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**Beds are Burning: A Study of
Green Human Resource
Management Implementation
on the Quality of Work Life
in Public Universities**

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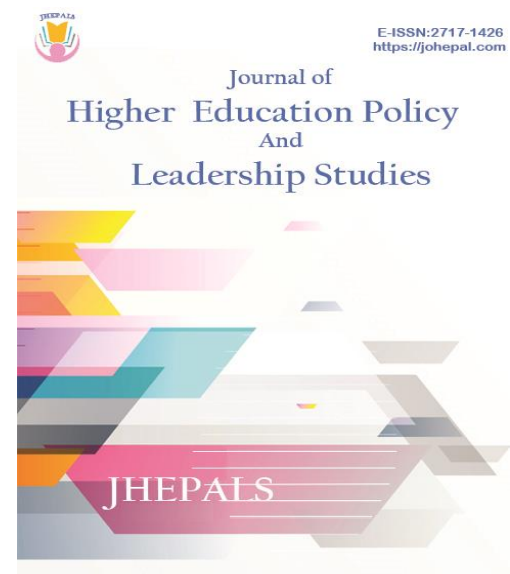
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Abstract

This paper comes to investigate the impact of green human resources management (GHRM) toward the Quality of Working Life (QWL) in public universities in Indonesia as current literature contains only a number of studies that investigate the GHRM on different issues in developing countries. Furthermore, most of the GHRM practices are implemented by the private organizations and businesses and the study focuses on the GHRM practices in government institutions are lacking, especially in higher education settings (Aftab et al., 2022; Ha & Uyen, 2021; Pham et al., 2022). The samples were 84 academics scattered in Indonesian public universities. Data was collected by using questionnaires, where in analyzing data analysis, path analysis was employed by using the SPSS software. Results of this study indicate GHRM not only has positive and significant influence on employee's health and well-being and productivity, but also improving the QWL of employees in public universities. This study is limited by the research design in grasping a comprehensive result. However, this limitation is justified as the hypotheses of this study required answers to scope, rather than depth.

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Introduction

Environmental problems are very serious issues to be anticipated by every human living on this planet earth. Aftab et al. (2022, p. 22) reveal "environmental issues are a hot topic among all countries". This means that every human activity must lead to the position and activities of sustainable development in order to save the natural environment from damage. In order to achieve sustainability, the right solution is needed. This solution is confirmed by Ha and Uyen (2021) who assert that from a systemic point of view, the only solution that should be implemented is a sustainable solution. If human life is not sustainable then environmental damage will be difficult to control by all humans as residents of the earth who will bear the consequences themselves globally. This is in accordance with Garnesia's work (2020) which reveals that global scale environmental crises always overshadow the earth's population, whose emergence will have a very big impact on the survival of humans on earth. The concept of Green Human Resource Management (GHRM) refers to Human Resource Management activities and policies in implementing sustainable environmentally friendly practices. This concept also aims to increase employee commitment to environmental sustainability issues (Masri & Jaaron, 2017).

Environmental damage incidents, of course, we are still looking at what happened earlier this year in Jakarta, according to the Indonesian National Agency for Disaster Management (BNPB) statement, rain and landslides in the provinces of Jakarta, Banten and West Java have so far caused 60 people to die. Also, recently East Australia was hit by hot weather with the highest temperature in the last 105 years at the end of October (Wijaya, 2020). Environmental problems, especially the floods that affected the Jakarta area, the DKI Regional Disaster Management Agency (BPBD) noted that there were at least 21 flooded points due to heavy rains that have flushed Jakarta since the last few months, the city of Jakarta BPBD stated the flood points were evenly distributed throughout the Jakarta area, but the recapitulation new BPBD data records city-level flooding, with details in Central Jakarta 5 locations with a height of 10-60cm, North Jakarta 4 points with a height of 10-30cm, then in West Jakarta 1 location with a height of 10-30cm, South Jakarta one point with a height 20-30cm and East Jakarta 10 points with a height of 5-10cm (Wijaya, 2020).

Not to mention the problem of waste where Indonesia is the second largest contributor of plastic waste in the world after China. The waste that is produced also pollutes the oceans, some of which is produced from land areas, especially big cities (Aftab et al., 2022). It is estimated that around 8 million tons of plastic waste is dumped into the oceans every year in the world. Garnesia (2020) published his research entitled "Plastic Waste Inputs from Land into the Ocean". In research conducted on 192 countries, it appears that Indonesia contributes as much as 3.22 million metric tons of plastic waste. More specific research was conducted by Lamb, et.al in a journal (Garnesia, 2020) entitled Plastic Waste Associated with pollutions on coral reefs. This research shows that most plastic waste is found in Indonesia, namely 25.6 parts per 100m² of coral reefs in the ocean (Garnesia, 2020).

Indonesian academics who work in the public universities are automatically are government employees/ Civil servants. Government agencies are organizations that are a collection of people especially selected to carry out state, government and development tasks. Elementary Civil Servants domiciled to provide services in a professional, honest and

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equitable manner (Kodua et al., 2022). Civil Servants must be free from the influence of all political groups and parties and not be discriminatory in providing services to the community based on loyalty and obedience to Pancasila and the 1945 Constitution. Civil Servants who are within the scope of government agencies need to work together with all Civil Servants in a government agency jointly protect the environment in order to contribute to environmental problems, so that government agencies are obliged to participate in resolving environmental problems in the form of a joint commitment to take action in order to support government agencies in their efforts to implement environmental protection management (Renwick et al., 2013).

Based on this description, it appears that Green Human Resource Management is important to be implemented at the governmental institutions or in this case is the public universities. However, in its implementation, several strategies are needed so that the process of implementing Green Human Resource Management can provide optimal results (Kodua et al., 2022). One strategy that can be used is to determine the priority of the Green Human Resource Management criteria at the public universities based on their level of importance. Therefore, this study aims to determine the priority of the Green Human Resource Management criteria at the universities (Aftab et al., 2022). It is hoped that by knowing the criteria for Green Human Resource Management at the public universities and the level of importance for each of these criteria, strategic steps can be formulated in optimizing Green Human Resource Management public universities (Kodua et al., 2022).

Public universities are government agency whose position is strategic in educating and shaping a nation's future. Considering that the environmental problems arise and significantly arise yearly, the role of public universities is pivotal in not only creating knowledge, but also a perfect example in implementing a greener method. Also. seeing that the environment is becoming more and more apprehensive at this time, the public universities are building more awareness on the environment in implementing Green Human Resource Management to improve the quality of work of academics Efforts to improve the quality of work of employees with the implementation of an effective Green Human Resource Management are important things to note (Aftab et al., 2022). Academics whose quality increases with the application of the Green Human Resource Management method will have a major impact on the agency, in addition to having a positive impact on the environment and the development of the agency (Hooi et al., 2022).

Green Human Resource Management (GHRM)

Green Human Resource Management (GHRM) is an emerging concept in the field of human resource management. It focuses on the integration of environmental sustainability into the HRM practices of organizations. GHRM is a holistic approach to managing human resources that takes into account the environmental, social, and economic impacts of HRM decisions. It seeks to ensure that organizations are taking into account the long-term sustainability of their operations when making decisions about their workforce. The negative impact of the production process on the environment requires companies to take strategic steps to eliminate it through the implementation of Green Human Resource Management. Green Human Resource Management is focused on systemic planning related to human resource management practices in accordance with environmental management (Rawash & Aloqaily,

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2022). The implementation of Green Human Resource Management is a form of effort to increase the productivity and commitment of companies in maintaining environmental sustainability. Several forms of implementation of Green Human Resource Management in companies are carried out through performance management, training, development and learning, compensation and benefits as well as organizational culture as argued by Aftab et al. (2022). More than that, the implementation of Green Human Resource Management requires a strong commitment from management at the top level, through a form of comprehensive planning as a guideline by employees at the operational level as asserted by Arulrajah et al. (2015).

According to Renwick et al. (2013), the existence of this, the implementation of Green Human Resource Management will provide several benefits for the company, including:

- Improvements in the employee retention process.
- Correcting the name of the institution in the general public.
- Get better employees.
- Increasing the productivity and sustainability of the company.
- Reducing the environmental impact caused by agencies.
- Improving competitiveness and increasing the overall performance of agencies.

GHRM can help organizations improve the quality of working life by creating a more sustainable workplace. This includes reducing energy consumption, using renewable energy sources, and implementing green policies such as recycling and composting. Additionally, GHRM can help organizations create a healthier work environment by providing access to natural light, fresh air, and ergonomic furniture (Haeruddin et al., 2023). As a result, these measures can help reduce stress levels and improve employee morale (Pham et al., 2022).

Green Human Resource Management integrates eco-friendly HR initiatives and practices for sustainable use of resources which results in more efficiency, reduces the amount of waste, and increases a caring attitude at work. Green Human Resource Management is a workforce management system that is applied to reduce negative impacts on the environment or increase positive environmental impacts on MSME performance in a sustainable manner (Arulrajah et al., 2015). The HR function will become a driver of environmental sustainability within the organization by aligning its practices and policies with sustainability goals that reflect an environmental focus (Dumont et al., 2017). This is for the benefit of the individual, society and the environment. The HR management function acts as a driver of sustainability by implying GHRM policies and practices with the aim of improving the Quality of Employee Work. Currently, the concept of GHRM promotes greater awareness among agencies, private/public sector, who seek to implement the role of GHRM activities in strengthening and encouraging Quality Work of Employees. To promote effective GHRM, an organization can practice Green recruitment and selection (GRS), Green training (GTR), and Green compensation (GCO). In this study, these following three factors represent the overall GHRM (Pham et al., 2022; Rawash & Aloqaily, 2022):

Green Recruitment and Selection (GRS)

Green recruitment and selection are continuous process of hiring employees that takes into account the environmental impact of the recruitment process. This includes reducing the amount of paper used in the recruitment process, using digital methods to communicate

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with potential candidates, and considering the environmental impact of travel for interviews. Additionally, green recruitment and selection looks at how an organization can reduce its carbon footprint by selecting candidates who are already located close to the job site or who are willing to relocate without having to travel long distances (Pham et al., 2022).

Organizations that practice green recruitment and selection also look for ways to reduce their energy consumption during the recruitment process. This includes using energy-efficient lighting in interview rooms, using video conferencing technology for remote interviews, and encouraging candidates to use public transportation or carpooling when attending interviews (Rawash & Aloqaily, 2022). Additionally, organizations may consider offering incentives such as discounts on public transportation or bike-sharing programs for employees who choose sustainable modes of transportation. By taking these steps, organizations can reduce their environmental impact while still finding qualified candidates for open positions (Hewapathirana et al., 2020).

Organizations need to select and recruit employees who are interested in the environment. Organizations need to focus on selecting and recruiting employees who are supportive and interested in the environment (Renwick et al., 2013). Therefore, to increase the attractiveness of recruitment and selection for prospective employees who are increasingly aware of the environment (Ehnert, 2009), organizations must build a reputation that is inspired by the idea that the organization is responsive to the environment (Kapil, 2015; Guerci et al., 2016). It is believed that going green practices and policies can increase employee engagement and productivity (Dumont et al., 2017).

GRS ensures that new recruits understand the green organizational culture and share its environmental values (Jackson & Seo, 2010) through selecting prospective employees' knowledge, values, and beliefs about the environment. Recruitment messages must include environmental criteria (Arulrajah et al., 2015). In the job analysis phase, job descriptions and job specifications should clarify and emphasize environmental aspects, green achievements and explain what is expected of future "green" employees (Mandip, 2012; Renwick et al., 2013). However, Hewapathirana et al. (2020) recommend a number of steps that organizations can implement to enhance GHRM through the GRS process. First, the job description must include elements that emphasize the role of environmental reporting. Both induction programs for newly recruited employees should focus on providing information about the policies, values and goals of green organizations. Third, interviews should be conducted to assess the candidate's potential suitability for the organization's greening program. The design of this interview process is supported by Razab et al. (2015) which states that when interviewing potential candidates, questions related to the environment should be a major part of the evaluation process.

Arulrajah et al. (2015) explained that organizations can increase their efforts to protect the environment by integrating environmental duties into the duties and responsibilities of each employee's work, designing new jobs or positions that care about the environment to focus exclusively on the quality aspects of employee work from agencies (Hewapathirana et al., 2020). During the selection of prospective employees, the employee selection process must ensure the selection of candidates who are committed to the environment (Jabbour, 2011).

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Green Training (GTR)

Green training (GTR) in GHRM is a type of training that focuses on the development of sustainable practices within an organization. This type of training is designed to help organizations become more environmentally conscious and reduce their environmental impact. It can include topics such as energy efficiency, waste management, water conservation, and green building design (Pham et al., 2022). Green training can also include topics such as corporate social responsibility, environmental law, and sustainability reporting. Green training in GHRM can be beneficial for both employers and employees (Hewapathirana et al., 2020). For employers, it can help them reduce their environmental impact while also increasing employee engagement and morale. For employees, it can provide them with the knowledge and skills needed to make informed decisions about their work environment and how they interact with the environment around them. Additionally, green training can help organizations become more competitive by providing them with a competitive edge in terms of sustainability practices. By investing in green training, organizations can demonstrate their commitment to sustainability while also improving their bottom line (Hooi et al., 2022).

GTR is one of GHRM's main methods of developing support for environmental sustainability initiatives (Daily et al., 2007; Jabbour, 2013). This was the focus of early studies developed in the 1990s with the theory of human resources and environmental sustainability, Teixeira et al. (2012) investigated the relationship between GTR and environmental management in Brazilian organizations. The research revealed that the two variables are interrelated when they synergize in the organization together. Hewapathirana et al. (2020) state that the most significant impact on environmental awareness among employees is through GTR. Moreover, according to Hewapathirana et al. (2020), GTR is responsible for creating a culture to foster green organizational practices. This is in accordance with the findings of Sarkis et al. (2010) which explains that employees can encourage environmental performance practices through the relevant GTR. Likewise, Arulrajah et al. (2015) discussed the value of GTR in providing the knowledge and skills needed for good Employee Work Quality.

Employee training and development programs must cover social and environmental issues at all levels as argued by Mandip (2012). According to Cherian & Jacob (2012), it is very important to design the GTR based on training needs to achieve optimal environmental benefits from training. Therefore, training, development and learning plans must include programmes, workshops and sessions to enable employees to develop and acquire knowledge in environmental performance (Jabbour & Jabbour, 2016).

Renwick et al. (2013) suggest elements of GTR implementation include training staff to produce green workspace analysis, energy efficiency, waste management, recycling, and green personal skills development. It is also recommended by Jackson & Seo (2010). In addition, Zoogah (2011) explains that organizations must provide opportunities to involve employees in environmental problem-solving projects. To achieve this goal, the principle of job rotation should be used in eco-friendly assignments as an important part of the training and career development plan of future talented "green" managers (Pham et al., 2022; Prasad & Agarwal, 2013).

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Green Compensation (GCO)

Achieving an organization's green goals can be enhanced by rewarding employees for their commitment to environmentally sustainable practices (Jabbour & Santos, 2008; Jabbour & Jabbour, 2016). In this context, Employee Work Quality can benefit from the GCO system if it focuses on avoiding negative behavior and encouraging environmentally friendly behavior (Zoogah, 2011). To achieve this, the reward system must be designed to reflect management's commitment to environmental performance by strengthening and motivating employees' pro-environmental behavior. This management commitment will increase the commitment of the employees themselves by becoming more environmentally responsible and will make them more involved in environmental initiatives (Renwick et al., 2013).

This illustrates that to increase the success of the award program which aims to motivate employees' pro-environmental behavior, rewards should be linked to the results of the greening project within the organization. There are many types of GCO practices for the acquisition of green skills. GCO can be in the form of cash-based rewards (bonuses, cash, premiums), non-cash-based rewards (paid leaves, holidays, gifts), recognition-based rewards (awards, appreciation, publicity, external roles, plaques), and positive rewards (Renwick et al., 2013; Hewapathirana et al., 2020). All of these types of rewards reward employees who contribute the most to environmental sustainability (Renwick et al., 2013), through recognizing and rewarding employees who are dedicated to achieving environmental goals, and those in middle management who encourage their subordinates to adopt environmentally friendly practices (Pham et al., 2022).

In this study, it was identified that recognition-based rewards, in the form of commendation letters and placards, have a better impact on employee productivity to environmental practices than other types of rewards. Furthermore, organizations can use GCO practices by linking participation in green initiatives with promotion/career advancement, or by providing incentives to encourage environmentally friendly practices such as recycling and waste management (Jabbar & Abid, 2014; Prasad & Agarwal, 2013). GCO can also be used to encourage some green creativity and innovation by asking employees to share innovative green ideas related to their individual work (Ahmad, 2015).

Quality of Work

Human resources need to be developed continuously in order to obtain quality human resource work in the real sense, namely the work carried out will produce something that is desired. According to Cascio (1998), the quality of work life (QWL) is a condition where employees can fulfill their important needs by working in the organization. Moreover, Islam et al. (2022) argue that the quality of work life can be interpreted into two views, the first view states that the quality of work life is a set of state and practice of organizational goals, examples of which are promotion policies from within, democratic supervision, employee participation, and safe working conditions. While the second view defines the quality of work life as employee perceptions such that employees feel safe, relatively feel satisfied and get the opportunity to grow and develop as human beings. Furthermore, according to Islam et al. (2022), the quality of work life (QWL) is a process that responds to the needs of employees by developing a mechanism that gives full opportunity to employees in making

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decisions and planning their work life. It means a state in which members of a work organization are able to meet important personal needs through their work experience in the organization (Ha & Uyen, 2021).

The process of employee empowerment typically involves giving employees more autonomy and control over their work, allowing them to make decisions and take initiative. This can include providing employees with more information about the organization, its goals, and its strategies; giving them access to resources they need to do their jobs; and encouraging them to take ownership of their work. It also involves creating an environment where employees feel comfortable expressing their ideas and opinions, as well as providing feedback on how the organization is doing. Finally, it involves recognizing and rewarding employees for their contributions (Hooi et al., 2022).

Green Human Resource Management (GHRM) is a concept that focuses on the environmental sustainability of an organization's workforce. It is a holistic approach to managing human resources that takes into account the environmental impact of an organization's activities and seeks to reduce it. GHRM seeks to improve the quality of working life for employees by creating a healthier, more sustainable workplace. This includes reducing energy consumption, promoting green practices, and providing employees with access to green products and services (Rawash & Aloqaily, 2022). GHRM also encourages organizations to invest in employee development and training programs that focus on environmental sustainability (Pham et al., 2022). By doing so, organizations can create a culture of sustainability that will benefit both their employees and the environment. Ultimately, GHRM helps organizations create a better quality of working life for their employees while also helping them reduce their environmental footprint (Hooi et al., 2022).

By the same token, the quality of working life (QWL) is an important factor in determining employee satisfaction and productivity. QWL refers to the overall satisfaction and well-being of employees in their work environment. It includes factors such as job security, job satisfaction, work-life balance, and workplace safety. Research has shown that when employees have a high quality of working life, they are more likely to be productive and satisfied with their jobs (Pham et al., 2020; Yong et al., 2020).

Studies have found that organizations that adopt GHRM practices tend to have higher levels of employee satisfaction and productivity than those who do not (Pham et al., 2020; Yong et al., 2020; Chaudhary, 2020; Tanova & Bayighomog, 2022; Munawar et al., 2022; Hooi et al., 2022). This is because GHRM practices focus on creating a sustainable work environment for employees by taking into account environmental, social, and economic impacts when making decisions about HRM policies.

Previous literature contains a number of studies that investigate the green human resources on different issues in developing countries (Aftab et al., 2022; Ha & Uyen, 2021; Pham et al., 2022), but to the knowledge of the researchers, there is lack of study that investigates the impact of green human resources management in the Global South countries, particularly Indonesia. Another remark that most of the GHRM practices are implemented by the private organizations and businesses and the study focuses on the GHRM practices in government institutions are lacking, especially universities (Rawash & Aloqaily, 2022). As a result, a comprehensive study is required to investigate the limitations of previous research in order to improve and update the bigger picture of research on global green human resources, as well as to include some recent variables that have not been

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addressed by previous studies and articles. Therefore, this paper comes to investigate the impact of green human resources management toward the Quality of Working Life (QWL) in public universities in Indonesia.

Research Hypotheses

The above description leads towards development of following hypotheses,

- Hypothesis 1: Green Human Resource Management positively influence productivity among employees in public universities.
- Hypothesis 2: Green Human Resource Management positively influence QWL among employees in Indonesian public universities.
- Hypothesis 3: Green Human Resource Management positively influence productivity among employees in public universities through QWL.

Research Methodology

This study investigates the impact of Green Human Resource Management implementations toward the quality of work life (QWL) and productivity of employees in public universities. Also, it examines the moderating role of QWL in the relations of GHRM implementations in increasing employees' productivity level. The current research is conducted under the quantitative method as the data was collected through questionnaires and analysis by using the SPSS software. Different questions related to concerned variables were asked to gather responses from the samples. The minimum three items have been attached to each variable. The questionnaire was based on close-ended questions, and the interval scale was used to measure the responses as this scale was suitable to measure the responses of quantitative research studies. For the evaluation of responses, a five-point Likert scale was employed.

This study used a positivist research design with a sample size of 84 employees from public universities in Indonesia. Data was collected through an online survey using Google Forms. The survey consisted of questions related to GHRM practices such as green recruitment policies, green training programs, green performance management systems, green compensation systems, green benefits packages, and green workplace policies. Additionally, questions related to QWL were included in the survey. Majority of the respondents of the study were male (75%) whereas the remaining 25% of the respondents were female. Additionally, 80% of the respondents were married whereas 20% of the respondents were not married/widowed. In terms of education of the respondents, 35% of the respondents had the Bachelor's degree, 55% of the respondents had the Master's degree whereas 10% of the respondents selected other option.

In addition, data analysis was a process of examining, identifying, and quantifying the collected data, theories and testing the developed hypothesis to construct the relationship between the variables that will permit a researcher to forecast and disclose the study's actual result. In this concerned research, SPSS software was used for the testing of data gathered from different respondents. Several tests are used to test the data. Reliability analysis, correlation analysis, and regression analysis are used to test the study's hypothesis.

Results

Path Analysis

To determine the effect of GHRM and QWL on Indonesia public universities employee’s productivity, then used path analysis which is processed using a computerized system program SPSS.

Path Coefficient Analysis (ρ)

At this stage, we will calculate the Model I Path Coefficient and the Model II Path Coefficient as follows:

Model I Path Coefficient

Referring to the Regression model I output in the "Coefficients" table section, it can be seen that the significance value of the variable, namely X1 = 0.003, is smaller than 0.05. These results conclude that the Regression Model I, namely variable X1 has a significant effect on X2 (Table 1).

Table 1.
Probability Test Results X1 on X2

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.509	2.763		2.356	.020
	GHRM	.867	.081	.735	10.746	.000

a. Dependent Variable: QWL

Source: Data Processed (2023)

Moreover, the R Square value contained in the "Model Summary" is 0.421 (Table 2).

Table 2.
R Square Test Results (X1 to X2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.735 ^a	.541	.536	2.636

a. Predictors: (Constant), GHRM

Source: Data Processed (2023)

Table 2 shows that the contribution of X1 to Y is 54.1% while the remaining 45.9% is the contribution of other variables not included in the study.

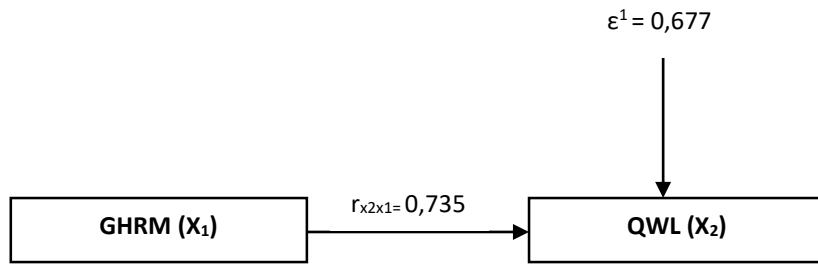


Figure 1. Path Coefficient of Model I

The value of ϵ^1 can be found using the formula $\epsilon^1 = \sqrt{1 - 0,541} = 0,677$. Thus, the path diagram of the structure model I is obtained as depicted in Figure 1 above.

Model II Path Coefficient

Based on the output of Regression Model II in the "Coefficients" table, it is identified that the significance value of the two variables, namely $X_1 = 0,232$ and $X_2 = 0,000$, means that the variable X_1 is greater than 0.05 and X_2 is less than 0.05. These results conclude that the Regression Model II, namely variables X_1 and X_2 have no significant effect on Y (Table 3).

Table 3.
Probability Test Results X_1, X_2 on Y

Model	Coefficients ^a		t	Sig.
	Unstandardized Coefficients			
	B	Std. Error		
(Constant)	7.447	2.934	2.538	.013
1 GHRM	.148	.123	1.204	.232
QWL	.619	.104	5.934	.000

a. Dependent Variable: Productivity

Source: Data Processed (2023).

The R Square value contained in the "Model Summary" as presented in Table 4 is 0.514

Table 4.
R Square Test Results (X_1 and X_2 to Y)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.717 ^a	.514	.504	2.724

a. Predictors: (Constant), QWL, GHRM

Source: Data Processed (2023)

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According to Table 4 above, it shows that the contribution of X1 and X2 to Y is 51.4% while the remaining 48.6% is the contribution of other variables not examined. Meanwhile for the value of $\epsilon^2 = \sqrt{1-0.514} = 0.697$. Thus, the Path Diagram of the Structure Model II is presented in Figure 2:

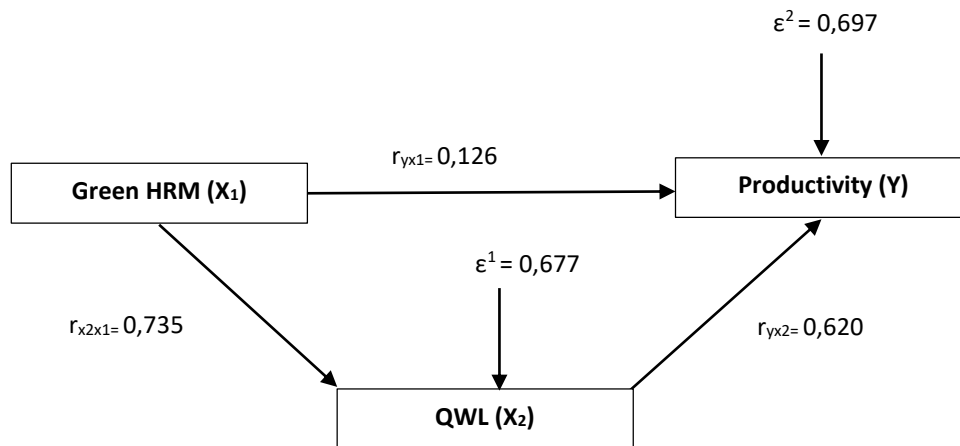


Figure 2. Path Coefficient of Model II

Hypotheses test

- Analysis of the effect of X1 on X2: from the analysis above, a significance value of X1 is $0.0001 < 0.05$. So, it can be concluded that there is a direct significant effect of X1 on X2.
- Analysis of the effect of X1 on Y: from the analysis above, a significance value of X1 is $0.232 > 0.05$. So, it can be concluded that there is no significant effect of X1 on Y.
- Analysis of the effect of X2 on Y: from the analysis above, a significance value of X2 is $0.0001 < 0.05$. So, it can be concluded that there is a significant effect of X2 on Y.
- Analysis of the effect of X1 through X2 on Y: it is known that the direct effect that X1 has on X2 is 0.735. Meanwhile, the indirect effect of X1 through X2 on Y is the multiplication of the beta value of X1 on X2 and the beta value of X2 on Y, namely: $0.735 \times 0.620 = 0.455$. Then the total effect that X1 has on Y is the direct effect plus the indirect effect, namely: $0.126 + 0.455 = 0.581$. Based on the results of the calculation above, it is known that the value of the direct effect is 0.126 and the indirect effect is 0.581, which means that the value of the indirect effect is greater than the value of the direct effect. These results indicate that indirectly X1 through X2 has a significant influence on Y.

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Table 5.
t-test results (X1 to X2) Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.509	2.763		2.356	.020
GHRM	.867	.081	.735	10.746	.000

a. Dependent Variable: QWL
Source: Data Processed (2023)

From Table 5, it can be seen that GHRM (X1) has a probability value (Sig) of 0.0001 which is smaller than the standard value of 0.05 so it can be concluded that GHRM has a significant effect on QWL. Next is the result of processing the test (t) for the GHRM variable (X1) on productivity (Y) and QWL (X2):

Table 6.
t-test results (X1 to Y and X2 to Y) Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.447	2.934		2.538	.013
1 GHRM	.148	.123	.126	1.204	.232
QWL	.619	.104	.620	5.934	.000

a. Dependent Variable: Productivity
Source: Data Processed (2023)

Moreover, from the Table 6 above, it can be seen that GHRM (X1) has a probability value (Sig) of 0.232 which is greater than the standard value of 0.05 so it can be concluded that GHRM has no significant effect on productivity. QWL (X2) has a probability value (Sig) of 0.0001 which is smaller than the standard value of 0.05 so it can be concluded that QWL has a significant effect on employee's productivity.

Discussion

Based on the results of the data analysis above, it shows that Green Human Resource Management has a positive influence on improving the quality of employee work. This positive influence is also very significant. Even though there are not a few academics at the public universities who apply Green Human Resource Management practices, this does not necessarily reduce the quality of their employees' work (Sakharina et al., 2020). The results of this study actually show the opposite that Green Human Resource Management is able to have a good impact on improving the health and well-being and quality of work of employees (Hewapathirana et al., 2020).

At the beginning, the decline in the quality of employee work, such as initiative, work potential, and employee work process, indeed causes decreased productivity (Rawash & Aloqaily, 2022). However, this encourages employees to work better and shows that he can do a better job. From the results of the respondents' answers, namely the statement being able to improvise work requested by superiors without leaving the applicable provisions with

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the second highest answer score being able to provide creative ideas for the progress of the public universities show that even though there are limited ideas caused by inability in the work process, employees will still try provide creative ideas to improve the quality of work (Pham et al., 2020; Sakharina et al., 2020; Yong et al., 2020). In addition, this positive influence is the impact of optimal work results. The application of GHRM at the Indonesian public universities have always been successfully implemented in Recruitment, Training and Compensation. On the other hand, employees who implement GHRM not only feel more healthier, but also will have more potential to become employees who will be aware of how important the environment is and save energy in every office activity, this causes an emphasis on energy and existing resources, employee skills in managing this GHRM practice will be rewarded financial or non-financial (Hooi et al., 2022; Sakharina et al., 2020).

This result is reinforced by the opinion of Renwick et al. (2013), Opatha (2013), and Hewapathirana et al. (2020), that GCO can be in the form of cash-based rewards (bonuses, cash, premiums), non-cash-based rewards (sabbaticals, holidays, gifts), recognition-based awards (awards, appreciation, publicity, external roles, placards), and positive awards. In this study, it was identified that recognition-based rewards, in the form of commendation letters and placards, have a better impact on employee productivity to environmental practices than other types of rewards (Rawash & Aloqaily, 2022; Sakharina et al., 2020). Furthermore, organizations can use GCO practices by linking participation in green initiatives with promotion/career advancement, or by providing incentives to encourage environmentally friendly practices such as recycling and waste management (Jabbar & Abid, 2014; Prasad & Agarwal, 2013). GCO can also be used to encourage some green creativity and innovation by asking employees to share innovative green ideas related to their individual work (Ahmad, 2015).

Another opinion was expressed by Arulrajah et al. (2015), Green Human Resource Management integrates environmentally friendly HR initiatives and practices for sustainable use of resources which results in more efficiency, reduces the amount of waste, and increases caring attitudes at work. Green Human Resource Management is a workforce management system that is applied to reduce negative impacts on the environment or increase positive environmental impacts on organization's performance in a sustainable manner which states that GHRM practices are very good for the long term of human health life so that they are more effective and efficient in managing available resources (Pham et al., 2020; Yong et al., 2020).

Through the results of this study, it can be concluded that Green Human Resource Management does not always have an adverse impact if Green Human Resource Management handlers are used optimally and produce maximum quality work (Haeruddin et al., 2023; Rawash & Aloqaily, 2022). If the level of implementation of Green Human Resource Management is not managed properly, it can cause the quality of work of academics in public universities to stagnate and even decrease, and the continuity of institutions' credibility to society is threatened (Arulrajah et al., 2015).

GHRM also encourages organizations to focus on employee development and training. This includes providing opportunities for employees to learn new skills, develop their knowledge base, and gain experience in different areas of the organization (Sakharina et al., 2020). By investing in employee development, organizations can create an environment where employees feel valued and motivated to perform at their best and eventually leads

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to higher levels of job satisfaction and productivity. Additionally, GHRM encourages organizations to promote diversity in the workplace by creating an inclusive culture that values different perspectives and backgrounds. This helps foster collaboration among employees from different backgrounds which can lead to increased creativity and innovation within the organization. Furthermore, promoting diversity helps create a more positive work environment where everyone feels respected and appreciated regardless of their background or identity.

Implications of the Study

For practical implications, public university such an organization should be able to be more focus on creating an environment where employees feel valued and supported in order for them to be more productive. This can be done through offering flexible working hours, green recruitment, green training etc. Secondly, organizations should ensure that they are taking into account the environmental, health and well-being, social, and economic impacts when making decisions about HR policies. At the same time, social implications could be promoted by implementing green policies such as energy conservation measures, investing in employee development programs, and promoting diversity in the workplace, organizations can create a more sustainable workplace that benefits both the environment and its employees.

Conclusion

The findings from this study suggest several managerial implications for public universities as government organizations looking to implement GHRM initiatives. First of all, organizations should focus on creating an environment where employees feel valued and supported in order for them to be more productive. This can be done through offering flexible working hours, green recruitment, green training etc. Secondly, organizations should ensure that they are taking into account the environmental, health and well-being, social, and economic impacts when making decisions about HR policies. Finally, organizations should strive for continuous improvement by regularly assessing their current HR practices in order to identify areas for improvement. In conclusion, GHRM is an important approach for organizations looking to improve the quality of working life for their employees while also reducing their environmental impact. By implementing green policies such as energy conservation measures, investing in employee development programs, and promoting diversity in the workplace, organizations can create a more sustainable workplace that benefits both the environment and its employees. Overall, research has shown that there is a strong link between GHRM practices and QWL outcomes such as employee satisfaction and productivity as well as organizational performance outcomes such as financial performance and capital investments. Organizations, particularly public universities as governmental institutions, should therefore consider implementing GHRM practices in order to improve both employee well-being as well as organizational performance over time.

Despite of the significant contributions offered; this study is not free from several limitations. First, the approach of a qualitative design limited the scope of the study. The limitation is associated with the data collected deepness. However, this limitation is justified

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as the hypotheses of this study required answers to scope, rather than depth. In addition, to assess the effect (and or relationship) of several independent variables on one or more dependent variables while taking into account other variables (e.g., control variables such as individual's demographics), a survey method using questionnaires is most suitable. Next, second limitation of this study is that in data collection process, Bahasa Indonesia is used in the questionnaires. Even though all endeavors were ensured to match the translations, there is a possibility that some nuances were lost in translation.

Declaration of Conflicting Interests

The authors declare that there is no conflict of interest.

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Human Participants

All authors confirm that this research is involving human participants, human material and anonymized personal data, which complies with all legal and ethical requirements and other applicable guidelines.

References

- Abdull Razab, M. F., Udin, Z. M., & Osman, W. N. (2015). Understanding the role of GHRM towards environmental performance. *Journal of Global Business and Social entrepreneurship*, 1(2), 118-125. [https://www.gbse.my/isi16/GBSE%201\(2\),%20118-125%20\(2015\).pdf](https://www.gbse.my/isi16/GBSE%201(2),%20118-125%20(2015).pdf)
- Aftab, J., Abid, N., Cucari, N., & Savastano, M. (2022). Green human resource management and environmental performance: The role of green innovation and environmental strategy in a developing country. *Business Strategy and the Environment*, 32(4), 1782-1798. <https://doi.org/10.1002/bse.3219>
- Ahmad, S. (2015). Green human resource management: Policies and practices. *Cogent Business & Management*, 2(1), 1-13. <https://doi.org/10.1080/23311975.2015.1030817>
- Arulrajah A. A., Opatha, H. H. D. N. P., & Nawaratne N. N. J. (2015). Green human resource management practices: A review, *Sri Lankan Journal of Human Resource Management*, 5(1), 1-16. <https://doi.org/10.4038/sljhrm.v5i1.5624>

Haeruddin, M. I. M., Hiromi, H., & Haeruddin, M. I. W.

- Cascio, W. F. (1998). *Managing Human Resources: Productivity, Quality of Work Life, Profits* (5th ed.). McGraw-Hill Companies, Inc.
- 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>
- Cherian, J., & Jacob, J. (2012). A study of green HR practices and its effective implementation in the organization: A review. *International Journal of Business and Management*, 7(21), 25-33. <https://doi.org/10.5539/ijbm.v7n21p25>
- Daily, B. F., Bishop, J. W., & Steiner, R. (2007). The mediating role of EMS teamwork as it pertains to HR factors and perceived environmental performance. *Journal of Applied Business Research*, 23(1), 95-110. <https://doi.org/10.19030/jabr.v23i1.1411>
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613-627. <https://doi.org/10.1002/hrm.21792>
- Ehnert, I. (2009). *Sustainable Human Resource Management: A Conceptual and Exploratory Analysis from a Paradox Perspective*. Physica-Verlag: A Springer Company.
- Garnesia, S. (2020). Mengintip kota kota gudang sampah di Indonesia. <https://tirto.id/mengintip-kota-kota-gudang-sampah-di-indonesia-cE4o>
- Guerci, M., Longoni, A., & Luzzini, D. (2016). Translating stakeholder pressures into environmental performance – the mediating role of green HRM practices. *The International Journal of Human Resource Management*, 27(2), 262-289. <https://doi.org/10.1080/09585192.2015.1065431>
- Ha, N. T. L., & Uyen, P. T. B. (2021). The effect of green human resource management on employee green behaviors in a developing country, Vietnam. *International Journal of Information, Business and Management*, 13(1), 107-124. https://ijibm.elitehall.com/IJIBM_Vol13No1_Feb2021.pdf
- Haeruddin, M. I. M., Natsir, U. D., Aswar, N. F., Aslam, A. P., & Salam, R. (2023). Here comes the sun: Green HRM implementation toward SME's sustainability in tourism industry. *International Journal of Professional Business Review*, 8(4), e01227. <https://doi.org/10.26668/businessreview/2023.v8i4.1227>
- Hewapathirana, R. A., Opatha, H. H. D. N. P., & Gamage, P. (2020). Identification of some research gaps in green human resource management. *International Business Research*, 13(12), 63-78. <https://doi.org/10.5539/ibr.v13n12p63>
- Hooi, L. W., Liu, M. S., & Lin, J. J. J. (2022). Green human resource management and green organizational citizenship behavior: Do green culture and green values matter? *International Journal of Manpower*, 43(3), 763-785. <https://doi.org/10.1108/IJM-05-2020-0247>
- Islam, M. A., Hack-Polay, D., Haque, A., Rahman, M., & Hossain, M. S. (2022). Moderating role of psychological empowerment on the relationship between green HRM practices and millennial employee retention in the hotel industry of Bangladesh. *Business Strategy and Development*, 5(1), 17-29. <https://doi.org/10.1002/bsd2.180>
- Jabbar, M. H., & Abid, M. (2014). GHRM: Motivating employees towards organizational environmental performance. *Magnt Research Report*, 2(4), 267-278.
- Jabbour, C. J. C. (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/10.1108/001978511111108926>
- Jabbour, C. J. C. (2013). Environmental training in organisations: From a literature review to a framework for future research. *Resources, Conservation and Recycling*, 74, 144-155. <https://doi.org/10.1016/j.resconrec.2012.12.017>

Green HRM & QWL

- Jabbour, C. J. C., & Jabbour, A. B. L. D. S. (2016). Green human resource management and green supply chain management: Linking two emerging agendas. *Journal of Cleaner Production*, 112(Part 3), 1824-1833. <https://doi.org/10.1016/j.jclepro.2015.01.052>
- Jabbour, C. J. C., & Santos, F. C. A. (2008). Relationships between human resource dimensions and environmental management in companies: Proposal of a model. *Journal of Cleaner Production*, 16(1), 51-58. <https://doi.org/10.1016/j.jclepro.2006.07.025>
- Jackson, S. E., & Seo, J. (2010). The greening of strategic HRM scholarship. *Organization Management Journal*, 7(4), 278-290. <https://doi.org/10.1057/omj.2010.37>
- Kapil, P. (2015). Green HRM-engaging human resource in reducing carbon footprint and enhancing environment sustainability: A case study-based approach. *International Journal of Engineering Technology Sciences and Research*, 2, 5-14. http://www.ijetsr.com/images/short_pdf/1425489718_5-14_JNU232_iJETSr.pdf
- Kodua, L. T., Xiao, Y., Adjei, N. O., Asante, D., Ofosu, B. O., & Amankona, D. (2022). Barriers to green human resources management (GHRM) implementation in developing countries. Evidence from Ghana. *Journal of Cleaner Production*, 340, 130671. <https://doi.org/10.1016/j.jclepro.2022.130671>
- Mandip, G. (2012). Green HRM: People management commitment to environmental sustainability. *Research Journal of Recent Sciences*, 1, 244-252. <http://www.isca.in/rjrs/archive/iscsi/38.ISCA-ISC-2011-18CLM-Com-03.pdf>
- Masri, H. A., & Jaaron, A. A. M. (2017). Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. *Journal of Cleaner Production*, 143, 474-489. <https://doi.org/10.1016/j.jclepro.2016.12.087>
- Munawar, S., Yousaf, H. Q., Ahmed, M., & Rehman, S. (2022). Effects of green human resource management on green innovation through green human capital, environmental knowledge, and managerial environmental concern. *Journal of Hospitality and Tourism Management*, 52, 141-150. <https://doi.org/10.1016/j.jhtm.2022.06.009>
- Opatha, H. H. D. N. P. (2013). Green human resource management: a simplified introduction. In *Proceedings of the HR Dialogue*, 1(1), 11-21. <https://mgt.sjp.ac.lk/hrm/wp-content/uploads/2013/12/03.pdf>
- Pham, N. T., Hoang, H. T., & Phan, Q. P. T. (2020). Green human resource management: A comprehensive review and future research agenda. *International Journal of Manpower*, 41(7), 845-878. <https://doi.org/10.1108/IJM-07-2019-0350>
- Pham, N. T., Vo-Thanh, T., Tučková, Z. (2022). Green human resource management in hotels in developing countries: A practices- and benefits-related conceptual framework. In N. Nguyen, H. V. Nguyen, C. D'Souza, & C. Strong (Eds.) *Environmental Sustainability in Emerging Markets: Approaches to Global Sustainability, Markets, and Governance* (pp. 151-176). Springer. https://doi.org/10.1007/978-981-19-2408-8_7
- Prasad, R. S., & Agarwal, K. (2013). Green HRM - partner in sustainable competitive growth. *Journal of Management Sciences and Technology*, 1(1), 15-19.
- Rawash, H. N. & Aloqaily, A. N. (2022). The impact of implementing green human resources management in government institutions in the Jordanian Ministry of Justice. *International Journal of Advanced and Applied Sciences*, 9(11), 113-120. <https://doi.org/10.21833/ijaas.2022.11.014>
- Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1-14. <https://doi.org/10.1111/j.1468-2370.2011.00328.x>
- Sakharina, I. K., S. I., Kadarudin, Patittingi, F., Hasrul, M., Latif, B., & Palutturi, S. (2020). The impact of green human resource practices on environmental performance. *Polish Journal of Management Studies*. 22(2), 470-486. <https://doi.org/10.17512/pjms.2020.22.2.31>

Haeruddin, M. I. M., Hiromi, H., & Haeruddin, M. I. W.

- Sarkis, J., Gonzalez-Torre, P., & Adenso-Diaz, B. (2010). Stakeholder pressure and the adoption of environmental practices: The mediating effect of training. *Journal of Operations Management*, 28(2), 163-176. <https://doi.org/10.1016/j.jom.2009.10.001>
- Tanova, C., & Bayighomog, S. W. (2022). Green human resource management in service industries: The construct, antecedents, consequences, and outlook. *The Service Industries Journal*, 42(5-6), 412-452. <https://doi.org/10.1080/02642069.2022.2045279>
- Teixeira, A. A., Jabbour, C. J. C., de Sousa Jabbour, A. B. L., Latan, H., & De Oliveira, J. H. C. (2016). Green training and green supply chain management: Evidence from Brazilian firms. *Journal of Cleaner Production*, 116, 170-176. <https://doi.org/10.1016/j.jclepro.2015.12.061>
- Wijaya, A. (2020). BPBD DKI: Ada 21 Titik Banjir Sabtu Pagi Ini di Jakarta. <https://metro.tempo.co/read/1304929/bpbd-dki-ada-21-titik-banjir-sabtu-pagi-ini-di-jakarta>
- Yong, J. Y., Yusliza, M. Y., 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>
- Zoogah, D. B. (2011). The dynamics of green HRM behaviors: A cognitive social information processing approach. *German Journal of Human Resource Management*, 25(2), 117-139. <https://doi.org/10.1177/239700221102500204>

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