



# Studying the relationship between green human resource management practices and organizational sustainability

## **Applied on Universal Health Insurance**

Research extracted from a PHD. thesis of Business Administration

By

## **Dr.Mohamed Refaat Mohamed Elkeerany**

College of International Transport and Logistics Arab Academy for Science, Technology & Maritime Transport

mohamed elkeerany@yahoo.com

#### Ms.Merna Mohamed Abd Elkader Osman

PHD. of Business Administration

College of International Transport and Logistics Arab Academy for Science, Technology & Maritime Transport

mernaosman2@gmail.com

## Scientific Journal for Financial and Commercial Studies and Research (SJFCSR)

Faculty of Commerce – Damietta University Vol.5, No.2, Part 1., July 2024

## **APA Citation:**

Elkeerany, M. R. M. and Osman, M. M. A. (2024). Studying the relationship between green human resource management practices and organizational sustainability: Applied on Universal Health Insurance, *Scientific Journal for Financial and Commercial Studies and Research*, Faculty of Commerce, Damietta University, 5(2)1, 1153-1202.

Website: https://cfdj.journals.ekb.eg/

# Studying the relationship between green human resource management practices and organizational sustainability

## **Applied on Universal Health Insurance**

Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

#### **Abstract**

Green Human Resources Management (GHRM) helps integrate environmental strategies into the overall strategic development goals of the organization to reach an effective environmental management system. The study sought to know the role of (GHRM) in achieving the underlying strategies for enhancing "organizational sustainability" in Universal Health Insurance concerned with achieving sustainable development in Egypt.

Recently, there has been observed an increasing awareness within business communities on the significance of going green and adopting various environment management techniques. As the corporate world is going global, the business is experiencing a shift from a conventional financial structure to a modern capacity-based economy which is ready to explore green economic facets of business. Today, Green Human Resource Management (GHRM) has become a key business strategy for the significant organizations where Human Resource Departments play an active part in going green, targeting the strategic vision of Egypt by the year 2030.

This research examines the effects of Green Human Resource Management (GHRM) practices on organizational sustainability, with a focus on the Universal Health Insurance in Egypt. The study employs a stratified random sample of employees from the Universal Health Insurance, totaling 1,723 individuals, with 318 participants selected for the final sample. Data collection was conducted through a structured survey assessing the implementation of various GHRM practices, such as green recruitment and green training, as independent variables, and their impact on organizational sustainability, considered as the dependent variable. Key findings reveal a significant positive correlation between the application of GHRM practices and enhanced organizational sustainability. Stability and reliability of the survey were verified using the Cronbach's Alpha coefficient, and data analysis included Pearson Correlation Coefficient and Regression Analysis to validate the relationships between variables.

**Keywords**: Green Human Resource Management, Organizational Sustainability, Universal Health Insurance, Egypt, Environmental Management.

## Introduction

Following the industrial revolution and global expansion, there was an urgent need for green human resource management and practices. These initiatives came from international organizations concerned with protecting the environment and its resources. Since decades ago, scientists have been made aware of the massive scale of business and the detrimental effects and behaviors that these industries and businesses leave behind, primarily through increased pollution and environmental degradation in general.

Beginning in the 1980s of the previous centuries, nations started to consider how to address these issues and prevent harmful environmental practices. Among the most notable of these accords, treaties, and protocols, we name some. From the Montreal Treaty for the Reduction of Ozone Gases (1987) in New York (1988), London (1990), Rio de Janeiro (1992), Kyoto (1998), and the Copenhagen Climate Stimulus Conference in 2009 up until the Paris Conference on Climate Change (2015) The accord, which has 195 signatories, including 158 heads of state, asks both wealthy and developing nations to commit to limiting global warming to less than two degrees Celsius above pre-industrial levels. The agreement is set to replace the Kyoto Protocol, which work ended in the year 2020, then lately from showcasing climate action to taking ambition to the next level, climate events provide space for knowledge exchange and discussions to strengthen the Paris Agreement's implementation such as the hosting of COP27 in Egypt, in the green city of Sharm El-Sheikh in 2022 marks the 30th anniversary of the adoption of the United Nations Framework Convention on Climate Change.

COP27 was an opportunity to showcase unity against an existential threat that we can only overcome through concerted action and effective implementation.

Along with achieving environmental balance and sustainable development, green human resource management (GHRM) techniques also significantly contribute to the sustainability of the workplace environment and the health, wellbeing, and well-being of employees (Amrutha & Geetha, 2020).

## 1. Research Problem

Despite the growing recognition of the importance of implementing environmentally sustainable practices in organizations, there is limited research on the impact of green human resource management (GHRM) on sustainability in Egypt and The special importance of the relationship between human capital and its impact on organizational sustainability, Since the main part of the environmental crisis is the lack of knowledge of how to protect the environment, and therefore it is in fact a cultural problem, so (GHRM) seeks to create a culture of environmental protection among the different segments of society, starting with workers and organizations by increasing people's awareness of the environmental issue, to correct their behavior towards the environment and push them to follow the correct environmental policies.

The need for sustainable environmental practices in organizations is critical due to the escalating environmental challenges globally. Industries account for about 21% of global carbon dioxide emissions, as reported by the Environmental Protection Agency. This substantial contribution highlights the urgency for companies to modify operational methodologies to reduce their environmental impact. While the importance of implementing sustainable practices is recognized, there is a lack of research on the impact of Green Human Resource Management (GHRM) on sustainability in Egypt.

Green Human Resource Management (GHRM) is crucial in integrating ecofriendly practices with traditional HR management to enhance sustainability. According to the 2021 United Nations Environment Report, companies implementing GHRM have successfully reduced resource consumption by 15% and waste by up to 20%, thereby directly enhancing environmental sustainability. However, the full spectrum of sustainability encompasses not only environmental but also economic and social dimensions:

Economic Sustainability: This involves practices that contribute to a firm's economic performance over the long term, ensuring that business operations are financially sustainable and contribute to a broader economic stability.

Environmental Sustainability: Focuses on reducing the environmental impact of company operations through efficient resource management and minimizing waste, as well as mitigating the effects of climate change.

Social Sustainability: Pertains to managing social impacts and responsibilities, ensuring fair practices, and contributing to the community's well-being.

This research aims to explore the comprehensive impact of GHRM practices on these three sustainability dimensions within the context of Egypt's Universal Health Insurance sector, a pivotal area where such integrated research is distinctly lacking. The study seeks to fill this gap by identifying how GHRM practices not only contribute to environmental performance but also support economic and social sustainability.

## 2. Research objectives

- 2.1 Provide with a basic understanding of green human resource management and sustainability to the readers.
- 2.2 Ensuring the existence of the relationship between the green human resources management and organizational sustainability in the universal health insurance system based on the development of health services provided in Egypt in several stages by spending heavily on itself from the beneficiaries' subscriptions, and it is considered an integral part in the real development sustainable in Egypt.
- 2.3 Presenting some recommendations that could contribute to benefiting from the adoption of (GHRM) in the universal health insurance system to achieve sustainable development for Egypt.

## 3. Research importance

The importance of the research can be summarized as follows:

## 3.1 Academic importance

Its academic importance can be determined by two main points:

- 1- Examination of the literature and studies dealing with green practices for human resources.
- 2- Developing and refining theoretical frameworks that explain how HRM can contribute to an organization's environmental sustainability efforts.

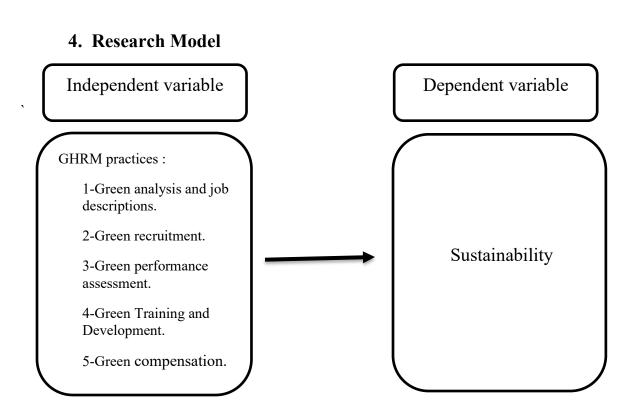
## 3.2 Field importance

It can be summarized as follows:

- 1- Many of the studies dealing with green practices for human resources have been applied in a foreign environment and are not Arab, while this research deals with an Arab environment represented by the health sector in Universal health insurance system in Egypt.
- 2- Explaining the impact of green practices for human resources in improving the performance of the organization and thus providing solutions to the problems that Organizations hinder to reach the ranks of international organizations.

The importance of the research is justified because human resource management plays an important role in shaping the organizational culture structural, strategy, and organizational development policy, especially when these ministries are the bodies and institutions are entrusted with the implementation of the development policies of the green economy in the country (Universal health insurance system in this study), and plays a key role in achieving sustainability.

Here, the research is concerned with clarifying the role of (GHRM) in creating environment-aware workers in the government regulation of developing countries, able to address appropriately for economic problems, helps the country achieve the 2030 sustainable development goals.



-Figure 1-

## 5. Research Limitation

Despite the potential contributions, several limitations exist in understanding the direct effect of GHRM practices on the Egyptian universal health insurance system. One primary limitation is the lack of specific empirical research that directly correlates GHRM practices with the performance and outcomes of the universal health insurance system in Egypt. Most existing studies focus on the impact of GHRM practices on employee health and organizational performance rather than their direct effects on public health policies or insurance systems.

Additionally, the implementation of GHRM practices might face challenges in terms of resource allocation, organizational culture, and the readiness of companies to adopt sustainability initiatives. The cultural and contextual differences within Egyptian workplaces could also affect the adoption and effectiveness of GHRM practices in improving overall public health and impacting the universal health insurance system.

In summary, while GHRM practices hold promise in positively influencing employee health and indirectly contributing to the efficiency of the Egyptian universal health insurance system, the lack of direct empirical evidence and potential implementation challenges pose limitations in fully understanding and leveraging their impact on the broader healthcare.

## 6. Theoretical framework6.1 Green human resource management

Green Human Resource Management (GHRM) is a relatively new concept that has emerged in response to the growing concerns about the impact of human activities on the environment. GHRM refers to the integration of environmental concerns into the HRM policies, processes, and practices of an organization. (Bombiak & Marciniuk-Kluska, 2018). The concept of green human resources management is one of the modern concepts in the contemporary time, which combines activities Environmental management and human resource management, where the term green human resource management refers to the role played by Human resources' practices towards the environmental agenda of companies to protect and conserve their natural resources. (Ali et al., 2020)

Since 2011, GHRM has been explicitly acknowledged as a research domain (R. Paulet, P.Holland, D. Morgan.,2021). When conceptualizing and subsequently operationalizing research topics, new views outside the functional and behavioral techniques typically employed by most researchers are required because quantitative evidence is still in its infancy (Pham et al., 2020; Ren et al., 2019).

Green human resource management (GHRM) has thus been receiving substantial attention in the environmental management literature. GHRM refers to an understanding of the associations between the activities of a firm that influence the natural environment and the formulation, evaluation, execution, and effect of human resource management (K.Haldorai et al., 2021).

According to (Young et al., 2020) GHRM has been attracted the interest of researchers since 2007 and intensive publications in GHRM began in 2016 and continued until the present time. Extensive research in GRHM has found European countries due to rigid government policies and regulations for waste management and environmental protection (Amrutha & Gheetha, 2021).

The theory of human capital defines human capital as the characteristics of employees that may be accessed to raise values that ultimately result in achieving a competitive edge. These characteristics include abilities, wisdom, knowledge, commitments, skills, attitudes, experiences, and creativity. (Sun, Li, & Ghosal, 2020).

These past two decades, the human resources management literature witnessed a great leap in the field of concern for environmental aspects, through Transforming personnel techniques by their managers to increase efforts in creativity and innovation in the field of friendly goods and services industry environment, on the fact that this task is not easy, and that is what the world is witnessing from the transformation of the global economy from a system. (Munawar et al., 2022)

According to additional research (Jia et al., 2018; Singh et al., 2020), GHRM practices were found to mediate the relationship between leadership support, employee behaviors, and attitudes towards green innovation and creativity. (Mukherji & Bhatnagar, 2022)

In this paper, we will discuss a set of green practices for green human resource management, which include:

## 6.1.1 Green analysis and job description

The design and description of green jobs typically involves identifying the skills and knowledge required for the job, as well as the expected outcomes and benefits. Delbridge et al. (2020) "The Role of Green Job Design in Enhancing Environmental Performance": This study investigates the connection between sustainability, environmental performance, and job design. It makes the case that implementing green job design concepts—such as task variety, autonomy, and feedback—can increase workers' motivation and environmental participation, which will improve sustainability outcomes. According to the study, in order to promote behaviors that are focused on sustainability, job descriptions must take into account the concepts of green job design. Job descriptions refer to the inclusion of environmental, social, personal and technical requirements during job specifications for the organizations (Arulrajah et al., 2015).

To have a detailed understanding of the jobs to be filled and the human characteristics and the competencies that you must work with a number of people to fill those jobs, Barua and Rathi (2020) summarizes research results from several studies and contends that application of green HRM techniques, such as green job descriptions, has a beneficial impact on environmental performance outcomes and highlights how green job descriptions can influence employee behavior and help achieve sustainability goals.

## 6.1.2Green recruitment

The "war for talent" has made attracting top people a significant HR concern (Renwick et al.,2013). Green recruitment is the process of hiring individuals for jobs that are focused on sustainability and environmental responsibility. This includes identifying and attracting candidates who have the skills, knowledge, and values that align with a company or organization's environmental goals and initiatives. the process of hiring new talents who are aware of sustainability and green practices, and this helps attract the most creative and innovative employees (Ullah,2017.)

Green recruitment and selection is process of attracting and selecting candidates that have an interest in environmental concerns and are committed to resolving the issues related to the environment including workplace environment (Saeed et al., Citation 2018).

The process of selecting and appointing new employees is based on environmental principles and standards in accordance with the concept of green human resources management to achieve responsibility Social and environmental. This process attracts individuals with green values and culture that are environmentally friendly. (Renwicka et.Al.;2015)

Previous researchers have either combined the two practises of green recruiting and selection into one variable or have referred to these practises as green hiring. Reputation for being environmentally friendly has risen to the top of the list of hiring requirements. For instance, (Guerci, Montanari, Scapolan, and Epifanio ;2016) found that even though Italy's economy has been in a severe recession for a long time, job candidates still place a high priority on green-related concerns in their career decisions. (Longoni, Luzzini, and Guerci ;2016, Zaid et al.,2018) demonstrate that green hiring is highly connected with an organization's financial performance based on the economic dimension of sustainability.

## 6.1.3 Green performance assessment

A green performance assessment in the context of Green HRM would involve evaluating the environmental performance of HRM practices within an organization. This could include assessing the environmental impact of:

- Performance management: This could involve evaluating the extent to which environmental performance is integrated into performance metrics and how employees are incentivized to adopt sustainable practices.

- Employee engagement: This could involve assessing the effectiveness of communication and engagement strategies aimed at promoting environmental awareness and behavior change among employees.

Environmental indicators must be incorporated into the process of performance evaluation, and employees must receive regular performance feedback from the green human resources department.

The degree to which environmental goals are met, together with feedback that aids employees in improving their knowledge and abilities and inform staff members of the evaluation's findings regarding their advancement towards environmental goals in order to encourage them to pursue continuous improvement (Masri ,2016).

The process of evaluating green performance must do environmental awareness first, which involves two fields of performance environment and competitive advantage. Some of the activities of green organizations include written environmental policies, an environmental management system, targets set to improve environmental performance, an environmental procurement policy, publishing environmental reports, and a policy to reduce the use of unsustainable products.

As a result, green performance with changing global environmental issues has attracted much attention to sustainable development processes. That The method of evaluating green performance in organizations is based on pollution emissions (waste), environmental performance (green), environmental work efficiency, and the organization's environmental reputation. (Mirghafoori et. Al.,2017).

## **6.1.4** Green Training and Development

"Green training and development" typically refer to training and development programs that focus on environmental sustainability and promoting "green" practices within an organization or industry.

Training means providing employees with basic skills to raise the level of environmental literacy. Continuous improvement can be achieved through continuous training. Environmental training is needed to motivate employees to participate in environmentally friendly initiatives whose results are gain the latest knowledge that ultimately motivates employees to perform better in the face of challenges and changes in the workplace (Abid & Jabbar, 2015).

Green training and development programs may cover a variety of topics, such as reducing waste, conserving energy, using environmentally-friendly products and materials, and promoting sustainable practices. These programs may be geared towards employees, managers, or executives, and may be designed to meet specific sustainability goals or regulations.

Green training focuses on safety, energy efficiency and recycling Training supervisors should use more online study materials and case studies instead of print brochures, books and brochures to reduce paper use. (Hosain & Rahman, 2016)

## **6.1.5** Green compensation

The main HRM processes used to reward employees for their performance are rewards and compensation. These HR procedures are the most effective way to connect an individual's interests with those of the organization. We also contend that rewards and incentives can affect workers' attention levels at work to the highest degree and inspire them to put out their best effort to advance organizational objectives. (Jackson et al., 2011) Green compensation and rewards are viable instruments that organizations can deploy as non-financial and financial reward systems with the goal of luring, keeping, and inspiring staff members to make positive environmental contributions. A set of green standards for all employees is indicated by "green performance and appraisal" or "assessment," which covers environmental incidents, responsibility, and the reduction of carbon emissions in addition to how to communicate environmental concerns and policies (Wulandari Nawangsari, 2021).

Rewards and compensation might be considered viable measures for promoting environmental initiatives in organizations when discussing green HRM (Jerez-Gómez, Céspedes-Lorente, & Valle-Cabrera, 2017). Modern businesses are creating incentive programs to support their employees' environmental actions in accordance with a strategic approach to reward and management.

According to Jabbour et al. (2010), "the implementation of a system of financial and nonfinancial rewards for employees with a distinct potential to contribute to environmental management" is what is meant by "green rewards."

Programs for staff compensation can be changed to award incentives partially based on how well-rated a person is for their behavioral and technical competencies. Employees may also receive bonuses for exceptional performance on unique initiatives. (Ahmad, 2015, Liebowitz, 2010).

To encourage employees to support the green agenda while also recognizing their contributions, green rewards might include the utilization of workplace and lifestyle advantages, such as free bicycles and carbon credit offsets. (Pillai & Sivathanu, 2014).

## 6.2 sustainability

Here is increasing global concern related to organizational sustainability, which has become a top priority in both developed and developing countries (Khan and Noorizwan Muktar, 2020)

Sustainability concept is defined in the World Commission on Environment and Development's 1987, Brandt and report 'Our Common Future'. And since then, it has become widely used in different organizational settings with administrative, development and leadership meanings. Environmental sustainability can be understood as a balance in which human beings are allowed to satisfy or achieving their current needs by using natural resources without violating the ability of future generations to satisfy their comprehensive needs. Environmental sustainability is a conscious effort and responsive interplay with the environment with a view to preserving natural resources through the development of alternative power sources, reducing pollution or any negative impact that may erode environmental quality (Fapohundaetal., 2022).

Sustainable development that prioritizes meeting current demands without jeopardizing the capacity of future generations to fulfill their own. The idea is based on three pillars: profits, planets, and people, or economic, environmental, and social factors. (Beatte, 2019)

Sustainability has become a primary focus for many organizations because of climate change as well as societal and governmental pressures for greater environmental and social responsibility. Corporate executives are paying more attention to sustainability, and many organizations are including it prominently in their strategic goals (Chouinard, Ellison, & Ridgeway, 2011).

Economic, environmental, and social sustainability are the three pillars that make up the triple bottom line principle. (Yong et al., 2020)

Economic sustainability is essential to corporate financial success; in order to survive, a organization needs to be able to continuously create goods and services while also turning a profit. The effects of business on the environment are taken into account in environmental sustainability. For intergenerational justice and sustainable economic output, natural resource protection is crucial, social sustainability represents the humanitarian context of business, which places an emphasis on opportunity and justice in distribution and links these to problems with income inequality, poverty, and disparities in access to healthcare and education. (Aggerholm, Andersen, & Thomsen, 2011; Harris, 2003).

Organization's sustainability goals can be attained through the use of HRM practices including recruiting the right people and supporting them with performance reviews and incentive programs. (Siti Nabiha, 2015), The organizational goal of pursuing profitability, environmental integrity, and social equality can best be achieved by integrating sustainability through HRM. (de Souza Freitas, Jabbour, Mangili, Filho, & de Oliveira, 2012).

Sustainability issues encompass a wide array of social and environmental factors that significantly impact the planet's well-being and societal harmony. Socially, issues such as poverty, inequality, access to healthcare, education, and basic amenities are critical components affecting sustainable development (United Nations, 2015). Economic disparities, inadequate healthcare systems, and limited access to education not only hinder individual well-being but also contribute to societal instability and environmental degradation (UNESCO, 2017). On the environmental front, factors such as climate change, loss of biodiversity, deforestation, pollution, and resource depletion pose severe threats to the planet's ecosystems and sustainability (IPCC, 2018). These interconnected social and environmental challenges highlight the complex nature of sustainability issues, underscoring the urgent need for comprehensive strategies addressing both social equity and environmental conservation to achieve a sustainable future for generations to come.

In order for these sustainable business strategies to be implemented successfully within an organization, both strong leadership and a clear procedure are needed (Glavas, Senge, & Cooperrider, 2010).

Sustainable communities are described as "places where people want to live and work, now and in the future" in the UK Sustainable Communities document (Office of the Deputy Prime Minister: London, UK, 2003.) which was adopted in 2003. They provide for the various demands of both current and potential residents, respect their surroundings, and enhance the standard of living.

They provide fair opportunity and high-quality services to everyone, are inclusive and safe, and are skillfully designed, constructed, and managed (Dempsey, N.; Brown, C.; Bramley, G,2011).

Sustainability is a trending topic in research that needs more empirical-based studies to recognize and access the worth of HRM towards sustainable organizations. The competitive nature of business today has made sustainability more of a demand than a deliberate action, which requires speed when developing unique consequences. Essentially organizations must move from physical technology to information technology for effective and efficient HRM functions (Oswal and Narayanappa, 2015).

## 7. Literature Review

Green human resource management refers to an aspect of human resource management and its practice is not limited to human resource management practices only; rather, this concept has expanded to include motivation in all business organization practices and reduce carbon emissions, Pollution by using green recruitment, training and development, green assessment, and green personnel. Experts in the green industry who possess these qualities are regarded as having "human capital". (Labella-Fernández & Martínez-del-Río, 2019)

The human resource management unit is the most significant contributor to the implementation of any corporate environmental program among the several organizational units, including HR, Marketing, IT, Finance, and so on. Without a doubt, the business community is a significant player in the debate over environmental issues and as such, conforms to be a crucial component of the solution to the environmental threat. There is no doubt that a significant portion of the workforce in the corporate sector cares deeply about the environment. Employees today are more devoted to and satisfied with the organizations that take an active role in supporting green initiatives.( S.Ahmad, 2015)

A global consensus has developed over the past 20 years about the necessity of proactive environmental management (de Sousa Jabbour et al., 2020, Bhatia & Kumar, 2022; Singh et al., 2022.), Based on this green idea, a wealth of literature on green management in general, green accounting, green retailing, and green marketing has permeated the management discipline. Green management perspectives were also made possible by the corporate sector's active embrace of environmental management strategies (H.Weng, J. Chen, P.Chen, 2015)

The twenty-first century has seen a rise in interest in environmental issues everywhere in the world, regardless of linked disciplines like politics, the public, or business. The specific climate change treaties are what have recently sparked a global interest in environmentalism (DG Victor, 2014). Governments and NGOs around the world have promoted regulations and policies in an effort to

slow down and, in some cases, even reverse the destruction of natural resources and its detrimental effects on humanity and society as a whole (Shrivastava & Berger, 2010). This is due to the harmful effects of industrial pollution and waste materials, including toxic chemicals.

Green HRM efforts are an element of larger corporate social responsibility initiatives. Green HR primarily comprises of two key components: knowledge capital preservation and eco-friendly HR practices (Cheema, Javed,2017). Human resources and their processes are the fundamental building blocks of every business, whether it be a profitable or sustainable one, within an organization. They are in charge of organizing and carrying out those environmentally friendly measures to foster a green environment. Going green, we contend, would be challenging to achieve without facilitating the human resource and putting sustainable policies in place.

Human resources are therefore one of the most crucial assets in organizations because they are crucial to people management, and organizations now place more emphasis on them due to a recent global trend. Business has had it and its modern HR managers integrate the philosophy of resources Green Humanity in its mission along with various HR policies and practices. These practices improve workers' activity and health, leading to an increase in production and productivity Employees has, that is, it increases efficiency, reduces costs, and thus increases competition and encourages creativity in human resource management (Renwick, Redman & Maguire, 2013)

The employment of directly responsible policies to produce labor is known as "green human resources management". Green who understands the value of green goals and actions in the process of managing human resources (hiring, employment, training, and development), which aids in the development of human capital. This is done to support and encourage the efficient use of resources inside businesses, as well as to raise awareness of environmental concerns that improve employee happiness and morale (A. Rawashdeh,2018)

The most valuable resource in an organization is its people, and human resource management (HRM) is a crucial part of management. Sustainability is currently being considered across the board in the context of HRM.

Green HRM, which further raises employee morale and satisfaction, is defined as the implementation of HRM policies to encourage the sustainable use of resources inside corporate organizations and promote environmental causes. According to some, Green HRM entails using HRM policies, philosophies, and practices to encourage the efficient use of company resources and prevent any unintended consequences brought on by environmental concerns in organizations (O.Ercantan, S.Eyupoglu,2022). It is a set of responsible policies and actions that aim to turn employees in green organizations into green workers who rely on green activities to complete their tasks, achieve the environmental goals of the organization, and participate in the sustainable environment, which is advantageous to both the individual and society. The natural world and industry, using natural resources and avoiding harm brought on by environmental issues. (Arulrajah & Opatha ,2014; Mehta & Chugan, 2015).

Green human resource management refers to the use of human resource management policies in a way that promotes the sustainable use of resources in the organization, making it environmentally friendly. It plays a significant role in achieving sustainable development and preserving the environment. Additionally, it aims to improve employees' attitudes towards sustainability issues by raising awareness among them. In order to save costs, boost efficiency, and improve employee engagement and retention, green human resource management comprises of two key elements: intellectual capital preservation and environmentally friendly human resource practices Additionally, there is a need to develop human resource management procedures and integrate them with green management functions and procedures from recruiting, hiring, and promoting employees to training, developing, and rewarding top performers. These procedures can be crucial in addressing environmental issues. (Rani & Mishra, 2014).

Therefore, "Green Management of Human Resources (GMHR)" is an area that helps to integrate objectives and environmental strategies in the organization's overall strategic development goals to reach an effective environmental management system to achieve various benefits that benefit all parties involved. This is done while ensuring that the environment in which you live is well preserved and enhanced, moving towards sustainable operations, and creating green policies that are environmentally friendly. (E.Kilase, A.Ibrahim, 2023).

Egypt has started to pay attention to this type as one of the significant and main avenues in comprehensive development plans that it takes place on the homeland, through the implementation of projects commensurate with the priorities of the country's economic and environmental goals, targeting the strategic vision of Egypt and hosting of COP27 in Egypt, in the green city of Sharm El-Sheikh. Additionally, nations all over the world have begun to adopt a "green" strategy in an effort to lower the environmental risks that come with economic growth. The aforementioned states that the goal of the study is to find out how green HRM practices and organizational sustainability are related.

The researcher discovered that the universal health insurance system in Egypt is the best field for applying the research.

## 8. Research Methodology

## 8.1 Research Method

In this research, the researcher used the descriptive analytical method, and the questionnaire was the tool that was applied to the study population depend on the 5-point Like scale consists of the below points – (5) Completely Agree; (4) Agree; (3) Neutral; (2) Disagree; (1) Definitely Disagree

## 8.2 Research Hypotheses

The HR function is well-positioned to help create and implement sustainability plans as organisations become more and more concerned with sustainability (Cohen, Taylor, & Muller-Carmen, 2010). A case study conducted by De Souza Freitas et al. (2012) in a renowned Brazilian corporation revealed that organisations aiming for sustainability require the help of HR in developing a communication system that spans the gap between current practises and sustainable principles. HRM, according to (Yong, Mohd et al.,2020), is the way to achieve environmental sustainability inside an organisation.

- Hypothesis 1: there is a significant difference between responses' answers and demographics factors.
- H1-1: there is insignificant difference between responses' answers according to gender.
- H1-2: there is a significant difference between responses' answers according to age.
- H1-3: there is a significant difference between responses' answers according to educational level.

- H1-4: there is a significant difference between responses' answers according to experience.
- H1-5: there is a significant difference between responses' answers according to job title.

To fulfill the main purpose of this research in universal health insurance, the following hypotheses are formulated:

Hypothesis 2: GHRM is positively associated with social sustainability

This hypothesis is divided into five sub-hypotheses based on of human resources management practices and as follow:

- H2-1: Green analysis and job description is one of the HR practices that have a positive impact on social sustainability.
- H2-2: Green recruitment is one of the HR practices that have a positive impact on social sustainability.
- H2-3: Green performance assessment is one of the HR practices that have a positive impact on social sustainability.
- H2-4: Green training and development is one of the HR practices that have a positive impact on social sustainability.
- H2-5: Green compensation is one of the HR practices that have a positive impact on social sustainability.

## 8.3 Research Population

Universal health insurance is a compulsory social solidarity health system in Egypt. It operates in accordance with Law No. 2 of 2018. Its umbrella covers all citizens participating in the system, and the state bears its burdens for those who are unable to do. According to a decision issued by the Prime Minister specifying the exemption controls, the family is the main insurance coverage unit within the system.

The new health system will be implemented in 6 stages, over a period of 15 years, starting from 2018 until 2032, and the first stage from 2018 until 2020 and Port Said was in the first stage.

According to the head of universal health insurance, human resources department and training department in Port Said that the total number of employees in Universal health insurance in Port Said is 1,723 employees involved.

- Table 1 - Research Population of Universal health insurance

Al-Hayat Hospital	165 employees
Al-Mabarrah Hospital	200 employees
Al Salam Hospital	160 employees
Obstetrics and Gynecology Hospital	281 employees
Al-Ramd Hospital	150 employees
The care center	45 employees
Al-Iman Center	51employees
Administrative building for Universal	300 employees
health insurance	
Al-Zohour Hospital	231 employees
June 30 Hospital	140 employees

And after excluded supporting agencies such as security and cleaning workers, the total research population became 1,500 employees.

## 8.4 Research sample

Universal Health Insurance Authority in Port Said is the research population that consists of 1,500 respondents from various departments, including doctors, pharmacists, employees, and support agencies.

The sample was determined as 306 according to the sample size table (Krejcie and Morgan Formula)

$$n = \frac{NP(1 - P)x^2}{(N - 1)d^2 + P(1 - P)x^2}$$

n: required sample size.

N: size of the research population.

P: the population proportion equal to 0.50.

D: The percentage of error that can be overlooked and its largest value is  $0.05\,$ 

## Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

The questionnaire was distributed via Google Form, 350 responses were received, and 21 responses were excluded. The sample became 318, representing 21.5% of the research population.

To scientifically analyze the data of this research, interpret its results, and benefit from them in achieving the objectives on which it was based and testing its hypotheses, the descriptive statistical method will be used several techniques.

## 8.5 Research techniques

- 1. cronbach's alpha
- 2. Descriptive statistics
- 3. correlation coefficient
- 4. hypotheses test by using:
  - T-test
  - Anova Test
- 5. Regression analysis

## 8.6 Sample distribution

Distribution of the research sample (employees) according to demographic factors. The charts of the demographic factors of the sample show that the research sample consists of 318 responses from employees and were divided as follows:

## Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

Table 2- Sample distribution for demographic factors

Gender	1	Tor demographic factors
P	F	
46.9%	150	Male
53.1%	168	Female
Age		
20.6%	65	Less than 30 years
20%	63	31: 35 years
19.4%	62	36: 40 years
23.8%	76	41:45 years
16.3%	52	More than 50 years
<b>Educational leve</b>	l	
36.3%	115	A bachelor's degree
63.7%	203	A degree higher than a
		bachelor's degree
		(diploma - master's -
		doctorate)
Years of 6	experience	
20%	63	less than 5 years
21.9%	70	6:10 years
30.6%	97	11:15 years
27.5%	88	More than 15 years
Job title		
28.8%	92	Doctor
25.6%	81	Employee
15.6%	50	Head of Department
6.9%	22	Managers
23.1%	73	Pharmacist

According to the gender factor, the sample was divided into 53.1% of females and 46.9% of males, which shows that the largest percentage of the sample is female.

According to age, the sample was divided into Less than 30 years by 20.6%, 31: 35 years by 20%, 36: 40 years by 19.4%, 41:45 years by 23.8%, and more than 50 years by 16.3%, which shows that the largest percentage of the sample is 41:45 years.

According to the Educational level, the research sample was divided into those holding a bachelor's degree at a rate of 36.3%, and those holding a degree higher than a bachelor's degree (diploma - master's - doctorate), a rate of about 63.7%. According to Years of experience, the research sample was divided into less than 5 years by 20%, 6:10 years by 21.9%, 11:15 years by 30.6%, and more than 15 years by 27.5%.

This shows that the largest percentage of employees has 11:15 years of experience.

According to Job title, the research sample was divided into Doctor by 28.8%, Employee by 25.6%, Head of Department by 15.6%, managers by 6.9%, and Pharmacist by 23.1%.

## 8.7 Data analysis

Starting with questioner reliability

## 8.7.1 Questioner Reliability

-Table 3-Questioner Reliability and validity

Reliability	Validity
0.970	0.98

The reliability coefficient of the research tool was extracted using the Cronbach's Alpha, and the overall reliability reached 0.970, which is a high reliability coefficient and suitable for the purposes of the research, as increasing the value of the coefficient means increasing the credibility of the data in reflecting the results of the sample on the research population. The Validity coefficient for the data was also calculated and came in at 0.98.

Table 4 - Questioner Reliability and validity

	Reliability	Validity
Green analysis and job	.863	0.928
description		
Green recruitment	.845	0.919
Green performance	.823	0.907
assessment		
Green training and	.886	0.941
development		
Green compensation	.870	0.932
Sustainability	.922	0.960

The previous table shows that each sub-axes (Green analysis and job description, green recruitment, green performance assessment, green training and development and green compensation) of the research's first dimension (GHRM) has high values for the reliability and validity coefficients and that the research's second dimension (sustainability) has high values for the reliability and validity coefficients.

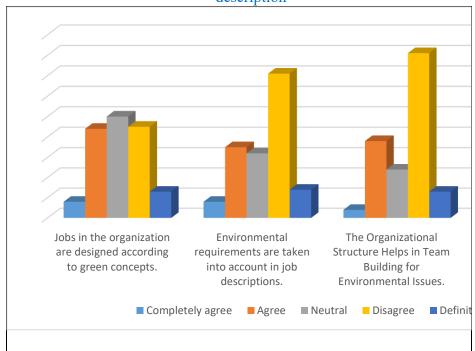
## 8.8 Descriptive statistics

The research axes and their importance were calculated and arranged by calculating the weighted average of the research axes, and the standard deviation and correlation coefficient for the two axes were also calculated as shown in the following tables:

First: Arranging the elements of the first axis:

8.8.1 Green analysis and job description:

-Table 5- Descriptive statistics for Green analysis and job description



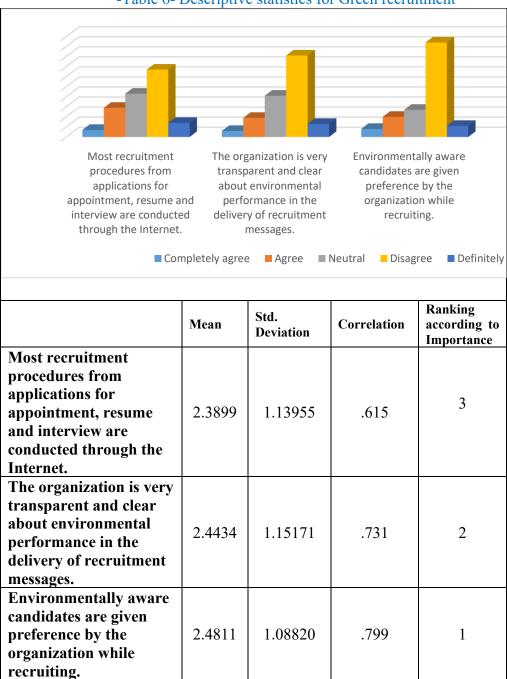
	Mean	Std. Deviation	Correlation	Ranking according to Importance
Jobs in the organization are designed according to green concepts.	2.7075	1.05944	.718	1
Environmental requirements are taken into account in job descriptions.	2.6478	1.06352	.756	2
The Organizational Structure Helps in Team Building for Environmental Issues.	2.5597	1.05431	.801	3
Jobs and positions are being created to help increase interest in environmental aspects.	2.4528	1.17384	.586	4

## Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

The previous table shows the relative importance and ranking of the elements of the first dimension: Green analysis and job description in the first axis of the research, which is: The ranking was done and the relative importance was determined by calculating the weighted mean. It was determined that the most important element in the sub-elements of this axis, according to the average opinions of the respondents, is the first element in the sequence, with an average power of 2.7075 and a standard deviation of power. 1.05944. The correlation coefficient also showed the existence of a moderate correlation, as the value of the correlation coefficient was .718. It was also reported that the least important element according to the average opinion of the respondents was the fourth element in the sequence, which was reported with an average power of 2.4528 and a standard deviation of 1.17384. And also, the correlation coefficient showed the presence of a Moderate correlation, where the value of the correlation coefficient is .586.

## 8.8.2 Green recruitment

-Table 6- Descriptive statistics for Green recruitment

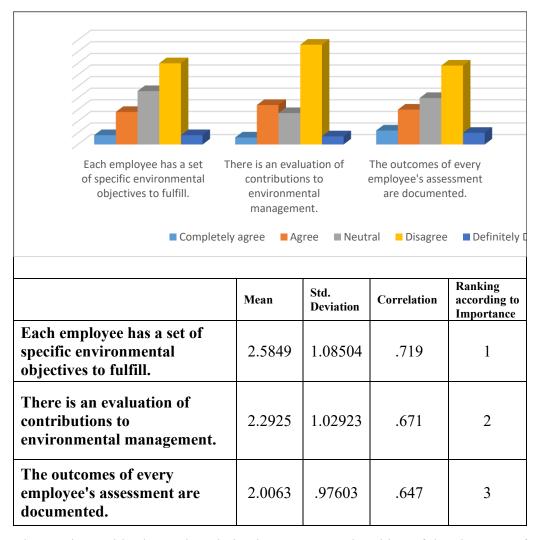


## Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

The previous table shows the relative importance and ranking of the elements of the first dimension: Green recruitment in the first axis of the research, which is: The ranking was done and the relative importance was determined by calculating the weighted mean. It was determined that the most important element in the sub-elements of this axis, according to the average opinions of the respondents, is the third element in the sequence, with an average power of 2.4811 and a standard deviation of power. 1.08820. The correlation coefficient also showed the existence of a moderate correlation, as the value of the correlation coefficient was .799. It was also reported that the least important element according to the average opinion of the respondents was the first element in the sequence, which was reported with an average power of 2.3899and a standard deviation of 1.13955. And also the correlation coefficient showed the presence of a moderate correlation, where the value of the correlation coefficient is .615

## 8.8.3 Green performance assessment

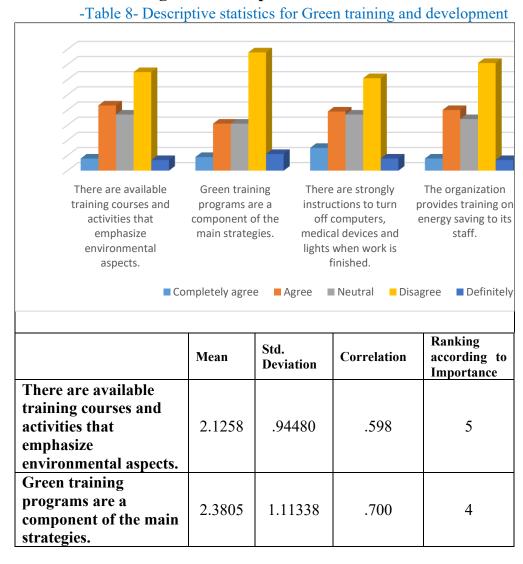
-Table 7- Descriptive statistics for Green performance assessment



The previous table shows the relative importance and ranking of the elements of the first dimension: Green performance assessment in the first axis of the research, which is: The ranking was done, and the relative importance was determined by calculating the weighted mean. It was determined that the most important element in the sub-elements of this axis, according to the average opinions of the respondents, is the first element in the sequence, with an average power of 2.5849 and a standard deviation of power1.08504. The correlation

coefficient also showed the existence of a moderate correlation, as the value of the correlation coefficient was 0.719. It was also reported that the least important element according to the average opinion of the respondents was the third element in the sequence, which was reported with an average power of 2.0063 and a standard deviation of 0.97603 And also the correlation coefficient showed the presence of a moderate correlation, where the value of the correlation coefficient is 0.647.

## 8.8.4 Green training and development



Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

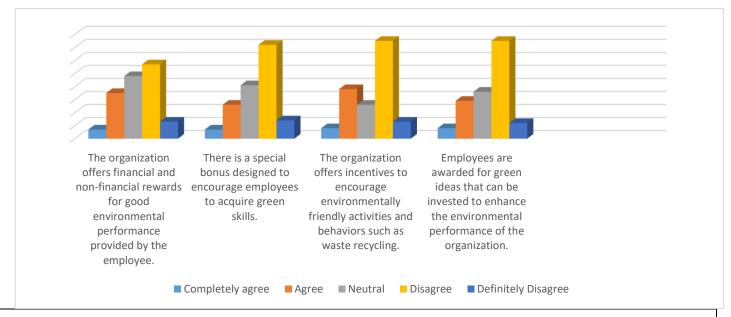
There are strongly instructions to turn off computers, medical devices and lights when work is finished.	2.4780	1.09104	.813	3
The organization provides training on energy saving to its staff.	2.7107	1.14195	.742	1
The organization provides bus or encourages the use of public vehicles for its staff.	2.5597	1.13221	.780	2

The previous table shows the relative importance and ranking of the elements of the first dimension: Green training and development in the first axis of the research, which is: The ranking was done and the relative importance was determined by calculating the weighted mean. It was determined that the most important element in the sub-elements of this axis, according to the average opinions of the respondents, is the fourth element in the sequence, with an average power of 2.7107 and a standard deviation of power 1.14195. The correlation coefficient also showed the existence of a moderate correlation, as the value of the correlation coefficient was .742. It was also reported that the least important element according to the average opinion of the respondents was the first element in the sequence, which was reported with an average power of 2.1258 and a standard deviation of .94480 And also the correlation coefficient showed the presence of a moderate correlation, where the value of the correlation coefficient is .598.

## Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

## 8.8.5 Green compensation

-Table 9- Descriptive statistics for Green compensation



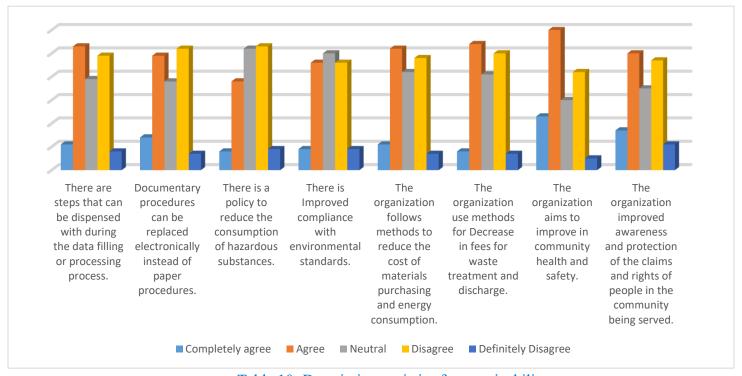
	Mean	Std. Deviation	Correlation	Ranking according to Importance
The organization offers financial and non-financial rewards for good environmental performance provided by the employee.	2.7075	1.05944	.467	1
There is a special bonus designed to encourage employees to acquire green skills.	2.3836	1.09371	.729	3
The organization offers incentives to encourage environmentally friendly activities and behaviors such as waste recycling.	2.3208	.95858	.745	4
Employees are awarded for green ideas that can be invested to enhance the environmental performance of the organization.	2.4340	1.06879	.770	2

## Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

The previous table shows the relative importance and ranking of the elements of the first dimension: Green compensation in the first axis of the research, which is: The ranking was done and the relative importance was determined by calculating the weighted mean. It was determined that the most important element in the sub-elements of this axis, according to the average opinions of the respondents, is the first element in the sequence, with an average power of 2.7075 and a standard deviation of power 1.05944. The correlation coefficient also showed the existence of a moderate correlation, as the value of the correlation coefficient was .467. It was also reported that the least important element according to the average opinion of the respondents was the third element in the sequence, which was reported with an average power of 2.3208 and a standard deviation of .95858 And also the correlation coefficient showed the presence of a strong correlation, where the value of the correlation coefficient is 0.745.

## Dr. Mohamed Refaat Elkeerany and Merna Mohamed Osman

## 6.2.6 Sustainability



-Table 10- Descriptive statistics for sustainability

	Mean	Std. Deviation	Correlation	Ranking according to Importance	
There are steps that can be dispensed with during the data filling or processing process.	2.3805	1.05519	.618	8	
Documentary procedures can be replaced electronically instead of paper procedures.	2.5314	1.13336	.756	2	
There is a policy to reduce the consumption of hazardous substances.	2.4528	1.05793	.827	5	
There is Improved compliance with environmental standards.	2.5157	1.09404	.776	3	
The organization follows methods to reduce the cost of materials purchasing and energy consumption.	2.4340	1.06583	.844	6	
The organization use methods for Decrease in fees for waste treatment and discharge.	2.4654	1.12488	.673	4	
The organization aims to improve in community health and safety.	2.3931	1.06842	.831	7	
The organization improved awareness and protection of the claims and rights of people in the community being served.	2.6541	1.19930	.607	1	

The previous table shows the relative importance and ranking of the second dimension: social sustainability in the second axis of the research, which is: The ranking was done and the relative importance was determined by calculating the weighted mean. It was determined that the most important element in the sub-elements of this axis, according to the average opinions of the respondents, is the eighth element in the sequence, with an average power of 2.6541 and a standard deviation of power 1.19930. The correlation coefficient also showed the existence of a moderate correlation, as the value of the correlation coefficient was .607. It was also reported that the least important element according to the average opinion of the respondents was the third element in the sequence, which was reported with an average power of 2.3805 and a standard deviation of 1.05519 And also the correlation coefficient showed the presence of a moderate correlation, where the value of the correlation coefficient is 0.618

## 9. Hypotheses test

Hypothesis 1: there is a significant difference between responses' answers and demographics factors.

## 9.1 Gender

Hypothesis 1-1 according to Gender

H0: there is insignificant difference between responses' answers according to gender

H1: there is a significant difference between responses' answers according to gender

P - value Dimensions Decision Green analysis and job 0.091 Reject description Green recruitment 0.101 Reject Green performance assessment 0.088 Reject Green training and development Reject 0.111 Green compensation 0.082 Reject Sustainability 0.072 Reject

Table 11- Hypothesis test according to Gender

The previous Hypothesis tested by t-test and from the previous table shown that there is insignificant difference between responses' answers according to gender so we will accept H0: there is insignificant difference between responses' answers according to gender.

## 9.2 Age

Hypothesis1-2: there is a significant difference between responses' answers and demographics factors.

The first hypothesis according to age

H0: there is insignificant difference between responses' answers according to age H1: there is a significant difference between responses' answers according to age

Table 12- Hypothesis test according to age

Dimensions	P – value	Decision
Green analysis and job	0.000	Accept
description		
Green recruitment	0.010	Accept
Green performance assessment	0.000	Accept
Green training and development	0.000	Accept
Green compensation	0.000	Accept
Sustainability	0.020	Accept

The previous Hypothesis tested by Anova test and from the previous table shown that there is insignificant difference between responses' answers according to age so we will reject H0: there is insignificant difference between responses' answers according to age.

## 9.3Educational level

-Table 13- Hypothesis test according to educational level

Dimensions	P – value	Decision
Green analysis and job	0.000	Accept
description		
Green recruitment	0.000	Accept
Green performance assessment	0.000	Accept
Green training and development	0.030	Accept
Green compensation	0.000	Accept
Sustainability	0.000	Accept

The previous Hypothesis tested by Anova test and from the previous table shown that there is insignificant difference between responses' answers according to educational level so we will reject H0: there is insignificant difference between responses' answers according to educational level.

# 9.4Experience

-Table 14- Hypothesis test according to experience

Dimensions	P – value	Decision
Green analysis and job	0.000	Accept
description		
Green recruitment	0.010	Accept
Green performance assessment	0.000	Accept
Green training and development	0.000	Accept
Green compensation	0.000	Accept
Sustainability	0.000	Accept

The previous Hypothesis tested by Anova test and from the previous table shown that there is insignificant difference between responses' answers according to experience so we will reject H0: there is insignificant difference between responses' answers according to experience.

# 9.5 Job title

-Table 15- Hypothesis test according to job title

Dimensions	P - value	Decision
Green analysis and job	0.000	Accept
description		
Green recruitment	0.000	Accept
Green performance assessment	0.000	Accept
Green training and development	0.000	Accept
Green compensation	0.000	Accept
Sustainability	0.000	Accept

The previous Hypothesis tested by Anova test and from the previous table shown that there is insignificant difference between responses' answers according to job title so we will reject H0: there is insignificant difference between responses' answers according to job title.

# 10. Regression model

# 10.1 Sample regression

-Table 16- Sample regression for Sustainability / Green analysis and job description

Sustainability / Green analysis and job description			
R R <sup>2</sup> Anova SIG			
0.871	0.758	0.000	0.000

The previous table shown:

R: from correlation value there is strong relationship between green analysis and job description and sustainability.

 $R^2$ : shown that the green analysis and job description (independent) can explain 75% of sustainability (dependent variable) variation.

Anova: Anova test shown that there is a significant impact of green analysis and job description and sustainability.

-Table 17- Sample regression for Sustainability / Green recruitment

Sustainability / Green recruitment			
R	$R^2$	anova	SIG
0.771	0.594	0.000	0.000

The previous table shown:

R: from correlation value there is direct strong relationship between green recruitment and sustainability.

 $R^2$ : shown that the green recruitment (independent) can explain

59% of sustainability (dependent variable) variation.

Anova: Anova test shown that there is a significant impact of green recruitment and sustainability.

-Table 18- Sample regression for Sustainability / Green performance assessment

Sustainability / Green performance assessment			
R $R^2$ anova SIG			
0.901	0.811	0.000	0.000

The previous table shown:

R: from correlation value there is direct strong relationship between green performance assessment and sustainability.

R^2: shown that the green performance assessment (independent) can explain 81% of sustainability (dependent variable) variation.

Anova: Anova test shown that there is a significant impact of green performance assessment and sustainability.

-Table 19- Sample regression for Sustainability / Green training and development

Sustainability / Green training and development				
R $R^2$ anova SIG				
0.830	0.688	0.000	0.000	

The previous table shown:

R: from correlation value there is direct strong relationship between green training and development and sustainability.

R^2: shown that the green training and development (independent) can explain 68% of sustainability (dependent variable) variation.

Anova: Anova test shown that there is a significant impact of green training and development and sustainability.

-Table 20- Sample regression for Sustainability / Green compensation

Sustainability / Green compensation			
R	$R^2$	anova	SIG
0.798	0.636	0.000	0.000

The previous table shown:

R: from correlation value there is direct strong relationship between green compensation and sustainability.

R^2: shown that the green compensation (independent) can explain 68% of sustainability (dependent variable) variation.

Anova: Anova test shown that there is a significant impact of green compensation and sustainability.

# **10.2 Multiple regressions**

-Table 21-2 multiple regression for Sustainability / Green human resource management

Sustainability / Green human resource management				
R $R^2$ anova SIG				
0.932 0.868 0.000 0.000				

The previous table shown:

R: from correlation value there is direct strong relationship between green human resource management and sustainability.

 $R^2$ : shown that the green human resource management (independent) can explain 86% of sustainability (dependent variable) variation.

Anova: Anova test shown that there is a significant impact of green human resource management and sustainability.

### 11. Discussion and conclusion

The purpose of this study was to investigate the impact of green human resources management practices on organizational sustainability in Egyptian Universal Health Insurance. Using intensive literature reviews and field data from the head managers of universal health insurance, human resources department and training department in Port Said, it was possible to extract that the weak application of green human resources management practice in universal health insurance resulting from lack of knowledge of the importance of these green practices, methods of applying them, and their role in improving the organization's

performance. And there will be a significant effect of green human resources management practices on the performance.

The findings revealed that the implementation of GHRM practices was at a moderate level, also there was a statistical positive association between GHRM practices individually and environmental performance.

This means that the Universal Health Insurance management did not invest enough money in human resources management practices, as most of Egyptian organizations adopted cost reduction strategies due to economic situation affecting the country. Therefore, the institution management is invited to invest more money in their green training and development programs in order to improve their implementation level of GHRM that may produce high level of environmental performance in the medium and long run. Teixeria et al. (2012) confirmed that green training and development is considered as one of the key significant functions that can develop human resources to standard level and achieving better performance. Green recruitment and selection have recorded as the top most used practice at health service organizations. This means that management regarded environmental performance as a priority in their organizations, and they have applied effective green recruitment and selection process and the best prepared applicant at protecting environment was selected. Jabbour (2011) stressed that effective green recruitment and selection criteria is a useful tool for attracting well trained, educated, skilled, and talented Ecofriendly people who prefer to work for environmental organizations. The results also showed that green reward system was not extensively applied to motivate employee's green behavior. Previous studies such as Jakson et al. (2011) pressed that green reward system is a productive tool for practicing GHRM. Based on this institution management should design an effective reward criterion that may fit all people in order to attract and retain green talented employees, as most of them perceived reward system as a priority to work for organizations. In general, top management has the power and visibility needed to motivate people to engage in eco-friendly activities that may increase their awareness and commitment to their green job.

In the context of Egypt's universal health insurance system, the adoption of GHRM practices could potentially alleviate the burden on healthcare services by promoting preventive health measures among employees. As a result, this could lead to reduced absenteeism, increased productivity, and a healthier workforce, indirectly contributing to the effectiveness of the universal health insurance system.

# **References:**

- 1. Murtha, V.N., & Geetha, S.N. (2020). A systematic review on green human resource management: Implications for social sustainability. Journal of Cleaner Production, 47(7), 1101-1121.
- 2. Labella-Fernández, F., & Martínez-del-Río, A. (2019). Green Human Resource Management: Policies and practices. Ahmad, Shoeb. (2015). Green Human Resource Management: Policies and practices. Journal of Environmental Management, 21(12), 1539-1552.
- 3. de Sousa Jabbour, A.B.L., Bhatia, M.S., & Kumar, S. (2020). Managing supply chains for sustainable operations in the era of Industry 4.0 and circular economy: Analysis of barriers. Production Planning & Control, 38(4), 489-513.
- 4. Weng, H., Chen, J., & Chen, P. (2015). Effects of green innovation on environmental and corporate performance: A stakeholder perspective. Journal of Business Ethics, 44, 89-104.
- 5. Victor, D.G. (2014). Climate change 2014: Mitigation of climate change: Working group III contribution to the fifth assessment report of the intergovernmental panel on climate change. Cambridge University Press, 43(4), 681-697.
- 6. Cheema, S., & Javed, F. (2017). Green Human Resource Management: An Empirical Study. Cogent Business & Management, 18(5-8), 433-462.
- 7. Kilase, M.E., Ibrahim, A., & Ibrahim, H. (2023). Impact of Green Human Resources Management Practices on Sustainable Development: Evidence from Ma'aden Company (Waadalshamal). Sustainability, 43(3), 357-368.
- 8. 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.
- 9. Ahmad, S. (2015). Green human resource management: Policies and practices. Cogent Business & Management, 2(1).

- 10. Renwick, W.S., Redman, T., & Maguire, S. (2013). Green Human Resource Management: A Review and Research Agenda. International Journal of Management Reviews, 15, 1-14.
- 11. Rawashdeh, A. (2018). The impact of green human resource management on organizational environmental performance in Jordanian health service organizations. Journal of Environmental Management, 89(2), 297-313.
- 12. Ercantan, O., & Eyupoglu, S. (2022). How Do Green Human Resource Management Practices Encourage Employees to Engage in Green Behavior? Perceptions of University Students as Prospective Employees. Sustainability, 13(3), 56-70.
- 13. Arulrajah, A.A., & Opatha, H.H.D.N.P. (2014). Green Human Resource Management Practices: A Review. Journal of Human Resource Management, 5(1), 1-16.
- 14. Mehta, K., & Chugan, P.K. (2015). Green HRM: Practices and Strategic Implementation in the Organizations. Journal of Environmental Management, 17(12), 78-92.
- 15. Khan, N.U., Rasli, A.M., & Qureshi, M.I. (2017). Greening human resource management: A review of policies and practices. Advanced Science Letters, 23, 8934-8938.
- 16. Mampra, M. (2013). Green HRM: Does it help to build a competitive service sector? A study. In Proceedings of the Tenth AIMS International Conference on Management (pp. 1273-1281).
- 17. Arzbhutto, S., & Auranzeb. (2016). Effects of Green Human Resources Management on Firm Performance: An Empirical Study On Pakistani Firms. Journal of Business and Management, 123, 45-67.
- 18. AL-Romeedy, B. (2019). Green Human Resource Management in the Egyptian Travel Agencies: Constraints of Implementation and Requirements for Success. Journal of Human Resources in Hospitality and Tourism, 18(4), 529-548.
- 19. Bangwal, D., & Tiwari, P. (2015). Green HRM A way to greening the environment. Journal of Business and Management, 17(12), 45-52.
- 20. de Souza Moraes, S., Jabbour, C.J.C., Battistelle, R.A.G., Rodrigues, J.M., Renwick, D.S.W., Foropon, C., & Roubaud, D. (2019). When

- knowledge management matters: Interplay between green human resources and eco-efficiency in the financial service industry. Journal of Knowledge Management, 23(9), 1691-1707.
- 21. Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2018). Green human resource management practices: Scale development and validity. Asia Pacific Journal of Human Resources, 56(1), 31-55.
- 22. Saeed, B.B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M.A. (2019). Promoting employee's pro-environmental behavior through green human resource management. Journal of Environmental Management, 23(4), 1234-1245.
- 23. Roscoe, S., Subramanian, N., Jabbour, C. J. C., & Chong, T. (2019). Green human resource management and the enablers of green organizational culture: Enhancing a firm's environmental performance for sustainable development. Business Strategy and the Environment, 28(5), 737-749.
- 24. Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. Journal of Organizational Behavior, 34(2), 176-194.
- 25. Ren, S., Tang, G., & Jackson, S. E. (2018). Green human resource management research in emergence: A review and future directions. Asia Pacific Journal of Management, 35(3), 769-803.
- 26. Afsar, B., Umrani, W. A., Dahiya, R., & Kautish, P., & Sharma, P. (2020). Green human resource management and employees' proenvironmental behaviors: Examining the underlying mechanism. Business Strategy and the Environment,
- 27. Al-Ghazali, B. M., & Afsar, B. (2020). Green human resource management and employees' green creativity: The roles of green behavioral intention and individual green values. Corporate Social Responsibility and Environmental Management, 27(1), 1-18.
- 28. Andersson, L., Jackson, S. E., & Russell, S. V. (2013). Greening organizational behavior: An introduction to the special issue. Journal of Organizational Behavior, 34(2), 151-155.

- 29. Kilase, E., & Ibrahim, A. (2023). Impact of Green Human Resources Management Practices on Sustainable Development: Evidence from Ma'aden Company (Waadalshamal). Sustainability, 15(3), 357-368.
- 30. Amrutha, V. N., & Geetha, S. N. (2021). Linking organizational green training and voluntary workplace green behavior: Mediating role of green supporting climate and employees' green satisfaction. Journal of Cleaner Production, 290, 125876.
- 31. Dubey, S., & Gupta, B. (2018). Linking green HRM practices with organizational practices for organizational and environmental sustainability. International Journal of Engineering and Management Research (IJEMR), 8(2).
- 32. Paulet, R., Holland, P., & Morgan, D. (2021). A meta-review of 10 years of green human resource management: Is Green HRM headed towards a roadblock or a revitalization? Business Strategy and the Environment, 30(2), 159-183.
- 33. Pham, H., Ren, S., & Tang, G. (2020). The role of green human resource management in driving hotel's environmental performance: Interaction and mediation analysis. Journal of Environmental Management, 256, 109942.
- 34. Cherian, P., & 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.
- 35. Haldorai, K., Kim, W., & Garcia, R. L. (2021). Top management green commitment and green intellectual capital as enablers of hotel environmental performance: The mediating role of green human resource management. Journal of Hospitality and Tourism Management, 46, 28-37.
- 36. Kuo, T., et al. (2019). Assessing the factors influencing proenvironmental behavior of college students in Taiwan. Sustainability, 11(12), 3376.
- 37. Hawkes, S., et al. (2020). Gender influences on health-seeking for universal healthcare services: A scoping review. Global Public Health, 15(8), 1204-1217.
- 38. Chakraborty, S., &

- 39. Chakraborty, S., & Misra, S. (2021). Education for sustainable development: A study on the role of education in creating environmental consciousness. Journal of Education and Learning, 10(1), 47-58.
- 40. Huang, K.-F., Jiang, Y., & Xu, H. (2020). The impact of environmental performance assessment on corporate environmental performance: Empirical evidence from China. Business Strategy and the Environment, 29(2), 738-750.
- 41. Kumar, P., & Rani, P. (2019). Corporate sustainability assessment models: A review and research agenda. Journal of Cleaner Production, 218, 256-271.
- 42. Jabbour, C. J. C., et al. (2020). Greening through cooperation in supply chains: A systematic literature review and bibliometric analysis. Resources, Conservation and Recycling, 154, 104578.
- 43. Lopes de Sousa Jabbour, A. B., et al. (2019). Green supply chain management as an enabler of sustainability: A qualitative review and future prospects. International Journal of Production Economics, 114(1), 5-22.
- 44. Sarkis, J. (2019). Managing sustainable operations across the supply chain: An interdisciplinary perspective. Resources, Conservation and Recycling, 151, 104451.
- 45. Reed, K., Blunt, P., & Sigley, A. (2020). Leading for sustainability: The role of green HRD. European Journal of Training and Development, 44(5/6), 436-451.
- 46. Jabbour, C. J. C., et al. (2018). Green training and green supply chain management: Evidence from Brazilian firms. Journal of Cleaner Production, 202, 927-936.
- 47. Alfieri, A., et al. (2019). Do green human resource management practices lead to corporate sustainability? A systematic review. Italian Journal of Management, 24(1), 15-33.
- 48. Luo, Y., et al. (2020). The effects of green training on employee green performance: A perspective of social learning theory. Journal of Cleaner Production, 253, 119918.

- 49. Jabbour, A. B. L. de S., et al. (2019). Green training practices in the context of green supply chains: Direct and mediated effects on proactivity and operational performance. International Journal of Operations & Production Management, 39(2), 261-285.
- 50. Rasdi, R. M., et al. (2020). The influence of green human resource management on sustainability among manufacturing firms in Malaysia. Journal of Cleaner Production, 268, 121885.
- 51. Kianto, A., et al. (2019). Green human resource management, process innovation, and sustainable performance. Journal of Knowledge Management, 23(8), 1526-1549.
- 52. Kramar, R., et al. (2020). The future of HRM: Decentralization, individualization, and digitization. Employee Relations, 42(2), 285-298.
- 53. Alas, R., et al. (2018). Green human resource management and employee eco-initiatives. Personnel Review, 47(4), 828-845.
- 54. Savitz, A. W., & Weber, K. (2018). Talent, transformation, and the triple bottom line: How companies can leverage human resources to achieve sustainable growth. Columbia University Press.
- 55. Ren, S., Tang, G., Jackson, S. E., & Zhang, L. (2019). Green human resource management practices: Scale development and validity. Frontiers in Psychology, 10, 1493.
- 56. Namasivayam, K., & Denizci Guillet, B. (2017). Going green: The impact of green practices on hotel guest's behavioral intentions in Egypt. Journal of Cleaner Production, 166, 1293-1302.
- 57. Oswal, N., & Narayanappa, G. L. (2015). Evolution of HRM to E-HRM to Achieve Organizational Effectiveness and Sustainability. International Journal of Business Administration and Management Research, 1(2), 22.
- 58. Arulrajah, A. A., Opatha, H. H. D. N. P., & Nawaratne, N. N. J. (2015). Green Human Resource Management Practices. Journal of Cleaner Production, 5(1), 4-28.
- 59. Sharma, K. (2016). Conceptualization of Green HRM & Green HRM practices: Commitment to Environmental Sustainability. Journal of Environmental Management, 18(2), 8-9.

- 60. Dessler, G. (2013). Human Resource Management. 13th Edition. Pearson, 91.
- 61. Russo, G. (2016). Job Design & Skill Development in the Workplace. Journal of Organizational Behavior, 18.
- 62. Mandip, G. (2012). Green HRM: People management commitment to environmental sustainability. Journal of Cleaner Production, 245.
- 63. AlBattat, A. R., Zaidan, B. B., Zaidan, A. A., Albahri, O. S., Salah, K., & Lakulu, M. M. (2020). Influence of green human resource management practices on employee job performance in Iraqi public universities: The mediating role of corporate social responsibility. Journal of Cleaner Production, 245, 118906.
- 64. Green human resource management: A comparative qualitative case study of a United States multinational corporation. The International Journal of Human Resource Management, 27(2), 192-211.
- 65. Linking Green Human Resource Management Practices to Environmental Performance in Hotel Industry. Global Business Review, 2018.
- 66. Green human resource management research in emergence: A review and future directions. Asia Pacific Journal of Management, 2017.
- 67. Reviewing the concept of Green HRM (GHRM) and Its Practices Application (Green Staffing) with Suggested Research Agenda: A Review from Literature Background and Testing Construction Perspective. Canadian Center of Science and Education, 2019.
- 68. Green Human Resource Management and Employee Green Behavior: An Empirical Analysis. John Wiley & Sons, Ltd and ERP Environment, Wiley Journals, 2019.
- 69. Green Organizational Culture: A Review of Literature and Future Research Agenda. Pir Mehar Ali Shah University of Arid Agriculture, Rawalpindi, Pakistan, 2019.

# دراسة العلاقة بين ممارسات إدارة الموارد البشرية الخضراء والاستدامة التنظيمية تطبيقاً على منظمة التأمين الصحى الشامل

#### ملخص

تساعد إدارة الموارد البشرية الخضراء على دمج الاستراتيجيات البيئية في أهداف التنمية الإستراتيجية الشاملة للمنظمة للوصول إلى نظام إدارة بيئية فعال. سعت الدراسة إلى معرفة دور ادارة الموارد البشرية الخضراء في تحقيق الاستراتيجيات الأساسية لتعزيز "الاستدامة التنظيمية" في التأمين الصحي الشامل المعنى بتحقيق التنمية المستدامة في مصر.

في الأونة الأخيرة، لوحظ تزايد الوعي داخل مجتمعات الأعمال حول أهمية التحول إلى البيئة واعتماد تقنيات مختلفة لإدارة البيئة. مع تحول عالم الشركات إلى العالمية، تشهد الأعمال تحولًا من الهيكل المالي التقليدي إلى الاقتصاد الحديث القائم على القدرات والذي يكون جاهزًا لاستكشاف الجوانب الاقتصادية الخضراء للأعمال. اليوم، أصبحت إدارة الموارد البشرية الخضراء استراتيجية عمل رئيسية للمؤسسات الهامة حيث تلعب إدارات الموارد البشرية دورًا نشطًا في التحول إلى البيئة الخضراء، مستهدفة الرؤية الإستراتيجية لمصر بحلول عام ٢٠٣٠.

يتناول هذا البحث آثار ممارسات إدارة الموارد البشرية الخضراء على الاستدامة التنظيمية، مع التركيز على التأمين الصحي الشامل في مصر. واستخدمت الدراسة عينة عشوائية طبقية من موظفي التأمين الصحي الشامل، بلغ عددهم ١٧٢٣ فرداً، وتم اختيار ٣١٨ مشاركاً للعينة النهائية. تم إجراء جمع البيانات من خلال دراسة استقصائية منظمة لتقييم تنفيذ ممارسات إدارة الموارد البشرية المختلفة، مثل التوظيف الأخضر والتدريب الأخضر، كمتغيرات مستقلة، وتأثيرها على الاستدامة التنظيمية، باعتبارها المتغير التابع. تكشف النتائج الرئيسية عن وجود علاقة إيجابية كبيرة بين تطبيق ممارسات ادارة الموارد البشرية الخضراء وتعزيز الاستدامة التنظيمية. تم التحقق من ثبات وموثوقية المسح باستخدام معامل ألفا كرونباخ، وشمل تحليل البيانات معامل ارتباط بيرسون وتحليل الانحدار للتحقق من صحة العلاقات بين المتغيرات.

**الكلمات المفتاحية**: إدارة الموارد البشرية الخضراء، الاستدامة التنظيمية، التأمين الصحي الشامل، مصر، الإدارة البيئية