

Sustainable Institutions: Operational Study of Green HRM

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Abstract—Sustainability is the potential for long-term maintenance of well-being with ecological, economic, political, and cultural dimensions. It explains how a system remains diverse and productive for future generations. Supporting sustainable industries, encouraging sustainable behaviors, and devoting time and money to scientific research and innovation are important ways to facilitate sustainable development. Thus, the efforts to measure sustainable performance in the organization should be carried out to instill awareness on sustainable development by all organization members regardless of their position. This study aims to understand the interactions of green human resource management or green HRM practices towards sustainable performance among managerial level administrator at a Higher Education Institutions (HEIs) in Malaysia. This research will be conducted as an explanatory study to examine the cause and effects between the variables. This paper hopes to offer some utility to potential researchers for growing interest and gaining a conceptual knowledge of green HRM. Eventually, this paper is expected to provide a deeper understanding of the managerial perspectives on green HRM and the perceived importance of sustainable performance for future researchers.

Index Terms—sustainability, green HRM, sustainable performance, green recruitment, green training, green involvement

I. INTRODUCTION

Recently, a growing number of companies have made sustainability an important part of their business strategy. Rising concern on the global environmental deterioration, economic, and social decline has driven all countries under United Nation Member States to adopt the 2030 Agenda for Sustainable Development (1). Under the agenda, there are 17 Sustainable Development Goals (SDGs) that were set as strategies to tackle universal issues such as poverty, inequality, quality of life, and other deprivations and at the same time conserving our forests and oceans. The SDGs were developed by participating countries and the United Nations (UN) over decades ago since 1992, at the Earth Summit in Rio de Janeiro. With that notion, the government has taken several initiatives to address the SDGs. Recently, in Budget 2021, the Malaysian Minister of Finance has

announced a particular focus on the sustainability agenda. The government will consider adopting sustainability and green technology in the development agenda as it will play a vital role in driving the economy. Therefore, with the growth of sustainability awareness, governments, businesses, and public society have become more conscious about environmental management systems (EMS).

Generally, carbon dioxide (CO₂) and greenhouse gas emissions were identified as the primary cause of the global temperature rise that directly affects climate change. The Our World in Data (n.d.) has archived data of carbon emission across countries gathered from the Carbon Dioxide Information Analysis Centre (CDIAC) and the Global Carbon Project. The global carbon emissions started to surge when the First Industrial Revolution was introduced in Europe and the United States around 1760. The CDIAC recorded that the total carbon emissions were very low before the Industrial Revolution. During those times, most of the CO₂ was emitted from the manufacturing industry, mainly from the factories operating using machines. Carbon dioxide is released into the atmosphere, mostly through the burning of fossil fuels, oil, gas, and coal extraction combustion (2).

Among the environmental impacts that threaten sustainability are climate change, ozone depletion, deforestation, ecosystem deprivation, and biodiversity loss. Consequently, the associations affect the sustainability of the environment and the sustainability of humankind (social) and the economy. These phenomena have introduced the concept of sustainable performance in which a business's economic performance is no longer viewed as the sole aim to accomplish as much emphasis has been put on the accomplishment of social and environmental goals (3,4). Individuals and companies in any sector need to comply with their environmental and natural conservation obligations, including the adaptation of environmental protection and proper management of natural resources to their business activities (5,6). Several benefits could be gained from the pro-environmental practices in the organization. Among them is reducing the office operating cost and having less impact on the environment. Besides, with advanced technologies, the

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process is more efficient (7). Examples include paperless approaches like posting job vacancies on the company website, submitting, and accepting company correspondence, online meetings, and interviews.

However, keeping the business running and, at the same time, maintaining the environment and natural resources becomes a significant challenge to the organization in the achievement of competitive advantage. The current and future competitive advantage strategies are highly dependent on the resources and capabilities that ease environmentally friendly activity (8). In line with this matter, many organizations are keen to ensure that their routine activities are less detrimental to the environment by implementing EMS or green initiatives (9). Environmental human resources practices or green human resource management (Green HRM) help to enhance HRM through the inclusion of environment consciousness within the whole HRM process of hiring, training, rewarding, and developing a green workforce that understands and values environment-friendly values, practices, and initiatives (3) that result in overall organizational efficiency and environmental protection.

II. LITERATURE REVIEW

Organizations worldwide have been facing constant pressure to become more sustainable to lessen their environmental consequences, improve their firms' social benefits, and foster economic growth beyond conventional profit-related initiatives (10). This trend has increased concern among business leaders, governments, customers, and management scholars to search for innovations to deal with these dilemmas (11). Consequently, companies had to develop strategies and policies to instigate sustainable development programs and, at the same time to comply with environmental legislation.

To achieve the organization's sustainability objectives and eventually make a significant contribution to environmental sustainability, environmentally friendly human resources practices or green human resource management (Green HRM) should be introduced to transform ordinary workers into green employees (12). Past studies on building a green culture in the organization, engaging the employees in reducing office waste, encouraging them to use resources efficiently, and other environmentally friendly activities have been conducted to understand green HRM's role in sustainable issues (13–15). Nevertheless, (6) claim that applying green HRM practices in most organizations is still in infancy; therefore, more research is needed to instill the ideas and explore them. Researchers and scholars have begun to set their interest in this area as they realize the importance of building sustainability strategies and measuring their sustainable performance.

A. Sustainable Performance

The interest in building sustainable organizations has been growing in recent decades. The notion of sustainable development (SD) was stemmed from the World Conservation Strategy in 1980 stated that for

development to be sustainable, social, ecological, and economic factors must be considered [7]. This description has been extended during the Earth Summit in 1992 (UN, 1992) and formalized ten years later by the World Summit of Sustainable Development in 2002 (UN, 2002), which highlight the global goals target to end hunger, protect the earth, and ensure everyone's well-being by 2030. These global goals, known as the Sustainable Development Goals (SDGs), where everyone in the society from institutional, organizational, and individual levels need to play their role and contribute to sustainable development. In line with this phenomenon, the idea of sustainable performance has been introduced, in which the economic performance of a company is no longer seen as the only aim to accomplish as much focus as has been put on achieving social and environmental objectives (18).

With this development, sustainable organizations are looking for input from both internal and external stakeholders to form their business strategies and operations, taking account of their financial, sociological, and environmental implications (13). The sustainable performance perspective is also aligned with the triple bottom line concept by (19), who emphasized the environmental, social, and economic performance. The organization's economic state is closely associated with environmental protection in the long run. With solid economic foundations, businesses are willing to invest in other domains, such as environmental and social aspects (20).

Nonetheless, (21) argues that a shift in environmental activities may raise economic growth but might affect social performance. The study investigating the interaction between financial performance and social performance found that good financial performance always precedes social performance by providing funds and putting investments that could improve its environmental and social performance. In contrast, there will be decreased social (employees) performance if the organization does not reward pro-environmental action (22). On the other hand, an excellent environmental and social performance will result in adequate financial performance because of the efficient use of resources and commitment of the employees and the stakeholders. For instance, the firm will gain maximum shareholder values and profit when they abide by corporate social responsibility (CSR). This result also proves that as the organization's economy increases, it would lead to better social and environmental performance (23).

While economic performance focus on the organization's financial state and social performance is all about the well-being of employees, customers, and stakeholders, another sustainable performance domain is environmental performance. Environmental performance is about reducing environmental degradation and defending against resource abuse (5). Previous studies showed that environmental performance could be measured either at the employee (individual) level or organizational (group or unit) level (3,17,22,23,24). These studies revealed that several factors influence

individual environmental performance, such as understanding and intention to preserve the environment, environmental commitment, and environmental passion.

Past studies also have provided evidence of sustainability incorporation in different areas of industry such as manufacturing industry (4,5,20,25–28), yachting industry (66), entrepreneurial business and retail industry (67,29,30), electrical and electronic industry (37), supply chain management (31–33), information technology (28), and healthcare industry (34). These research papers have confirmed that sustainable development and business processes are crucial for successful performance. These studies also provide a shred of empirical evidence to show that the organization had put forth considerable efforts to include sustainability into their business. These efforts have shown positive and significant results to the organizations, such as becoming competitive and increasing economic performance. These studies also revealed the importance of influencing the employees to perceive that sustainability issues are a critical element of their organization strategy. However, some challenges could inhibit business sustainability. For example, small cooperation may lack resources and low interest in environmental management (61). These could lead not ultimately to embed the environmental concept among employees. Therefore, (7) suggest organizations apply green HRM practices such as green hiring and green training to increase the organization's sustainability results.

From the above discussions, empirical studies have shown compelling evidence of the factors influencing sustainable performance in various fields and industries worldwide. However, the integration of green HRM and sustainable performance has been less explored in Malaysia as most of the past studies focused on one type of performance measure from the triple bottom line model, particularly environmental performance. Hence, this study believes that human resource management practices are crucial in enhancing Malaysia's higher education institutions' sustainable performance.

B. Green Human Resource Management

The concept of green human resource management or green HRM for sustainable development has various definitions. The idea of green HRM seeks to explain the management processes that the organizations implement to respond to environmental concerns (24). The green HRM also relate to all the activity and practices to improve, develop, implement, and system fixing to develop staff to the level of green and environment friendly as the working style approach (14). Overall, green HRM can be described as using human resource policies to increase organizational efficiency within the human resource functions and practices (35). Therefore, green HRM is viewed as comprehensive and aligns its staff with the organization's environmental policy. The main objective of implementing green HRM in the organization is to help enhance HRM by including environment consciousness within the whole HRM process (3).

Past studies have mentioned the urgent need to develop theoretical and empirical measures of green HRM to offer more insights into its implication on an individual or organizational performance (56,36,37). Scholars are at the forefront of developing such measures in various contexts, such as using the Ability-Motivation-Opportunity (AMO) theoretical lens to embed green HRM in their organization (58,38–40). These studies affirmed that green HRM practices could influence employees' ability, motivation, and opportunity to be involved in environmental activities. However, (57) argues that if organizations do not use the full spectrum of green HRM activities, their effectiveness will hinder sustainability. Therefore, further in-depth research related to employees and organizations' role in environmental management systems are recommended to be explored (64).

Nevertheless, not all green HRM practices have a positive influence on sustainability. Past studies revealed that only certain green HRM practices have a positive effect on sustainability, e.g., green recruitment and green training (4); green recruitment and selection, green reward, green intellectual capital (green human capital and green relational capital) (39); and green recruitment and selection, green training and development, green performance management and appraisal, green reward and compensation, green employee empowerment and participation, green management of organizational culture (59). These studies provide empirical data and useful insights into the positive role of green HRM in sustainability. This study only interests in investigating the influence of green HRM practices that relate to the AMO framework, that is, the ability (training), motivation (green compensation and rewards), and opportunity (green involvement) towards the organization's sustainable performance.

Green Training. Training is commonly known as an approach to improve the employee's knowledge, skills, and ability. The purpose of green training should focus on improving employees' knowledge, experience, skills, attitudes, behavior, and practices toward the concept of environmental management (13). Employers are responsible for providing training related to environmentally friendly activities to the new and existing employees to understand and practice daily tasks. The green training programs could ease the organization's burden while delivering workshops, seminars, and demonstration sessions that solely concentrated on environmental-related problems. Besides that, green training could improve environmental knowledge and influence employees' green behavior. Prior studies have evidenced the significance of green training on employee green behavior (60,65,25). These studies affirmed that employees' eco-behavior could be improved through constant in-house training. For example, the green training programs include sharing knowledge, organizing activities, and developing skills that target to teach employees how to reduce all waste, a suitable way of using organization resource, use and reduce elements that affect the environment.

Nonetheless, there could be some challenges encountered to deliver green training. Past studies have highlighted several reasons that could impede green training effectiveness, including inadequate funding, lack of expertise, and conventional methods for completing tasks (28,41,42). Usually, staff may not be aware of green principles and practices, but as soon as a company becomes more environmentally conscious in its present activities, it is possible to exert much pressure on its employees. Therefore, employees need to be appropriately trained to cope with green concepts and practices (36,43). Furthermore, it is recommended that firms adopt technology into green training (41). The use of technology can be cost-efficient, easy to use, and more environmental-friendly. It will develop employee skills, motivate employees, and minimize resource consumption and less harm to natural resources.

Green Compensation and Rewards. Another critical function of green HRM is green compensation and reward. Based on the AMO framework, compensation and rewards packages were used to motivate managers and employees in corporate environmental management initiatives (35). Studies confirm that green compensation and rewards are vital to achieving sustainable performance (7,41). Compensation bundles should be based on green competencies to reward employees' skills acquisition and task achievements. The compensation system in an organization can be in the form of financial and non-financial recognition. Financial rewards such as salary increases, cash bonuses, and incentives, while non-financial rewards can be in the form of awards, prizes, or gifts for employee and their families, holidays, and recognition.

The employee will be more motivated when they get rewards that are commensurate with the work they do. The organization's role is to develop employees' green ability, motivate by using green rewards to the employees, and give employees green opportunities to ensure employees may increase their productivity, organization performance, and profit, and reduce waste (44). (4,45) argue the effect of green rewards on sustainability. Past research conducted within large manufacturing firms found that green rewards do not significantly affect environmental performance. This might be because green rewards are not extensively used within the firms to support their environmental contributions. Thus, this practice's limited use does not lead to substantive changes in the environment. It is recommended that the compensation and reward system be implemented across the firms and used by the manager to promote green behavior (18).

Green Involvement. Employees' involvement in corporate sustainability projects is another essential green HRM activity. It means providing employees with the opportunity to make environmental choices and inspiring them to take responsibility for their acts (18). The opportunity to participate could include knowledge of costs, a sense of belonging to the same group, improved results, and better connections between team members because they believe employees have real decision-

making powers. Green involvement could provide employees with opportunities to participate in environmental management, which stimulates them to support the prevention of pollution and identify environmental opportunities (46).

Past studies have shown the significant effect of green involvement and sustainability (25,42). These studies affirmed that integration between organizational and employee engagement is essential to achieve sustainable performance. A green learning environment would inspire workers to be concerned about their green actions and consciousness. This will provide a supervisory atmosphere between workers and increase understanding of environmental issues. Previous studies also revealed that various communication channels enable employees to be well informed about their workplace environmental issues. Several formal or informal communication channels among employees can spread green culture and provide a comfortable context to improve their green behaviors and awareness. (47) argue that employees are more likely to engage in green behaviors when they perceive adequate support from the organization. Thus, it is recommended that firms integrate green involvement with other green HRM practices like green training and green compensation and rewards to attain better results on sustainable performance.

C. Ability Motivation Opportunity (AMO)

The Ability-Motivation-Opportunity (AMO) model has been widely used by scholars better to understand the link between human resource practices and performance. The concept was initially proposed by Thomas Bailey in the early 1990s, who suggested three components that an employee should have to ensure maximum effort (48). The components are employees need to have the ability to perform their job; employees need to have sufficient drive to motivate them to work and, the employees should be allowed to perform. Later, Appelbaum, Bailey, Berg, and Kalleberg developed the model while incorporating the concept of a high-performance work system (HPWS) to describe the three elements combined that could increase employee performance that is the ability, motivation, and opportunity (AMO) (58,49,50). The AMO model of performance suggested three essential components that effectively use employees' discretionary effort for an effective HPWS. There are opportunities for employees' participation, appropriate incentives or motivation is given to employees, and policies for developing employees' skills and abilities (51). Fig. 1 shows the AMO model describing that when an employee shows a positive discretionary behavior that is working beyond expectation (i.e., taking additional responsibilities), it will positively affect the organizational performance (48).

Though, some scholar suggests that the AMO framework is originally from the basic concept of psychology (52,53) that shaped an individual trait that includes ensuring employees have the required skills and abilities, motivating employees to enhance their discretionary behavior, and empowering them to achieve

the organizational outcome (Marin-Garcia & Tomas, 2016). Many scholars have considered the AMO framework a useful instrument for interpreting the HRM-performance (48,55). It implies that the HRM practices that improve the company's human resources through enhanced human skills can be translated into performance outcomes such as higher productivity, reduced waste, higher quality, and profit (58). On that ground, this study adopts the AMO theory to explain the link between green HRM and the university's sustainable performance. The AMO perspective of GHRM requires a measurement scale that combines the dimensions of ability, motivation, and opportunity. Employees' environmental ability can be gained through green recruitment and selection and green training and development programs (50). Also, employee motivation can be enhanced through green performance appraisal and green compensation and rewards to boost the employee's green initiatives efforts (54). Finally, an opportunity is a bundle of practices like employee engagement, empowerment, and knowledge sharing that promote green employee involvement in environmentally friendly activities (58).

D. Conceptual Framework

Based on past literature reviews, the study variables are determined by integrating two main theories and new additional variables from previous research recommendations. This study applies a model integrating the Ability-Motivation-Opportunity framework to expand the research scope of examining the interaction between green HRM and sustainable performance. This study is more novel than the previous study because it integrates and analyses the organization level environmental knowledge towards sustainable performance, which has been overlooked by most previous studies. Fig. 2 shows the purposed research framework.

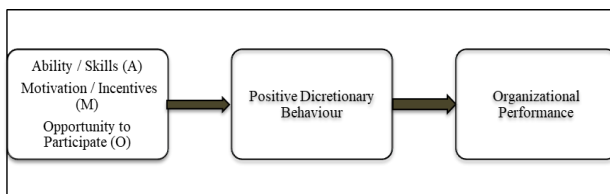


Figure 1. The AMO model of High-Performance Work System (HPWS) adopted from Applebaum et al. (2000)

III. METHODOLOGY

This research will be conducted as a correlational study. This method is used to determine the interaction between environmental knowledge on green HRM (green training, green compensation and rewards, and green involvement) and sustainable performance. This study's target respondents are the administrator at a managerial level working with public research universities in Malaysia.

For this study, the researcher will use a non-probability sampling method, which is purposive sampling. In purposive sampling, the researcher sample with a purpose in mind. Purposive sampling can help the researcher

reach a targeted sample quickly and where sampling for proportionality is not the primary concern. The unit of analysis for this study focuses on the organizational level that involves public research universities in Malaysia.

The sample size will be determined using the G Power application. The G power program offers the ability to calculate sample size and a wide variety of statistical tests. A self-administrated survey questionnaire will be distributed as an instrument to collect data. The responses will be keyed into a Statistical Package for the Social Sciences (SPSS) for descriptive analysis such as frequency, percentage, mean, and standard deviation from the questionnaires. Further, SMART-PLS will be used as a data analysis tool to analyze the structural equation model variables. Partial Least Square (PLS) based Structural Equation Modelling (SEM) will be adopted for the data analysis.

IV. CONCLUSION

This study is hoped to help organizations understand sustainable development and measure sustainable performance. Green HRM practices that play an important role in industry to promote environment-related issues will be tested to evaluate sustainable performance effects. The findings are also hoped to shed some light on ways to enhance Green HRM's effectiveness potentially. Ultimately, this study is expected to provide a deeper understanding of the managerial perspectives on Green HRM and the perceived importance of sustainable performance for future researchers.

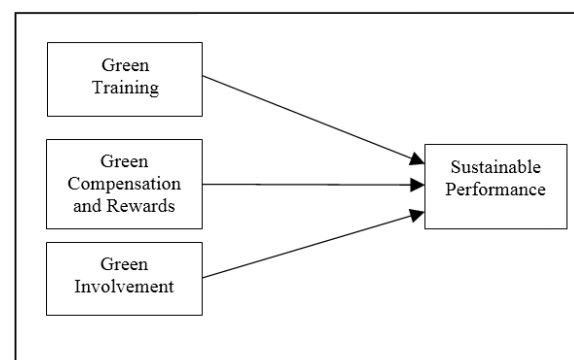


Figure 2. The purposed research framework

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

The main author wrote the paper and the co-authors reviewed and verified it. All authors had approved the final version.

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