed with specific resource guidelines. The advantages of GHRM activities include increasing the understanding of the ecosystem among workers, who in turn promote the environmental practices of the organization (Zhang et al., 2019). People should be used as corporate tools to maximize environmental management techniques and plans (Al Mehrzi & Singh, 2016; Waheed, 2020). All relevant considerations in the quest for sustainability include market

models expanding the commodity value chain, ecologically sustainable values, and ecologically sound premises (Shen et al., 2018). Furthermore, the utilization of "big data" technologies and the pursuit of generating revenue with ecological awareness are crucial factors in environmental conservation and prioritizing human potential while acknowledging the societal interests of particular racial groups, societies, and regions (Smith et al., 2016).

II. LITERATURE REVIEW

A. *Green Human Resource Management*

The GHRM relates to the systematic, scheduled synchronization with traditional human resource organizational activities and the environmental priorities of the business. (Song et al., 2020). The field of GHRM is important for companies because it relates to other sections, such as "Green Management," "Green Supply Chain Management," "Green Transactions," and "Green Marketing." GHRM is viewed as providing a balanced perspective that aligns employees with the organization's environmental policy. Green-based activities are difficult to undertake, and systematic changes are needed, any improvements need to be introduced, enforced, and embraced by workers, and this is one of the key GHRM goals. (Hameed et al., 2020). Previous scholars claim that the way HRM is greened is always analyzed through a continuum that encompasses all practices of HRM — review and role description, recruiting and placement, preparation and growth, success and evaluation, and incentives. (Paillé et al., 2020).

B. *Sustainability*

The contemporary business environment is characterized by an urgent need to deal with the escalating problem of climate change and meet the increasing expectations of stakeholders regarding environmental and social responsibility. Consequently, modern organizations have come to recognize the pivotal role of sustainability in maintaining a competitive edge in the market. Thus, corporate leaders are increasingly prioritizing sustainability as a key strategic objective for their firms, demonstrating a heightened focus on creating a sustainable future for all. (Shah & Rahim, 2019a). The concept of sustainability is based on three primary dimensions: economic, social, and environmental. (Ketprapakorn & Kantabutra, 2019; Lozano et al., 2015). These dimensions serve as the fundamental components of sustainable development. Economic sustainability relies on a firm's capacity to produce consistent revenue while providing products and services. This pillar is critical for ensuring the financial viability of businesses. Environmental sustainability, on the other hand, concentrates on the impact of business operations on the environment, and natural resource management takes an essential role in aiding sustainable economic development. (Gunawan et al., 2023; Nugraha et al., 2022). Thus, social sustainability stresses the importance of philanthropy and addresses concerns regarding distribution and opportunity diversity, education and well-being, income inequality, and scarcity. (Chang et al., 2017). The literature on sustainability underscores the significance of these three pillars in achieving sustainable development objectives.

Sustainability requires meeting today's needs without jeopardizing potential needs, stressing intergenerational equity. This means ensuring the supply of opportunities for potential generations. (Morioka et al., 2018; Rahim & Shah, 2020). Organizational activities, especially those with a green orientation, are crucial to overall sustainability. Rivera et al. (2017) Demonstrate that organizations already need an economic, environmental, and social dimension-friendly growth norm. Sustainability should be used to build alternatives to environmental and social problems. As sustainability becomes a more prominent issue for businesses (Genoveva et al., 2023), human resource management (HRM) is becoming more recognized as a crucial contributor to the development of skills, collaboration strategies, and organizational capabilities necessary to support sustainable practices. HRM has the potential to incorporate sustainability principles into areas such as corporate growth, community dignity, and social justice (Zhang et al., 2019).

HRMs can guide workers' efforts to achieve sustainability goals by recruiting the right candidates, providing performance assessments, and implementing award programs. (Hameed et al., 2020). HRM programs that aim to promote the long-term economic, physical, and social well-being of a company's workforce should integrate sustainability concepts (Song et al., 2020). Building a green organizational culture requires employees to enforce eco-policies, which is difficult to achieve without proper education and training. Yong et al. (2020) Posit that HRM is a critical factor in establishing sustainable organizations, with HR practices promoting environmental sustainability, creativity, and effective diversity management. Conversely, Zhang et al. (2019) Assert that GHRM aligns with the "third bottom line" concept, encompassing HR activities that promote fiscal, environmental, and social sustainability. Despite the growing importance of sustainability, research on the connection between HRM systems and achieving sustainability goals remains limited. (Al Mehrzi & Singh, 2016).

C. *Green Training*

Organizational change requires the development of employee skills and behaviors, which can be achieved through extensive training activities. (Guerci et al., 2015). It is widely acknowledged that workforce training is

essential for the implementation and promotion of environmental management practices within an organization. (Gilani et al., 2020). GT enriches staff with the necessary information about an enterprise's environmental policy, practices, and attitudes (Song et al., 2020). Green training (GT) is a particularly effective HR practice for providing support in environmental management and is crucial in enhancing workforce awareness and initiating the implementation of environmental policies. (Zhang et al., 2019). The objectives of GT include educating employees on environmental policies and day-to-day procedures, as well as changing behaviors and enhancing ecological consciousness (Hameed et al., 2020). GT may cover environmental law, instructions on the use of novel instruments, and company codes of conduct. (Jirawuttinunt & Limsuwan, 2020). The widespread adoption of GT in certain countries reflects its effectiveness in promoting environmental sustainability within organizations.

H1: The GT has a significant impact on organizational sustainability.

D. Green Analysis and Job Development

The importance of job analysis has been increasing considering changing workforce dynamics and job characteristics. Job analysis provides a clear understanding of the responsibilities and duties associated with various job positions, facilitating organizational comprehension of the significance and value of each role towards the development of the company's products, whether goods or services. Furthermore, job analysis helps to reduce redundancy and resource waste and ensures that previous employees adhere to professional values. According to studies conducted by Roscoe et al. (2019) and Siddique (2004), job analysis can enhance administrative efficiency, boost productivity, improve the work environment of an organization, and reduce costs. Thus, job analysis and job descriptions are considered valuable components in attracting and recruiting qualified individuals.

Green Analysis and Job Description (GA&JD) is a useful tool that incorporates environmental considerations into job descriptions, emphasizing an employee's responsibility to prioritize the environment alongside their regular job activities. (Jabbour et al., 2010). In the context of an organization, GA&JD can be implemented to promote sustainability and enhance environmental performance by identifying positions that require environmental knowledge and encouraging employees to utilize their environmental understanding and knowledge. This includes empowering employees to become directly involved in improving environmental performance and engaging in environmental management issues. (Jabbour, 2011). Additionally, a job description can outline the environmental responsibilities of a particular role, such as duties related to safety and health or environmental reporting, which can improve administrative efficiency and reduce costs while promoting environmental responsibility. (Misra et al., 2012). Incorporating GA&JD into the job analysis process can help organizations achieve their sustainability goals and create a culture of environmental responsibility.

H2: The GA&JD has a significant impact on organizational sustainability.

E. Green Performance Assessment

Performance evaluations are a commonly employed tool in organizations to manage employee compensation, identify individual strengths and weaknesses, offer feedback on performance, enhance operational capabilities, and improve company development and performance systems. The absence of a well-defined performance review process can compromise disciplinary measures in a company and impede the willingness of workers to adapt. Therefore, it is important to strategically design appraisal programs to maximize the talent and contributions of workers. (Shen, Dumont, & Deng, 2018). In green language, GPA applies to the assessment of the ecological efficiency of workers in their careers and delivers them by providing responses on their work to avoid unwanted attitudes. (Singjai et al., 2018). In the performance appraisal program, some businesses have established sustainability targets for workers and measure their efforts at ecological conservation. Efficiency monitoring offers important input for staff that may continuously enhance environmental performance in an organization. (Thanki & Thakkar, 2018). Zhou et al. (2016) Indicate that environmental impact success evaluations provide regular emissions prevention and environmental innovation growth objectives for businesses.

H3: The GPA has a significant impact on organizational sustainability.

F. Green Selection

Recruitment and selection are vital processes for organizations to acquire and maintain competent employees, which can contribute to organizational success (Gilani et al., 2020). Singh (2019) emphasizes the importance of skilled employees, and recruitment and selection strategies play a key role in acquiring such employees. These strategies should be designed to attract qualified individuals who possess the necessary knowledge, skills, and abilities to fulfill job requirements and help the organization achieve its goals (Mayer et al., 2012). Furthermore, recruitment and selection should be aligned with the organization's overall strategic plan, and the selection process should be fair, objective, and legally defensible (Eltrán-Martín, I.ROca-Puig, 2006). Effective recruitment and

selection practices can result in reduced employee turnover, increased productivity, and improved job satisfaction (Colette Darcy, Jimmy Hill, 2014).

To address the limited availability of individuals with technical knowledge of environmental management, organizations may need to develop their own green talent pipeline through targeted recruitment, training, and development programs. (Misra et al., 2012). These programs can enhance the knowledge and skills of potential candidates, thus increasing the pool of qualified applicants for GS. Additionally, GS can be facilitated by incorporating green elements into job descriptions, including environmental responsibilities and requirements, as well as considering the applicant's green qualifications and experience during the selection process. (Chaudhary, 2020). Effective GS is essential to ensure that the selected candidates have a deep understanding of the organization's sustainability objectives and can contribute to the company's green initiatives. Moreover, it can increase employee engagement and improve the overall environmental performance of the organization. (Singh, 2019). Therefore, it is critical for organizations to develop and implement effective GS strategies to attract and retain talented individuals who can support their environmental sustainability goals.

H4: The GS has a significant impact on organizational sustainability.

G. Green Recruitment

In the competitive field of talent acquisition, HRM plays a crucial role in attracting and retaining skilled workers. Prospective employees tend to favor organizations that align with their personal values. Due to increasing environmental awareness, the environmental reputation and brand of an organization have become significant factors in recruitment activities. (Paillé et al., 2020). Companies are now recognizing that the perception of being an environmentally conscious employer is an effective way to attract future talents. (Yong et al., 2020). The environmental performance of an organization can be a key factor in attracting top talent during the recruitment phase. (Singjai et al., 2018). In today's business landscape, companies are increasingly aware of the importance of the environment and seek to attract the most innovative and inventive workers to improve their recruitment competitiveness. Web-based recruiting provides recruiters with more information about the organization's environmental practices than traditional media such as print ads or brochures. (Paillé et al., 2020). Al Mehrzi and Singh (2016) Categorized green recruitment strategies into three main areas: green candidate recognition, green career branding, and the use of green criteria to attract applicants. They suggest that recognizing the green values and awareness of candidates, as well as how they align with the values of the organization, can lead to the achievement of environmental objectives. Green workplace messaging is utilized to attract potential employees, and the assessment and placement of workers are based on green standards.

H5: The GR has a significant impact on organizational sustainability

H. Green Rewards

In order to accomplish corporate targets, incentives function to recruit, maintain, and inspire the best workers while simultaneously fostering the creation of new skills, behaviors, and abilities. (Karatepe & Vatankhah, 2015). Rewards are important instruments that can connect corporate priorities to employee interests, center workers' attention on the core facets of their jobs, and inspire them to make the greatest effort possible. (Cerasoli et al., 2014). GRw is described as a structure of monetary and non-monetary incentives by a discrete likeness to help in ecological administration. (Yong et al., 2020). Numerous companies have built incentive programs that promote environmental efficiency. Zhang et al. (2019) Suggests that monetary and non-monetary incentives are important mechanisms to promote environmental management.

H6: The GRw has a significant impact on organizational sustainability

II. RESEARCH METHOD

This study endeavours to assess the effects of the adoption of Green Human Resource Management (GHRM) on organizational sustainability through a cross-sectional empirical investigation. To accomplish this objective, a survey instrument was created, and measuring scales were devised to evaluate the research methodology. The validity of the measuring scales was confirmed through a pre-test, with input from six scholars and six industry experts. Subsequently, an updated version of the questionnaire was developed, and the new theories were evaluated. The measuring scales incorporated in the questionnaire reflect the activities of GHRM, enabling the evaluation of its impact on sustainability.

This research was conducted on major manufacturing corporations in Indonesia, selected for their significant exposure to environmental concerns, and established HR activities plans related to environmental protection. The sampling frame consisted of all major manufacturing companies in Indonesia, totaling 347 organizations. This particular sample was deemed suitable for investigating the association between GHRM and

sustainability within specific organizational settings, thereby fulfilling the research purpose. As our research focuses on environmental concerns and market factors (HRM and sustainability), our goals were those workers who had knowledge of these groups. As a result, 347 questionnaires were distributed among the HR directors who were active participants in HRM in major manufacturing companies in Indonesia.

Sustainable growth was assessed using three dimensions that were adapted from Zhu *et al*. (2008) And Laosirihongthong *et al*. (2013), i.e., Social Performance (SocP), which consists of five items; Environment Performance (EnvP), which consists of five items; and Economic Performance (EcoP), which consists of five items. Those items were measured on a Likert-type scale with seven points, with values ranging from one as strongly disagree to seven as strongly agree. Furthermore, the GHRM activities were assessed in six dimensions developed by Yong & Moh-Yusoff. (2016) and Joubour (Charbel Jose Chiappetta Jabbour, 2011), i.e., Green Analysis and Job Development (GA&JD) that consists of three items, Green Recruitment (GR) that consists of two items, Green Selection (GS) that consists of two items, Green Training (GT) that consist of three items, Green Performance Assessment (GPA) that consist of three items, and Green Rewards (GRw) that consist of two items. In response to each object, a 7-point Likert-type scale ranging between 1 (strongly disagree) to 7 (strongly agree).

III.. RESULTS AND DISCUSSION

To analyze the model of research developed for this report, the test of the partial least squares (PLS) was conducted using SmartPLS 3.2.8 (Hair et al., 2017). SmartPLS is a second-generation program that can evaluate smaller, non-normal data sets. Survey testing data is normally non-normal and, thus, the most fitting method for our study. We checked the construct and then analyzed the systemic model to ensure it was in compliance with the literature guidance. (Hair et al., 2017).
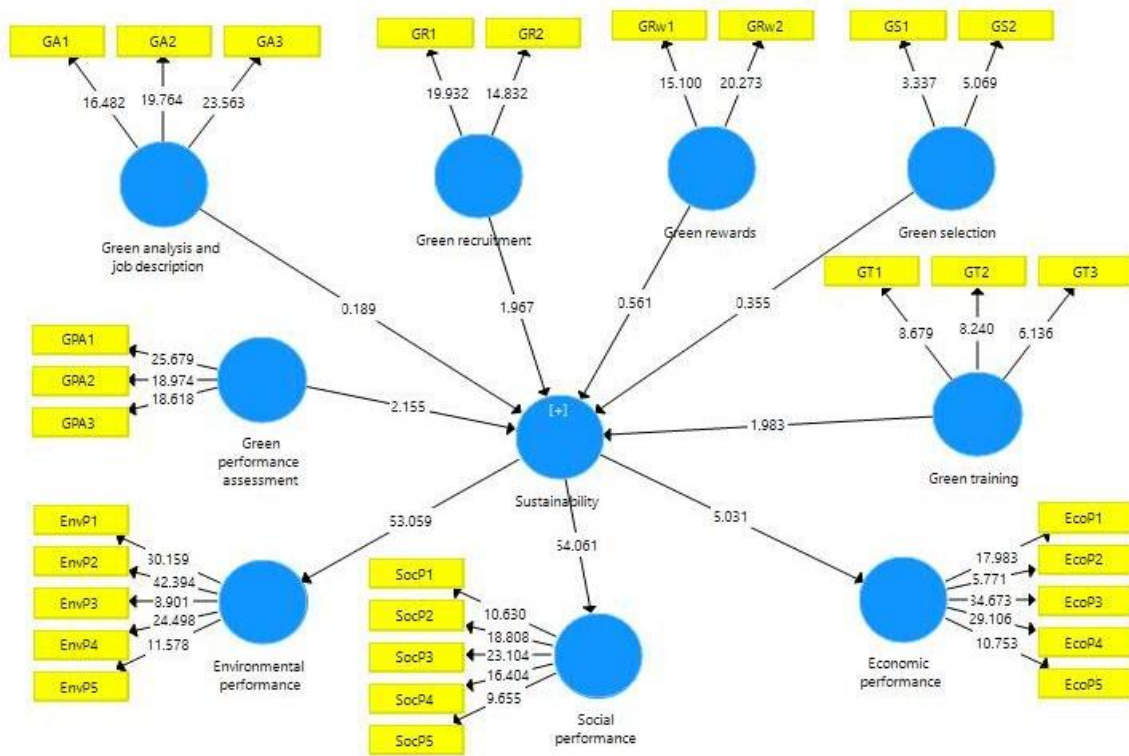

Figure. 1. Estimations of Measurement Model.

A second order in sustainability was included in the model we created. We checked the first-order variables, accompanied by the validity and efficiency of the second-order factor first. We used factor loads, average variance derived (AVE), and composite reliability (CR) to assess convergent validity, accompanied by discriminant validity, as proposed by (Hair et al., 2017; Shah & Rahim, 2019b).

Table 1. Estimation Measurement Model

Construct	Items	Loadings	Cronbach's Alpha	CR	AVE
Economic performance (EcoP)	EcoP1	0.786	**0.787**	**0.851**	**0.537**
	EcoP2	0.575			
	EcoP3	0.813			
	EcoP4	0.804			
	EcoP5	0.656			
Environmental performance (EnvP)	EnvP1	0.779	**0.742**	**0.831**	**0.500**
	EnvP2	0.814			
	EnvP3	0.558			
	EnvP4	0.743			
	EnvP5	0.607			
Green analysis and job description (GA&JD)	GA1	0.786	**0.749**	**0.855**	**0.663**
	GA2	0.815			
	GA3	0.841			
Green Performance Assessment (GPA)	GPA1	0.828	**0.749**	**0.855**	**0.664**
	GPA2	0.805			
	GPA3	0.810			
Green recruitment (GR)	GR1	0.884	**0.737**	**0.845**	**0.732**
	GR2	0.826			
Green rewards (GRw)	GRw1	0.851	**0.765**	**0.856**	**0.749**
	GRw2	0.879			
Green selection (GS)	GS1	0.812	**0.738**	**0.844**	**0.731**
	GS2	0.896			
Green training (GT)	GT1	0.835			
	GT2	0.816	**0.776**	**0.870**	**0.690**
	GT3	0.840			
Social performance (SocP)	SocP1	0.607	**0.784**	**0.798**	**0.545**
	SocP2	0.721			
	SocP3	0.761			
	SocP4	0.681			
	SocP5	0.543			
Sustainability	EcoP	0.896	**0.812**	**0.848**	**0.519**
	EnvP	0.888			
	SocP	0.536			

Table 2. demonstrates that all first-order constructs exhibit valid and reliable loadings above 0.7, with AVE> 0.5 and CR> 0.7. Three parameters have already been passed by the second-order factors, and thus, both the first and the second-order factors are true and accurate. The HTMT criteria that surpassed the 0.85 threshold (Hair et al., 2017) Shows that discriminant validity has been developed (see Table 3).

Table 2. Fornell and Larcker Criterion for Discriminant Validity

	EcoP	EnvP	GA&JD	GPA	GR	GRw	GS	GT	SocP
EcoP	**0.733**								
EnvP	0.205	**0.707**							
GA&JD	0.170	0.213	**0.814**						
GPA	0.187	0.251	0.787	**0.815**					
GR	0.123	0.224	0.774	0.741	**0.856**				
GRw	0.192	0.199	0.778	0.763	0.700	**0.865**			
GS	0.166	0.139	0.114	0.082	0.072	0.062	**0.855**		
GT	0.179	0.160	0.126	0.083	0.089	0.023	0.615	**0.831**	
SocP	0.251	0.690	0.223	0.268	0.246	0.198	0.050	0.113	**0.767**

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HRM practices were recommended in order to transform workers into useful, unusual, and unequal tools that could support the aims of companies (Jerónimo, et al., 2020). These results suggest that GHRM will have environmentally conscious workers and disseminate environmental principles within the organization, which can help to promote sustainability in the industry. This study contributes to the existing literature on GHRM and highlights three crucial activities, namely GR, GPA, and GT, that foster organizational planning and environmental congruence.
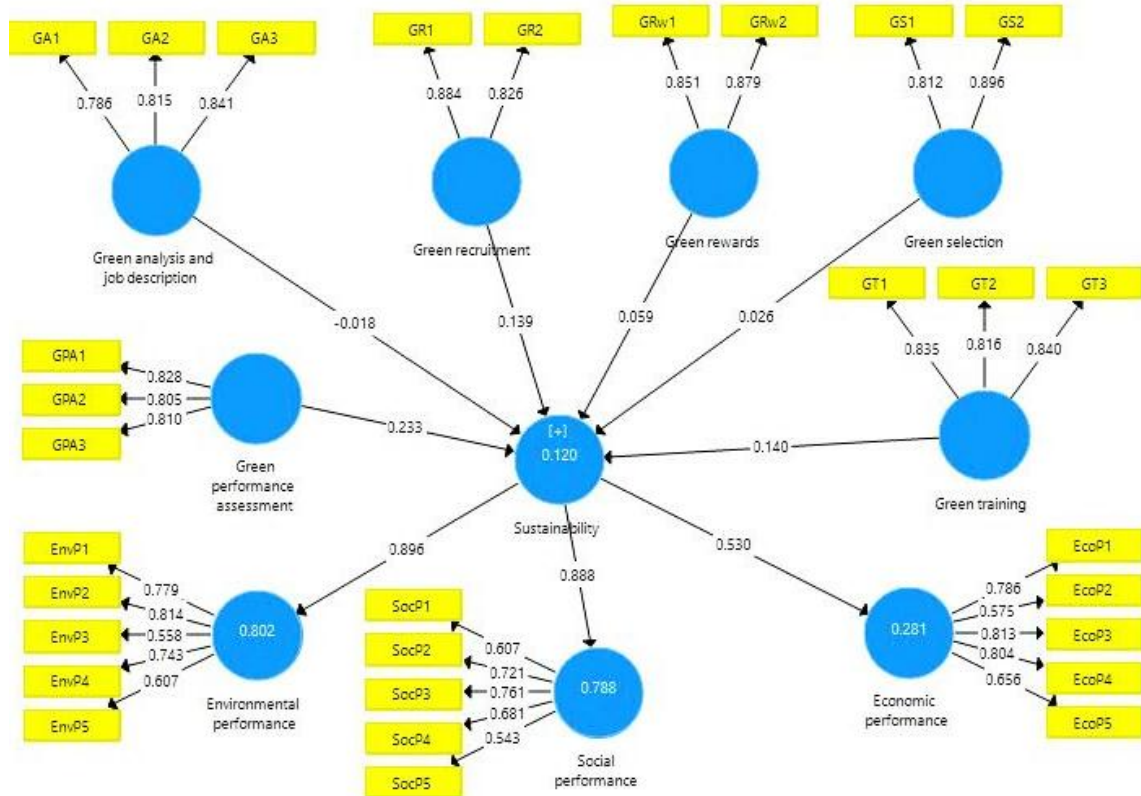

Figure. 2. Estimations of Structural Model.

This research demonstrates that GA&JD has no meaningful effects on firms' sustainability. This may be because environmental factors are seldom incorporated into work interpretation and explanation, particularly in the Indonesian context. (Yong et al., 2020). Often, even though organizations have addressed environmental concerns in their role descriptions and have taken credit for environmental involvement, only certain workers in the Department of Climate, health, and Protection tend to be impacted. Previous scientists including Song et al. (2020) Empirically suggested that the introduction of environmental management systems has had a significant effect on environmental efficiency. The effect of GA&JD on sustainability in Indonesia's big manufacturing companies is simply not evident.

Table 3. Heterotrait-Monotrait Criterion for Discriminant Validity

	EcoP	EnvP	GA&JD	GPA	GR	GRw	GS	GT	SocP
EcoP									
EnvP	0.289								
GA&JD	0.232	0.283							
GPA	0.253	0.328	0.049						
GR	0.169	0.325	0.13	0.078					
GRw	0.278	0.286	0.105	0.077	0.073				
GS	0.241	0.201	0.157	0.132	0.111	0.144			
GT	0.223	0.208	0.159	0.108	0.128	0.088	0.888		
SocP	0.330	0.101	0.307	0.364	0.370	0.289	0.124	0.174	

In order to establish the hypothesis, the bootstrap procedure has been performed in SmatPLS 3.2.8 (Hair Jr. et al., 2017). We checked the six hypotheses, and half of them were considered to be relevant, as seen in Table 4. In particular, GR (β = 0.139, t = 1.967, p <.01), GT (β = 0.140, t = 1.983, p <.01) and GPA (β = 0.234, t = 2.212, p <.01) were established. While GA&JD, GS, and green performance appraisal were found insignificant.

This research's originality resides in exploring the connection between GHRM activities and sustainability. To the best of our knowledge, this is the inaugural investigation of this theoretical construct utilizing empirical data from Indonesia, thereby enhancing the broader comprehension of sustainability in prominent production companies. Centered on the principle of RBV, this research hypothesized the positive relation of GHRM activities (for example, GA&JD, GR, GS and GT, GPA and GRw) with sustainability. The results found that three GHRM activities showed a statistically substantial and favorable link to sustainability: GR, GPA, and GT.

Table 3. Hypotheses Testing.

Hypothesis	Beta	S.E	T Value	P Value	CI^{BCa} Low	CI^{BCa} High	Decision
GA&JD -> Sustainability	-0.018	0.114	0.201	0.841	-0.269	0.173	Not supported
GPA -> Sustainability	0.234	0.106	2.212	0.027	0.012	0.432	Supported
GR -> Sustainability	0.139	0.096	1.967	0.048	0.004	0.237	Supported
GRw -> Sustainability	0.053	0.093	0.571	0.568	-0.115	0.259	Not supported
GS -> Sustainability	0.024	0.064	0.374	0.709	-0.099	0.146	Not supported
GT -> Sustainability	0.140	0.071	1.983	0.047	0.002	0.278	Supported

The findings revealed a favorable association between these two factors in terms of the relationship between GR and sustainability. Wide industrial corporations evidently supported green hires, reflecting the desire of companies for sustainable applicants. With this degree of dedication, an organization is likely to achieve sustainable growth, especially with regard to environmental efficiency. This results in HR managers considering a candidate's environmental involvement as a target in the recruiting procedure to combat environmental challenges in the automotive sector. Recruiting people dedicated to protecting the environment can boost the organization's environmental output. There was no substantial association between GS and sustainability. From an economic viewpoint, this finding contradicts (Jerónimo et al., 2020), which indicates that GR has a positive and important impact on financial results. A possible justification for these inconsistent findings is that the prominent industrial firms examined in this study might be in the nascent stage of GS implementation. Therefore, GS does not have an impact on economic efficiency.

Regarding GT, the findings indicate a good association between GT and sustainability. This observation is close to Jerónimo et al. (2020), where GT favorably affected environmental results. The implementation of GT is anticipated to enhance employees' environmental knowledge, instill environmental awareness, stimulate their creativity for green innovation, and foster their environmental commitment, all of which ultimately contribute to bolstering environmental outcomes. Through the adoption of GT, employees are incentivized to identify methods for curtailing paper and energy consumption and minimizing the utilization of environmentally hazardous materials in their products, particularly among manufacturing personnel. Continuous GT can allow businesses to enhance their economic and environmental efficiency. Results suggest a significant association between GPA and sustainability. The results are consistent with Tsaur & Huang' (2016) The research found a significant correlation between GPA and environmental performance.

This present investigation, which scrutinized the linkage between GRw and sustainability, uncovered no significant association between these two variables. GRw is designed to promote employee commitment to environmental management; thus, this approach is more likely to have a direct impact on employee performance rather than on company sustainability. Paillé et al. (2020) States that environmental incentives and appreciation can improve workers' desire to deliver environmental initiatives. This may be the factor behind Indonesian big manufacturing firms' non-significant findings. From an environmental viewpoint, the non-significance of this partnership could be that GRw is not commonly utilized in major Indonesian manufacturing companies to promote workers' environmental contributions. Therefore, restricted application of this approach could not contribute to substantial environmental change. Additionally, focusing on incentives may not contribute to substantial environmental performance changes, but such improvements can be accomplished if paired with consistent coordination, input, and empowerment.

According to Song et al. (2020), HRM will direct the sustainability of companies by updating principles and assumptions to rearrange the corporate culture and cultivate an awareness of sustainability that will be mirrored in

the everyday behavior of employees. Consequently, although the impact of GHRM on sustainability remains inconclusive, the significant influence of GR, GPA, and GT on sustainability highlights the need for major manufacturing companies to intensify their GHRM initiatives to attain enduring sustainability. In addition, previous HRM literature conceptualizes the importance of HRM activities to sustainability (Jerónimo et al., 2020). However, the partnership was not empirically checked, and environmental initiatives have yet to be thoroughly explored. Through conceptualizing sustainability and analyzing how it performs at an organizational level, this study defined and analyzed a construct that could be empirically evaluated. This research advances current studies by substantiating sustainability assessment and empirically demonstrating the benefits of GHRM practices to market sustainability. This contribution would also enable future investigations to examine the correlation between sustainability and other constructs deemed crucial for such inquiries.

IV. CONCLUSION

In conclusion, this study emphasizes the crucial role of GHRM in accomplishing organizational sustainable development. The outcomes of this research indicate that three of the six GHRM practices were significantly associated with organizational sustainability performance. Specifically, Green Performance Assessment (GPA), Green Recruitment (GR), and Green Training (GT) demonstrated a positive relationship with sustainability performance. These findings suggest that the adoption of GHRM practices can enhance environmental performance and offer a well-rounded approach to aligning employees with the organization's environmental policy. From a theoretical perspective, this research contributes to the existing literature on GHRM practices by identifying the precise practices that have the most significant impact on enhancing organizational sustainability performance. From a practical perspective, the research provides critical insights for HR managers in Indonesian organizations who want to implement GHRM practices to promote sustainability. The findings indicate that HR managers should prioritize the three identified practices to improve sustainability performance. Furthermore, the research results emphasize the importance of aligning GHRM practices with the organization's overall environmental policy to achieve sustainability objectives. Negligible findings need more analysis to contribute to the debate and offer fresh perspectives on GHRM. Future studies on GHRM may, therefore, further explore the connections between GA&JD, green collection, GRw, and sustainability in various contexts to find and validate synergies and inconsistencies.

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REFERENCES

Al Mehrzi, N., & Singh, S. K. (2016). Competing through employee engagement: a proposed framework. *International Journal of Productivity and Performance Management*, *65*(6), 831–843. https://doi.org/10.1108/IJPPM-02-2016-0037

Bocken, N. M. P., & Geradts, T. H. J. (2020). Barriers and drivers to sustainable business model innovation: Organization design and dynamic capabilities. *Long Range Planning*, *53*(4), 101950. https://doi.org/10.1016/j.lrp.2019.101950

Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. *Psychological Bulletin*, *140*(4), 980–1008. https://doi.org/10.1037/a0035661

Chang, R.-D., Zuo, J., Zhao, Z.-Y., Zillante, G., Gan, X.-L., & Soebarto, V. (2017). Evolving theories of sustainability and firms: History, future directions and implications for renewable energy research. *Renewable and Sustainable Energy Reviews*, *72*, 48–56. https://doi.org/10.1016/j.rser.2017.01.029

Chaudhary, R. (2020). Green Human Resource Management and Employee Green Behavior: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management*, *27*(2), 630–641. https://doi.org/10.1002/csr.1827

Colette Darcy, Jimmy Hill, T. M. and P. M. (2014). Consideration of organizational sustainability in the SME

context: A resource-based view and composite model. *Managerial Auditing Journal*, *28*(2), 2–3. https://doi.org/10.1108/02686901311284531

Côrte-Real, N., Oliveira, T., & Ruivo, P. (2017). Assessing business value of big data analytics in European firms. *Journal of Business Research*, *70*, 379–390. https://doi.org/10.1016/j.jbusres.2016.08.011

Du, S., & Sen, S. (2016). Challenging competition with CSR: Going beyond the marketing mix to make a difference. *GfK Marketing Intelligence Review*, *8*(1), 18–23. https://doi.org/10.1515/gfkmir-2016-0003

Ehnert, I., Harry, W., & Zink, K. J. (2013). Sustainability and Human Resource Management - Developing Sustainable Business Organizations. *NHRD Network Journal*, *6*(4), 81–82. https://doi.org/10.1177/0974173920130413

Eltrán-Martín, I.ROca-Puig, V. (2006). Promoting employee flexibility through HR practices. *Human Resource Management*, *45*(1), 127–145. https://doi.org/10.1002/hrm

Farooq, O., Farooq, M., & Reynaud, E. (2019). Does Employees' Participation in Decision Making Increase the level of Corporate Social and Environmental Sustainability? An Investigation in South Asia. *Sustainability*, *11*(2), 511. https://doi.org/10.3390/su11020511

Genoveva, G., Adinda, S., & Kartawaria, F. N. (2023). Environment-Friendly Coffee Shop Intentions: How Does Peer Pressure Mediate Among Millennials? *Jurnal Manajemen Indonesia*, *23*(2), 156–167. https://doi.org/10.25124/jmi.v23i2.4197

Gilani, N., Waheed, S. A., & Lakhvi, M. Z. (2020). Prevalence of disability categories in special education: A potential barrier to inclusive education and Islamic perspective. *Al-Qalam*, *25*(1), 83–95.

Gilani, Nadia, Waheed, S. A., & Shaheen, A. (2020). Making a Debut in Teaching: Uncovering Prospective Teachers' First-time Teaching Experiences in Schools. *Universal Journal of Educational Research*, *8*(11), 5443–5452. https://doi.org/10.13189/ujer.2020.081147

Guerci, M., Radaelli, G., Siletti, E., Cirella, S., & Rami Shani, A. B. (2015). The impact of human resource management practices and corporate sustainability on organizational ethical climates: An employee perspective. *Journal of Business Ethics*, *126*(2), 325–342. https://doi.org/10.1007/s10551-013-1946-1

Gunawan, A. A., Putri, M. K., & S. Putri, I. N. (2023). Implementation of Design Thinking Concepts in Eco-Fashion Product Design. *Jurnal Manajemen Indonesia*, *23*(3), 322–331. https://doi.org/10.25124/jmi.v23i3.5486

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structure Equation Modelling (PLS)* (2nd Editio). Sage Publications Ltd.

Hameed, Z., Khan, I. U., Islam, T., Sheikh, Z., & Naeem, R. M. (2020). Do green HRM practices influence employees' environmental performance? *International Journal of Manpower*, *41*(7), 1061–1079. https://doi.org/10.1108/IJM-08-2019-0407

Jabbour, Charbel Jose Chiappetta. (2011). How green are HRM practices, organizational culture, learning, and teamwork? A Brazilian study. *Industrial and Commercial Training*, *43*(2), 98–105. https://doi.org/10.1108/00197851111108926

Jabbour, Charbel José Chiappetta, Santos, F. C. A., & Nagano, M. S. (2010). Contributions of HRM throughout the stages of environmental management: methodological triangulation applied to companies in Brazil. *The International Journal of Human Resource Management*, *21*(7), 1049–1089. https://doi.org/10.1080/09585191003783512

Jerónimo, H. M., Henriques, P. L., Lacerda, T. C. de, da Silva, F. P., & Vieira, P. R. (2020). Going green and sustainable: The influence of green HR practices on the organizational rationale for sustainability. *Journal of Business Research*, *112*, 413–421. https://doi.org/10.1016/j.jbusres.2019.11.036

Jerónimo, H. M., Lacerda, T. C., & Henriques, P. L. (2020). From Sustainable HRM to Employee Performance: A Complex and Intertwined Road. *European Management Review*, *17*(4), 871–884. https://doi.org/10.1111/emre.12402

Jirawuttinunt, S., & Limsuwan, K. (2020). The Effect of Green Human Resource Management on Performance of Certified Iso 14000 Businesses in Thailand. *UTCC International Journal of Business and Economics (UTCC IJBE)*, *11*(1), 168–185.

Karatepe, O. M., & Vatankhah, S. (2015). High-performance work practices, career satisfaction, and service recovery performance: a study of flight attendants. *Tourism Review*, *70*(1), 56–71. https://doi.org/10.1108/TR-01-2014-0004

Ketprapakorn, N., & Kantabutra, S. (2019). *Culture Development for Sustainable SMEs : Toward a Behavioral Theory*.

Kostopoulos, K. (2002). The resource-based view of the firm and innovation: identification of critical linkages. *The 2nd European Academy of Management Conference*, 1–19.

Laosirihongthong, T., Adebanjo, D., & Choon Tan, K. (2013). Green supply chain management practices and performance. *Industrial Management & Data Systems*, *113*(8), 1088–1109. https://doi.org/10.1108/IMDS-04-2013-0164

Lozano, R., Carpenter, A., & Huisingh, D. (2015). A review of "theories of the firm" and their contributions to Corporate Sustainability. *Journal of Cleaner Production*, *106*, 430–442. https://doi.org/10.1016/j.jclepro.2014.05.007

Mayer, K. J., Somaya, D., & Williamson, I. O. (2012). Firm-specific, industry-specific, and occupational human capital and the sourcing of knowledge work. *Organization Science*, *23*(5), 1311–1329. https://doi.org/10.1287/orsc.1110.0722

Misra, R. K., Sarkar, S., & Singh, P. (2012). *Today's HR for a sustainable tomorrow*. Allied Publishers.

Morioka, S. N., Bolis, I., Evans, S., & Carvalho, M. M. (2018). Transforming sustainability challenges into competitive advantage: Multiple case studies kaleidoscope converging into sustainable business models. *Journal of Cleaner Production*, *167*, 723–738. https://doi.org/10.1016/j.jclepro.2017.08.118

Nugraha, A. T., Wahyudi, R., Fawzi, A. M., & Sunarti, S. (2022). Eco Design, Internal Environment Management, Just in Time and Organizational Performance: Examining Moderating Role of Trust. *Jurnal Manajemen Indonesia*, *22*(3), 396. https://doi.org/10.25124/jmi.v22i3.3673

Paillé, P., Valéau, P., & Renwick, D. W. (2020). Leveraging green human resource practices to achieve environmental sustainability. *Journal of Cleaner Production*, *260*, 121137. https://doi.org/10.1016/j.jclepro.2020.121137

Rahim, N. A., & Shah, S. I. U. (2020). A Micro-Level Implementation Mechanism to Enhance Corporate Sustainability Performance: A Social Identity Perspective. *International Journal of Innovation, Creativity, and Change*, *11*(2), 1–23. https://ijicc.net/images/vol11iss2/11201_Rahim_2020_E1_R1.pdf

Rivera, J. M., Muñoz, M. J., & Moneva, J. M. (2017). Revisiting the relationship between corporate stakeholder commitment and social and financial performance. *Sustainable Development*, *25*(6), 482–494. https://doi.org/10.1002/sd.1664

Roscoe, S., Subramanian, N., Jabbour, C. J. C., & Chong, T. (2019). Green human resource management and the enablers of green organizational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment*, *28*(5), 737–749. https://doi.org/10.1002/bse.2277

Shah, S. I. U., & Rahim, N. A. (2019a). Addressing the recent developments and potential gaps in the literature of corporate sustainability. *Journal of Studies in Social Sciences and Humanities*, *5*(1), 27–40. http://www.jssshonline.com/wp-content/uploads/2020/05/JSSSH_Vol.5_No.1_2019_27-40_Sr-No.-3-1.pdf

Shah, S. I. U., & Rahim, N. A. (2019b). Effect of ethical climate on corporate financial performance in Pakistan: An application of confirmatory tetrad analysis (CTA-PLS) approach. *Journal of Studies in Social Sciences and Humanities*, *5*(2), 53–67. http://www.jssshonline.com/wp-content/uploads/2020/05/JSSSH_Vol.5_No.2_2019_53-67_Sr-No.-2-Updated-1.pdf

Shen, J., Dumont, J., & Deng, X. (2018). Employees' Perceptions of Green HRM and Non-Green Employee Work Outcomes: The Social Identity and Stakeholder Perspectives. *Group and Organization Management*. https://doi.org/10.1177/1059601116664610

Shen, W., Tang, W., Siripanan, A., Lei, Z., & Duffield, C. F. (2018). *Understanding the Green Technical Capabilities and Barriers to Green Buildings in Developing Countries : A Case Study of Thailand*. https://doi.org/10.3390/su10103585

Shibin, K. T., Dubey, R., Gunasekaran, A., Hazen, B., Roubaud, D., Gupta, S., & Foropon, C. (2020). Examining sustainable supply chain management of SMEs using resource-based view and institutional theory. *Annals of Operations Research*, *290*(1–2), 301–326. https://doi.org/10.1007/s10479-017-2706-x

Siddique, C. M. (2004). Job analysis: a strategic human resource management practice. *The International Journal of Human Resource Management*, *15*(1), 219–244. https://doi.org/10.1080/0958519032000157438

Singh, D. (2019). A Literature Review on Employee Retention with Focus on Recent Trends. *International Journal of Scientific Research in Science and Technology*, *6*(1), 425–431. https://doi.org/10.32628/IJSRST195463

Singjai, K., Winata, L., & Kummer, T. (2018). International Journal of Hospitality Management Green initiatives and their competitive advantage for the hotel industry in developing countries. *International Journal of Hospitality Management*, *75*(March), 131–143. https://doi.org/10.1016/j.ijhm.2018.03.007

Smith, M. B., Wallace, J. C., Vandenberg, R. J., & Mondore, S. (2016). Employee involvement climate, task and citizenship performance, and instability as a moderator. *The International Journal of Human Resource Management*, *5192*(May), 1–22. https://doi.org/10.1080/09585192.2016.1184175

Song, W., Yu, H., & Xu, H. (2020). Effects of green human resource management and managerial environmental concern on green innovation. *European Journal of Innovation Management*. https://doi.org/10.1108/EJIM-11-2019-0315

Thanki, S., & Thakkar, J. (2018). A quantitative framework for lean and green assessment of supply chain performance. *International Journal of Productivity and Performance Management*, *67*(2), 366–400. https://doi.org/10.1108/IJPPM-09-2016-0215

Tsaur, R. C., & Huang, H. T. (2016). Green performance assessment for the retail industry in Taiwan. *International Journal of Information and Management Sciences*. https://doi.org/10.6186/1JIMS.2016.27.2.8

van der Waal, J. W. H., & Thijssens, T. (2020). Corporate involvement in Sustainable Development Goals: Exploring the territory. *Journal of Cleaner Production*, *252*, 119625. https://doi.org/10.1016/j.jclepro.2019.119625

Waheed, S. A. (2020). Doctoral Students' Transition to the Academic Culture of Foreign Universities: Setting the Stage for PhD. *Sjesr*, *3*(2), 408–419. https://doi.org/10.36902/sjesr-vol3-iss2-2020(408-419)

Yong, J. Y., & Mohd-Yusoff, Y. (2016). Studying the influence of strategic human resource competencies on the adoption of green human resource management practices. *Industrial and Commercial Training*, *48*(8), 416–422. https://doi.org/10.1108/ICT-03-2016-0017

Yong, J. Y., Yusliza, M., Ramayah, T., Chiappetta Jabbour, C. J., Sehnem, S., & Mani, V. (2020). Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. *Business Strategy and the Environment*, *29*(1), 212–228. https://doi.org/10.1002/bse.2359

Zhang, Y., Luo, Y., Zhang, X., & Zhao, J. (2019). How Green Human Resource Management Can Promote Green Employee Behavior in China: A Technology Acceptance Model Perspective. *Sustainability*, *11*(19), 5408. https://doi.org/10.3390/su11195408

Zhou, Q., Yabar, H., Mizunoya, T., & Higano, Y. (2016). Exploring the potential of introducing technology innovation and regulations in the energy sector in China: A regional dynamic evaluation model. *Journal of Cleaner Production*. https://doi.org/10.1016/j.jclepro.2015.03.070

Zhu, Q., Sarkis, J., & Lai, K. (2008). Confirmation of a measurement model for green supply chain management practices implementation. *International Journal of Production Economics*, *111*(2), 261–273. https://doi.org/10.1016/j.ijpe.2006.11.029