



Enhancing The Awareness Of University Managers About Green Human Resource Management Towards Sustainable Development

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Abstract

This paper aims to focus on the issue of sustainable development of public universities in Vietnam, and explores how GHRM (Green Human Resource Management) will impact the motivation and work capacity of staff, thereby creating effective labor productivity, improving educational quality, and enhancing the reputation of the university. By conducting a survey of official lecturers at public universities in Vietnam to collect information on their perception, attitudes, and behavior related to GHRM, the results show that transformational leadership, employee participation, and ethical management play a crucial role in promoting sustainable development and having a positive impact on staff work attitudes in the university. Based on the analysis, this study proposes some implications for public universities when setting goals and implementing GHRM to achieve more sustainable outcomes.

Research purpose:

To study the relationship between GHRM and employee competence and motivation to enhance managers' awareness towards sustainable development in public universities in Vietnam

Research motivation:

The concept of Global Human Resource Management (GHRM) has gained significant attention in recent years, emphasizing the importance of managing diverse human resources globally to achieve organizational objectives. However, the application of GHRM practices is still limited in many organizations, particularly in public universities in Vietnam.

Public universities in Vietnam are facing numerous challenges, including increasing competition, limited resources, and rapid changes in technology and society. To address these challenges and ensure sustainable development, it is essential to develop a comprehensive understanding of GHRM among public university administrators. Unfortunately, many administrators in these institutions lack the necessary knowledge and skills to effectively manage human resources, which can lead to inefficient use of resources, low morale, and high turnover rates.

Furthermore, the Vietnamese education system is undergoing significant reforms aimed at improving the quality of education and promoting internationalization. To achieve these goals, public universities must adopt innovative strategies for managing human resources, including recruiting and retaining talented faculty members, developing staff skills, and fostering a positive work environment. However, the current lack of understanding of GHRM among public university administrators may hinder the effective implementation of these strategies.

Therefore, this research aims to investigate the current state of GHRM practices among public university administrators in Vietnam and explore the factors that influence their understanding of GHRM.

Research design, approach, and method:

The study was designed using quantitative and qualitative research methods. The questionnaire was developed and conducted to survey university administrators. In addition, the study conducted in-depth interviews with experts who are lecturers and researchers in the university to clarify the research results. The data collected from the survey process was coded and classified according to topics.

Main findings:

The findings reveal that administrators generally agree on the implementation of GHRM in areas such as Green Job Design (GJD), Green Recruitment and Selection (GRS), and Green Training and Development (GTD). However, there is a lower level of agreement concerning Green Performance Management (GPM) and Green Compensation Management (GCM) within these institutions. The study highlights significant gaps in both the awareness and implementation of GHRM in public universities, which may hinder the pursuit of sustainable development within these institutions. The underlying causes of these limitations warrant further investigation in future research.

Practical/managerial implications:

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Based on the analysis, the study proposes some implications to help public universities when setting goals and implementing GHRM to achieve results towards a more sustainable future.

Keywords: green human resource management, green skills, sustainable development, public universities, higher education, education quality.

1. INTRODUCTION

Sustainability is a global issue that affects the environment and is increasingly becoming a concern for organizations, who recognize it as a long-term competitive advantage (Paillé et al, 2014). Human resources management is a key factor in achieving sustainable success (Jackson et al, 2011).

As a vital role in developing talent and contributing to the country's economic and social development, universities must also strive for sustainability (United Nations, 2015; UNESCO, 2019). Universities with their creative and knowledge-sharing abilities, as well as their position in society, play a crucial role in achieving sustainable development goals. However, achieving these goals is not easy, and universities must have an effective leadership and human resource management system, with leaders who have integrity and GHRM playing important roles. Green Human Resource Management (GHRM) can facilitate the development of sustainable practices through activities such as selecting, evaluating, and training employees to align with organizational goals and protect the environment (Jabbour et al, 2013).

Based on a review of previous studies, this research synthesizes the basic theories of sustainability, the role of green human resource management, and its impact on employees in public universities in Vietnam, and proposes some implications for public universities when setting goals and implementing GHRM to achieve sustainable outcomes.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Definition

2.1.1. Sustainability

The term "sustainability" first appeared in 1980 in the publication "World Conservation Strategy" by the International Union for Conservation of Nature (IUCN). Later, in 1987, the World Commission on Environment and Development defined sustainability as "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Ebner & Baumgartner, 2006).

Today, sustainability is an essential concept and increasingly important in response to growing pressure on natural resources and the environment. The increasing population, urbanization, industrialization, and globalization have put immense pressure on natural resources, leading to their depletion. Sustainability is necessary to maintain ecological balance and reduce the impact of climate change. Moreover, it is also crucial for the long-term prosperity of organizations and economies. Sustainable business practices can increase efficiency, reduce costs, and improve customer loyalty (United Nations, 2023). Conversely, sustainable economic development can create new jobs and stimulate innovation.

Sustainability in universities in the digital age. In today's rapidly developing digital age, traditional teachers who are accustomed to their own teaching methods must also face the choice of adapting to change. People are living with super-smart robots based on AI technology. The creative ability of robots is true in a specific aspect. For example, if a robot is given all types of music, it can remix a song in a completely new way using AI intelligence and the music it has learned (Thanh Hùng, 2022). Therefore, in the future, lecturers who only teach classical knowledge will find it difficult to compete with robots.

Universities will need to innovate and teach skills that enable graduates to not be displaced by robots; focusing on new skills that are relevant to Industry 4.0, such as AI, Big Data, UI, and UX. To achieve this, lecturers must have the ability and motivation to innovate and create educational reform. Because the core of universities is quality education. During his visit to Bà Rịa-Vũng Tàu University in March 2017, Former Minister of Education and Training Phùng Xuân Nhạ emphasized that only when education is of high quality and services are good can a university's brand value increase, credibility, and reputation be high. Achieving this core value, universities will be able to develop sustainably.

Sustainability is a pressing need in the digital age. It's not just the responsibility of the government and society, but also the responsibility of universities to develop and educate future generations. According to Scott et al (2018), sustainability in universities refers to integrating social, economic, and environmental choices into the strategy, policies, and practices of higher education institutions. Sustainability in universities includes: sustainable strategy, sustainable education, sustainable initiatives, and sustainable reporting (Watson et al, 2019).

2.1.2. GHRM

Green Human Resource Management (GHRM) is the integration of green concepts into human resource management in the context of sustainable development and climate change (GHRM; Mishra, Sarkar, and Kiranmai, 2014). GHRM is a strategy for managing and developing human resources in organizations to minimize the negative impact on the environment and society (United Nations, 2015). This includes developing and implementing sustainable development policies, training programs, and resource management.

GHRM can be manifested in the following forms (Renwick et al., 2013): (1) Developing skills and perspectives on sustainable development for staff and employees; (2) Building a green culture in the organization, including values and rules about sustainable development; developing training programs on sustainable development for staff and employees; (3) Managing resources and reducing environmental pollution within the organization; (4) Evaluation and improvement:

evaluating and improving sustainable development policies and programs within the organization.

Jabbour et al. (2010) showed that the reward and performance evaluation system are crucial factors that drive green motivation among employees. Therefore, activities aimed at driving green motivation such as performance evaluation, result-based assessment (e.g., salary increase, promotion, etc.) play a significant role in developing environmental management skills. Activities aimed at encouraging employees to develop environmental management skills and collaborate with the organization's goals are called green opportunities. Enhancing green opportunities means giving employees the authority to align with environmental goals and developing channels for communication between the organization and employees to share knowledge on environmental management. Hoque (1999) emphasizes that employees who are given authority tend to have a higher motivation to participate in environmental initiatives, have the right to make decisions, and have greater autonomy. By applying the theory of Ability-Motivation-Opportunity, many managers have successfully built and trained teams of employees who meet the requirements of the business.

2.1.3. *The Role of GHRM in Sustainable Development*

Employee engagement is a crucial factor in maintaining and developing a business. A workplace with high engagement can create unexpected benefits, not only in terms of human resources but also affecting the revenue of a business.

Employee engagement is built on the relationship between individual goals and the organization's overall goals. When individual goals align with the organization's goals, it increases connectivity and sense of responsibility, not only towards the organization but also towards oneself as an employee.

The level of employee engagement with an organization is not just about being satisfied or having opportunities for advancement in the future. They can be happy with their job, but if they do not receive recognition or there is a mismatch between their individual goals and the organization's goals, ... All of this will lead to low work performance and cause employees to lose trust in their leaders and organization.

With today's younger generation, they highly value environmental sustainability activities. A green environment at work or all GHRM-related activities enhance the value of employees and organizations.

Green Human Resource Management (GHRM) is a necessary trend for sustainable development. Organizations need to manage GHRM to achieve goals such as protecting the environment, combating climate change... to make work meaningful and a safe, healthy workplace. This includes:

- Guiding, teaching, and encouraging employees to implement environmentally-friendly activities and develop green skills;
- Providing eco-friendly products and activities, managing environmental programs successfully, and overcoming challenges in implementing environmental programs within the organization.

(Masood, 2018)

2.2. **GHRM in Sustainable Development at University**

2.2.1. *Green Job Analysis*

In general, job descriptions can be used to identify specific tasks, responsibilities, and duties related to environmental protection (Renwick et al., 2018). Some companies have integrated environmental and social responsibilities into their job descriptions, particularly when it comes to tasks related to environmental protection and whenever possible.

During the process of collecting and analyzing information about the various tasks, responsibilities, and requirements of any specific job, "green skills" are a crucial aspect that organizations consider when making decisions about recruitment, selection, training, and performance evaluation. According to ManpowerGroup's report "The Search for ESG Talent 2022", the percentage of "green talent" increased from 9.6% to 13.3% from 2015 to 2022. It is estimated that by 2050, there will be over 300 million office positions worldwide that require "green skills".

According to Manpower Vietnam's report on the demand for green jobs, over 350 green job positions were recorded in Vietnam in the first half of 2023, with the highest demand coming from industries such as manufacturing (30%), healthcare (20%), technology (17%), energy and oil (15%), business (9%), agriculture (5%), transportation and logistics (2%)...

Not only does green work help reduce energy consumption, but it is also a focus of sustainable development and addressing global challenges to protect the environment. Green work is one of the important orientations at the National Strategy for Green Growth from 2021 to 2030, with a vision for 2050.

2.2.2. *Green Recruitment and Selection*

Green work has become a pressing need in the job market, no longer just a distant hope. This is evident in job seekers' interest in organizations that prioritize green practices. Previously, job seekers often focused more on the company's industry, salary, and work location... whereas today, recruiters receive more questions about the company's social activities (Manpower Vietnam, 2023).

It is clear that job advertisements that highlight the company's social responsibility and environmental commitment tend to attract more applicants, especially during interviews. If recruiters provide specific explanations about these factors, it will be a major attraction for applicants, especially young workers.

On the other hand, green recruitment is a growing trend in the world. Some organizations in Vietnam are already adopting green recruitment practices to build a team of green talent for the future.

Formally, green recruitment refers to a paperless recruitment process with minimal environmental impact (Nguyễn Hoàng Nam, 2015). Through various methods, traditional paper-based tests are gradually being replaced by computer-based assessments that integrate and combine to evaluate a candidate's thinking skills, professional knowledge, work skills, professional experience, and personality.

According to the World Economic Forum in 2022, the demand for green recruitment is almost ready to be applied mainly to certain industries focused on environmental protection, such as renewable energy and green technology. Additionally, organizations are currently lacking in green recruitment criteria. Based on a framework consisting of four aspects: knowledge/credentials, work skills, environmental awareness/attitudes, and professional experience, organizations can establish a set of criteria for evaluating green recruitment that is tailored to their specific industry or business. Moreover, organizations should also develop and implement green welfare policies to encourage employees to participate in green activities within the organization. This will help attract and select candidates who are environmentally conscious and responsible, contributing to the organization's sustainable development.

2.2.3. *Green Training and development*

The transition to a green economy is a dynamic process that affects the quantity and nature of work and skills required in various fields and industries (EC, 2013). The OECD and CEDEFOP (2014) have noted that green skills are: "The skills needed for the workforce in all fields and levels to adapt products, services, and processes to meet the challenges of climate change and environmental regulations."

In companies, many HR experts are increasingly incorporating sustainability into their training modules, even organizing specific workshops on environmental awareness. This can include anything from training based on daily activities such as responsible recycling, reducing waste, and using company equipment efficiently (William K, 2024).

In response to the demand for green jobs, universities are also increasingly focusing on and promoting green skill training programs. When building training programs that emphasize green skills, some universities have highlighted the role and participation of businesses and companies in this process (Lương Minh Phương et al., 2024). Moreover, green skill training is promoted through interdisciplinary cooperation between departments within the university. Notably, some universities in Vietnam have proactively participated in green university rankings and implemented sustainable development goals on a global scale, such as the University of Economics Ho Chi Minh City, Ton Duc Thang University, and Hanoi University of Technology.

A green university is one that organizes research, knowledge creation, and new technology solutions, contributing to the development of high-quality human resources with knowledge, skills, and attitudes towards sustainable development to serve the country's green growth. This is a trend that universities are pushing forward in recent times because green skills are considered an essential skill across all fields and industries in the future.

2.2.4. *Assessment of Green Human Resources*

GHRM focuses on evaluating performance based on green criteria, not just professional competence, but also evaluating employees' contributions to the organization's environmental goals. This activity is quite compatible with Ramus' theoretical perspective (2002), who stated that employees feel more prepared for green initiatives when organizations share environmental responsibility with them and consider environmental responsibility as part of their performance evaluation. This model aims to make each individual in the organization a proactive and responsible person who takes care of and preserves the natural environment in its original form and protects it from negative changes. It also encourages employees to continuously and persistently strive against behaviors and outcomes that harm the ecosystem. Additionally, it creates work environments close to nature or with natural elements.

2.2.5. *Green Compensation and Benefits*

A compensation and benefits system is a powerful tool that can support environmental management activities. It is designed to attract, retain, and motivate employees, as well as encourage employees to develop their knowledge, attitudes, and skills to achieve the company's goals (Brockett, 2007). In environmental management, organizations can use a basic salary structure to reward employees who contribute to achieving environmental goals. A reward mechanism is established to change the salary specifically for environmental management. When employees' efforts and changes help reduce waste or propose practical suggestions for environmental protection, such as reducing company costs, organizations can implement a policy to reward employees with a portion of the saved costs. At the same time, organizations provide non-monetary benefits to reward employees who contribute to achieving environmental goals, including:

- Paid time off
- Priority parking
- Gift cards
- Company-wide recognition
- Individual, team, or department awards for reducing waste
- Encouraging employees to participate in environmental activities...

Although top-level managers play a very important role in environmental management (Chen et al., 2014; Paillé et al., 2014), if employees are not involved widely, the effectiveness of environmental management may be significantly reduced. Case studies in the UK and the US have shown that empowering employees and satisfying their psychological needs will help them make more rational suggestions about environmental management, which is very important for

successful environmental management (Kitazawa and Sarkis, 2000). A survey conducted by Simpson and Samson (2008) on 232 Australian manufacturing companies found that employee empowerment in environmental management has a significant positive correlation with environmental management effectiveness and companies should encourage employees to make rational suggestions about environmental management.

3. METHODOLOGY

3.1. Quantitative Research Method

3.1.1. Survey Questionnaire

The survey questionnaire was constructed to include two parts. Part 1 contains information related to the respondent and Part 2 includes questions about the respondents' perceptions of Green Human Resource Management (GHRM) in public universities. The goal is to evaluate the opinions of university administrators in Vietnam regarding GHRM.

Many scales have been used in previous studies to measure GHRM, such as building a GHRM model in public universities in Tehran (Shahriari et al., 2020) or evaluating the impact of GHRM on organisational citizenship behavior towards the environment and environmental performance (Anwar et al., 2019). In this study, we used the scale developed by Shah (2019) to assess the perceptions of university administrators regarding GHRM in Vietnam. The scale includes:

- GJD: Green Job Design (4 items);
- GRS: Green Recruitment and Selection (3 items);
- GTD: Green Training and Development (4 items);
- GPM: Green Performance Management (6 items);
- GCM: Green Compensation Management (5 items);
- GHS: Green Health and Safety (3 items); and
- GLR: Green Labor Relations (3 items).

3.1.2. Data collection

The study was conducted to evaluate the perceptions of university administrators in Vietnam regarding GHRM. Data was collected through online surveys using Google Forms. The author contacted the Human Resources Department of public universities in Vietnam to discuss the research objectives and methodology. With the support of the Human Resources Department, the author collected data from March 2024 to August 2024, with a total of 294 valid responses. The characteristics of the sample are presented in Table 1.

Table 1:

Table 1. Demographic Profile of Respondents (N = 294)

Characteristics	Number of respondents	N	%
Gender	Male	186	63.27%
	Female	108	36.73%
Age	25–35	18	6.12%
	36–45	102	34.69%
	46–55	89	30.27%
	Over 55	85	28.91%
	Master	62	21.09%
	PhD	232	78.91%
Working Experience	Under 10 year	36	12.24%
	10 years – < 20 years	89	30.27%
	> 20years	169	57.48%

Source: Author (2024)

3.2. Qualitative Research

In this study, qualitative research was conducted with the following objectives: (i) to refine the survey questionnaire through expert interviews with professors and researchers at universities and research institutes; and (ii) to gather opinions from university administrators to clarify and supplement the results of the quantitative research.

Firstly, in-depth interviews were conducted with experts to refine the survey questionnaire. After designing the measurement scale, the author sent the survey questionnaire to 5 experts who are professors teaching and researching in human resource management, with at least 5 years of research experience and published research papers on GHRM. With their feedback, the author adjusted the terms of the observed variables in the survey questionnaire.

Secondly, in-depth interviews were conducted with experts to analyze and clarify the results of the quantitative survey. After conducting the large-scale survey and analyzing the data to obtain quantitative results, the author conducted in-depth interviews with some members of the university board, council, and department heads responsible for human resources to discuss and clarify the research findings. The author used semi-structured interviews, in which questions were designed to explore the results, causes of the results, and perceptions of GHRM among public universities. Additionally, open-ended questions were asked to encourage university administrators to share their reasons for implementing GHRM towards sustainable development, challenges and limitations when implementing GHRM in public universities...

3.3. Data Analysis

Quantitative Data Analysis: The purpose of this analysis is to evaluate the reliability and validity of the measurement scale used in the study. The author analyzed the Cronbach's Alpha coefficient and the KMO index based on the research of Hair et al. (1998) and Tho (2012). After verifying the reliability and validity of the measurement scale, the author conducted statistical analysis to obtain primary data for analyzing the research results. The author used SPSS 18 to evaluate the preliminary reliability and accuracy of the measurement scale used in the study and Excel to analyze descriptive data.

Qualitative Data Analysis: The qualitative data was collected from the expert interviews. The data was coded and categorized into themes. Due to the small sample size and in-depth survey content, the author did not use specialized software to analyze primary data from the interviews.

4. RESULTS AND DISCUSSION

4.1. Green job description in Vietnam public university

The job analysis scale for GHRM in public universities is considered strong, with a KMO value of 0.851, a Cronbach's Alpha of 0.931, and an Eigenvalue of 77.24. All observed variables scored above 0.8. Descriptive statistics reveal a moderate level of agreement among university administrators regarding the integration of "green" requirements into job design, specifically through the inclusion of environmental protection responsibilities in certain aspects of job design. The research also indicates that while universities have incorporated these "green" requirements, they are often not included as a distinct section in the job description. Instead, environmental considerations are generally integrated with other job requirements. Notably, the standard deviation (SD) values for all scales are relatively high, suggesting significant variability in the responses. This indicates that many universities may not be fully prioritizing or explicitly incorporating green requirements into the job descriptions and performance standards for their staff, faculty, and other employees.

Table 2. Result of factor analysis of Green job description in Vietnam public university

No	Items	Descriptive analysis		Factor analysis	
		Mean	SD	Factor loading	Item to total correlation
GJD1	My univeristy has integrated several environmental protection responsibilities in each position	3.7755	1.04045	.880	.839
GJD2	My univerisyt has included green and social needs of the university in job description and specification.	3.6735	1.03958	0.923	.875
GJD3	My university has incorporated green capabilities as a distinctive element in job specification	3.2735	1.06231	0.874	.835
GJD4	My university has designed and executed innovative positions to emphasize on environmental protection aspects.	3.7381	1.00991	0.835	.802

Source: Author (2024)

Shah's (2019) research underscores the significance of integrating green elements into job design, particularly by embedding environmental protection responsibilities into every role within an organization. This approach advocates for the inclusion of environmental and social criteria in job descriptions and specifications. Renwick et al. (2013) also suggest that organizations can highlight environmental aspects in these descriptions, making green competencies a central focus. Moreover, organizations should develop innovative roles and positions that prioritize environmental sustainability. This implies that educational institutions should formalize the inclusion of "green" content and environmental protection

responsibilities within their job analysis frameworks to enhance employees' environmentally friendly behaviors while performing their duties.

4.2. Green recruitment and selection in public university

The research findings indicate that the GRS scale, which consists of three items, is robust, with a KMO value of 0.685 and a Cronbach's Alpha of 0.855. The Eigenvalue reached 68.248, with all factor loadings exceeding 0.6 and item-total correlation values also surpassing 0.6. The results reflect that the level of agreement with the GRS-related statements ranges from 3.4 to 4.2, indicating a moderate level of agreement. Notably, the statement "Our university has incorporated 'green aware' criteria in HR staffing policy" received the highest level of agreement. This suggests that the surveyed universities are not only interested in green criteria but have also implemented these criteria, along with environmental protection standards, as part of their recruitment requirements. While this outcome positively reflects the emphasis on green practices in candidate selection, the criterion related to the "paperless recruitment and selection process" showed the lowest effectiveness. A contributing factor to this may be the inspection and supervision requirements imposed by governmental authorities on public universities, which are subject to oversight by multiple agencies. These agencies have yet to transition fully to digital processes and still require the use of paper records for the inspection and supervision of university recruitment activities.

Table 3. Result of factor analysis of Green recruitment and selection in public university

No	Items	Descriptive analysis		Factor analysis	
		Mean	SD	Factor loading	Item to total correlation
1	Our university has incorporated "green aware" criteria in HR staffing policy	3.5680	1.07109	.842	.743
2	My university practices the use of paperless recruitment and selection process.	3.2279	1.33952	.670	.633
3	We appeal to green job applicants who practice green criteria choose employer (green employer branding).	3.4796	1.17914	.943	.795

GRS emphasizes that environmental management should be a fundamental component of a company's strategic and HR planning processes. This requires developing a strong, forward-thinking vision to guide individual actions in environmental protection. To meet environmental protection goals, an organization must position itself as a green employer. Ehnert et al. (2016) describe green employer branding as the image and reputation an organization builds through its commitment to green management. University can cultivate their green brand by implementing green HR practices. Job applicants assess the alignment between their values and those of the company through its green employer branding, which may involve practices such as paperless recruitment and selection processes and the inclusion of "green aware" criteria in HR policies (Jones & Willness, 2013). Recruitment strategies should be designed to attract candidates who prioritize environmental values when choosing an employer. Recruitment policies should focus on hiring individuals who are both competent and knowledgeable about environmental protection. The selection committee should use green criteria to shortlist candidates, and organizations should ensure that new hires are integrated into the company's green philosophy.

4.3. Green training and development in public university

Table 4. Result of factor analysis of Green training and development in public university

No	Items	Descriptive analysis		Factor analysis	
		Mean	SD	Factor loading	Item to total correlation
1	My university assesses who need training in environmental management	3.8027	1.00265	.844	.811
2	My university evaluates whether the incumbent has manager and peer support to apply the learned content on the job.	3.6633	1.06072	.900	.858
3	My university uses environmental protection elements as the central themes of green training	3.7551	1.02589	.899	.857
4	My university delivers environmental management training to improve employee awareness, skills, and know-how in	3.6701	1.03356	.880	.840

	environmental management.				
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The survey results indicate that universities have made considerable efforts to implement training activities focused on "green" themes and environmental protection in a relatively systematic manner. Specifically, the average score of 3.802 for the statement "My university assesses who needs training in environmental management" suggests a high level of agreement on the process of identifying training needs related to green and environmentally friendly topics. All measured variables show a relatively high average value, reflecting the attention given to the content of green human resource management training at universities in Vietnam. However, similar to the findings regarding Green Job Descriptions and Green Recruitment and Selection, the standard deviation (SD) values for the observed variables in the Green Training scale are also relatively large, indicating significant variation in the level of agreement among respondents. This variation may be attributed to the fact that "green" training requirements for employees are still optional rather than mandatory in universities, leading to differences in implementation. The extent of green training at universities is likely influenced by the specific strategies, orientations, and the level of commitment of the university's Board of Directors toward achieving sustainable development goals. Shah (2019) emphasized that the GTD dimension encompasses both individual and organizational learning activities related to environmental management. To foster a culture of environmental protection, organizations should create a collaborative learning environment that promotes green awareness and behavior. By regularly providing environmental management training, organizations can enhance their workforce's environmental mindfulness, skills, and expertise. It is important for organizations to periodically assess the need for environmental management training. Environmental protection should be a central theme in such training programs. According to Fernández et al. (2003), employee awareness and skills in green practices can be significantly improved through targeted training. Additionally, organizations should ensure that employees receive adequate support from managers and peers to effectively apply the training content in their work.

4.4. Green performance management in public university

Table 5. Result of factor analysis of Green performance management in public university

No	Items	Descriptive analysis		Factor analysis	
		Mean	SD	Factor loading	Item to total correlation
1	Our university establishes green targets, objectives, and duties for each employee across organization	3.5272	1.09806	.882	.860
2	In my university, there is communication of green goals.	3.7313	1.04469	.820	.802
3	The use of green criteria to evaluate performance	3.4422	1.14558	.909	.886
4	My university keeps track of non-compliance or not meeting green objectives	3.4660	1.15838	.924	.899
5	My university reinforces compliance of meeting environmental goals.	3.6054	1.06485	.903	.880
6	Identification of "Green Superstars" (remarkably talented individuals who perform beyond the standards) and distribution of prizes based on their green contributions.	3.4524	1.13407	.898	.876

Human resource assessment plays a vital role in evaluating the contributions of individual faculty and staff members toward achieving the university's overall objectives. Survey results show the highest level of agreement with the statement, "There is communication of green goals" (Mean: 3.731), indicating that universities are actively promoting "green" goals within their institutions. This communication is essential for guiding green initiatives among university employees. However, the survey also reveals only moderate agreement regarding the alignment with green goals (Mean: 3.5272, SD: 1.098), with the relatively high standard deviation suggesting significant differences in respondents' perceptions. This indicates varying approaches to setting and evaluating "green" goals for university personnel. Green Performance Management (GPM) emphasizes the need to establish green objectives for all employees throughout the organization. Clair et al. (1996) suggested that setting green objectives for all workers is key to translating environmental goals into actionable plans. These green goals should be clearly communicated to employees, and green criteria should be incorporated into performance evaluations. Ahmad (2015) further emphasized the importance of clear green performance indicators in performance management practices, which should monitor compliance and ensure that environmental goals are met. The organizational performance management system should reinforce the achievement of environmental objectives.

Research findings from universities in Vietnam suggest that "green" criteria are not widely incorporated into employee performance evaluations. One reason for this is that most employees at public universities are civil servants, who are managed and evaluated based on criteria established by civil service laws, along with certain university-specific standards. As a result, many "green" criteria have yet to be integrated into the evaluation systems for university staff. Some

organizations identify "Green Superstars"—exceptionally talented individuals who exceed performance standards—and reward them based on their contributions to environmental sustainability. Compensation systems can be designed to recognize and reward efforts in environmental protection, such as acquiring green skills or completing green curricula. Non-monetary rewards, such as special leave, gifts, paid time off, and family trips, can also be used to acknowledge contributions to environmental management. Additionally, organizations should publicly recognize and praise staff for their green initiatives, increasing visibility and appreciation for their efforts. Ahmad (2015) highlighted that for both executives and staff, performance evaluations are the most critical aspect of Green Performance Management (GPM), influencing the process and effectiveness of subsequent rewards and compensation.

4.5. Green compensation and benefit in public university

Table 6. Result of factor analysis of Green compensation and benefit

No	Items	Descriptive analysis		Factor analysis	
		Mean	SD	Factor loading	Item to total correlation
1	Our compensation system recognizes and rewards contributions in environmental protection.	3.3878	1.16519	.884	.862
2	My university rewards green skills acquisition	3.3946	1.12713	.936	.910
3	My university rewards for learning a green curricula.	3.4524	1.13407	.927	.900
4	My university uses non-monetary rewards for contributions in environment management such as paid time off, special leave, and gifts to employees and their families.	3.4252	1.13260	.904	.880
5	My university recognizes green initiatives of employees via organization wide publicity and public praise.	3.6327	1.08406	.873	.851

The research results on green compensation in universities indicate that the current systems do not adequately address green compensation practices. Specifically, the item "Our compensation system recognizes and rewards contributions in environmental protection" received the lowest level of agreement (Mean: 3.3878), reflecting the lack of financial and non-financial rewards linked to employees' contributions to environmental protection. The item "My university uses non-monetary rewards for contributions in environmental management, such as paid time off, special leave, and gifts to employees and their families," also received a low level of agreement (Mean: 3.4252), further illustrating the absence of recognition for green initiatives within the compensation system. Compensation systems are meant to reflect organizational recognition of employees' efforts, thereby motivating continued alignment with organizational goals. However, the study's findings reveal that public universities have yet to develop compensation systems that effectively acknowledge and encourage green actions among employees, which is essential for sustaining motivation in the university context. The results also highlight inconsistencies in the level of agreement with statements about green compensation, which may be attributed to the lack of mandatory green compensation policies in public universities. The variability in green compensation practices likely depends on each university's strategy, goals, and resources, influencing the development of compensation policies aligned with their specific strategic objectives.

These findings align with the current state of compensation systems in public universities in Vietnam. Given that employees in these institutions are both university staff and civil servants (working within the public administration sector), the university's compensation system is subject to the broader requirements of public sector management. The study suggests that for public universities to focus on green human resource management—particularly green compensation—they need to implement policies that offer financial or non-financial rewards for employees' contributions toward the university's green objectives.

4.6. Green health and safety in public university

Table 6. Result of factor analysis of Green health and safety in public university

No	Items	Descriptive analysis		Factor analysis	
		Mean	SD	Factor loading	Item to total correlation
1	My organization provides green workplace for all.	3.8605	.98674	.936	.883
2	My organization takes green initiatives to decrease	3.7755	1.00711	.894	.853

	worker anxiety and work-related sickness instigated by harmful work setting				
3	My organization develops and executes strategies to sustain a favorable work setting to avoid several fitness problems to develop health and safety of workforce	3.7823	.99155	.894	.853

Prioritizing employee health and safety within an organization is crucial for enhancing motivation and fostering a strong connection between employees and the organization. The research findings indicate a high level of employee agreement with the statement, "My organization provides a green workplace for all" (Mean: 3.86, SD: 0.986). Additionally, universities have implemented green initiatives aimed at reducing stress and alleviating work-related pressure. According to Shah (2019), the Green Health and Safety (GHS) dimension underscores the organizational responsibility to offer a green workplace for all. Organizations should undertake green initiatives to mitigate employee concerns and prevent work-related illnesses caused by harmful working environments. It is essential for organizations to develop and implement strategies that maintain a favorable work environment to prevent various health issues and to promote the overall health and safety of the workforce. Green Labor Relations (GLR) require organizations to provide opportunities for individuals to participate in green initiatives. This includes establishing a green whistle-blowing system and helplines for handling grievances. Furthermore, organizations should continuously provide environmental management training to union members and support them in collective bargaining. Consequently, public universities in Vietnam have initiated green actions and measures to create a green environment that safeguards the health of their employees (Mean: 3.7823, SD: 0.99155).

5. CONCLUSION

Human resources are a crucial asset for organizations in building and maintaining sustainable competitive advantages. Green Human Resource Management (GHRM) has emerged as a vital tool for fostering human resource development, even within public organizations. This study, conducted with public universities in Vietnam, aimed to assess the current level of awareness among administrators regarding GHRM practices. The findings reveal that administrators generally agree on the implementation of GHRM in areas such as Green Job Design (GJD), Green Recruitment and Selection (GRS), and Green Training and Development (GTD). However, there is a lower level of agreement concerning Green Performance Management (GPM) and Green Compensation Management (GCM) within these institutions. The study highlights significant gaps in both the awareness and implementation of GHRM in public universities, which may hinder the pursuit of sustainable development within these institutions. The underlying causes of these limitations warrant further investigation in future research.

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