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Assessing the impact of green human resource management practices on sustainable performance in Palestinian healthcare organizations: An empirical study

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الإهداء

بسم الله الرحمن الرحيم

(وَقُلِ اعْمَلُوا فَسَيَرَى الله عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ)

الحمد لله الذي وفقنا لتقديم هذا البحث ويسر لنا امرنا ووهب لنا العلم النافع ويسر طريق العلم لنا.

اللهم لك الحمد ولك الشكر كما اعنتني ووفقتني

في ظل الصعاب التي واجهتني من عناء الدراسة، والعمل، والجد، إني لأجد اليوم وأنا وقلمي

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ألى زملاء الدراسة والعمل الذين تحملوا عبء مساندتي، الذين كانوا قد قدموا راحتهم في سبيل

محاضرة أو اختبار.

إلى رسل العلم أساتذتي في الدراسة، الذين اشعلوا دربي نوراً وضياء.

إلى من دعمني وشجعني على مواصلة طرق العلم والعمل بجد مهما كانت الظروف

إلى الذين تمنيت لو كانوا بجانبي، ولكن منعتهم الظروف عن هذا التواجد....

إلى أسرتي، إخوتي، أصدقائي.

كما واتوجه بخالص شكري لأستاذي العزيز المقتدر الدكتور محمد عثمان.... لكل ما فعله من اجل

ولمساعدته لي

الى جميع من سبق أهديكم ثمرة جهدي...

شريفة موسى

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الاقرار

أنا الموقع أدناه، مقدّم الرسالة التي تحمل العنوان:

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Assessing the impact of green human resource management practices on sustainable performance in Palestinian healthcare organizations: An empirical study

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أقر بأن ما اشتملت عليه هذه الأطروحة إنما هو نتاج جهدي الخاص، باستثناء ما تمت الاشارة إليه حيثما ورد. وأن هذه الرسالة كاملة، أو اي جزء منها لم يقدم من قبل لنيل اي درجة او لقب علمي او بحثي لدى أي مؤسسة تعليمية أو بحثية أخرى.

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Declaration

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's name: اسم الطالب:

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List of Abbreviations

GHRM: Green Human Resources Management.

HR: Human Resources.

GRS: Green Recruitment and Selection.

GPM: Green Performance Management.

GT: Green Training.

GPR: Green Pay and Reward.

GI: Green Involvement.

GH: Green Hiring.

GTI: Green Training and Involvement.

GPC: Green Performance management and Compensation.

EP: Environmental Performance.

Ec.P: Economic Performance.

SP: Social Performance.

MOH: Ministry of Health.

MMS: Military Medical Services.

WHO: World Health Organization.

EQA: Environmental Quality Authority.

PCBS: Palestinian Central Bureau of Statistics.

WB: West Bank.

EMS: Environmental Management System.

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Abstract

Over the past few years, organisations have faced pressure from stakeholders to adopt environmentally friendly business practices, where it is becoming critical to identify green practices that boost sustainability. This study aims to investigate the level of GHRM implementation in Palestinian healthcare organizations. The relationship between GHRM bundle practices and sustainable performance is studied. A mixed research approach is conducted using both qualitative and quantitative methods through conducting 14 semi-structured interviews with HR managers from various classifications of healthcare organizations in the West Bank. However, a survey used as an instrument for qualitative methods for data collection from 68 healthcare organizations that have using GHRM practices at different managerial levels. The collected data are analyzed using the partial least squares structural equation modeling (PLS-3). The findings revealed that green human resource management practices are implemented at moderate level in healthcare organizations. Identification and prioritization of the green practices were applied, where the most influence practices were "green hiring", and "green training and involvement" whereas the least influential green practice was "Green performance and rewards". In addition, the findings revealed that green

human resource management practices have a positive effect on the sustainable performance. A model was developed to provide a policy maker with basic guidelines on how to influence green human resource management practices to boost employees' commitment in healthcare organizations for maximized sustainable performance. As revealed from the literature of GHRM practices, there is no similar work which exploring the impact of green human resource management on the dimensions of sustainable performance in Palestinian healthcare organizations based on evidence from an emerging economy. Moreover, the role of HR practices as a unique business partner to enhance green behaviors and the sustainable performance is clarified.

Chapter One
Introduction

1.1 Chapter overview

This chapter provides an introduction of the study background by considering West Bank(Palestine) as the research context. In addition, it displays the problem statement, research objectives and questions, significance of the study, and finally organization of thesis.

1.2 Background of the study

Recently, the need for "sustainable environmental performance "has grown quickly, and "green management" t arises as a significant instrument for the same purpose. The role of Green Human Resource Management (GHRM) practices in green management and sustainable performance is broadly known, but at the same time it is lesser debated in academic literature (Gupta, 2018), where it defined as "a process of ensuring that the management system practicing in an organization is ecologically balanced and environmentally affable" (Kapil, 2015, p1) . Environmental protection has raised as the most pressing societal priorities. Protecting the natural eco-system and preserving the resources for future generations have become main priorities on the agenda of decision makers and top managers in organizations (Howard-Grenville et al., 2014).

In today's world, organizations are in increasing competition, which requires managers to keep finding out for ways to maximize their organizational essential resources which is the Human Resources (HR) of

organization, where the HR is considered as a key success for implementation polices, practices, and boost sustainable performance (Harel & Tzafrir, 1999; Sheehan, 2014). Human Resource Management (HRM) is defined as "a strategic and coherent approach to the management of an organization's most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives" (Armstrong, 2006, p 3). This area of research contains various practices that aim to efficiently manage employees such as: selection, training, appraisal, compensation and reward (Wright & Mcmahan, 1992).

Recently, new alternatives of the traditional HRM have been reproduced, and linked these practices with innovation and environmental issues for presenting new ideas in HR, and phrasing new viewpoint in this area called. Consequently, researchers concerned in HRM have devoted more interest to the role that staff can play in greening the organizations, as shown by the important number of special issues of major journals (e.g. Renwick et al., 2013; Jabbour & Santos, 2008; Jackson & Seo 2010; 2017; Tang et al., 2018; Jackson et al., 2011; Jabbour & Jabbour, 2016). Where there is a little argument about the level of impact of these issues with among environmental specialists (IPCC, 2018; EPA, 2018).

In addition, previous researchers have recommended that future work should focus on developing countries and focus more on service sector such healthcare sector (Jabbour & Santos, 2013; Renwick et al., 2013; Haddock-Millar et al., 2016; Siyambalapitiya et al., 2018; Yusliza et al.,

2017; Yusoff et al., 2015; Rehman et al., 2016; Mishra et al., 2014; Pinzone et al., 2016).

Despite of the important role of GHRM practices in improving environmental performance and sustainability, these practices are still emerging and unresolved in developing countries, and require more attention and highlight from the scholars. This study endeavor to assess the implementation of GHRM as a bundle in Palestinian healthcare organizations, which is a bundle of coherent GHRM practices which is considered to have main effects on environmental performance. Where the GHRM bundle contains of i) Green Hiring (GH). ii) Green Training and Involvement (GTI). iii) Green Performance management and Compensation (GPC) (Renwick et al., 2013; Nejati et al., 2017). In addition, the impact of GHRM practices on sustainable performance of healthcare organizations, from the perspective of HR managers working at this sector is studied. Finally a conceptual model that guides the managers to implement green culture in healthcare organizations is developed.

1.3 Problem Statement

In general getting medical service is an essential need for all individuals in any country (Ganapathy & Ashokkumar, 2018). Healthcare organizations have become continuously responsible for the environmental effect from the healthcare operation due to the increasing societal and stakeholder pressure (Pinzone & Lettieri ,2016). Their responsibility is not only constrained by providing a high quality service, low cost and safe

medical service, but also it should be extended to contain the environmental safeguard (Pinzone & Lettieri, 2016). The healthcare sector is considered as a source of different types of environmental pollution from both hazardous and non-hazardous wastes (WHO, 2018). According to the World Health Organization (WHO) in 2008, climate change is a standout amongst the most vital issues in these days. Healthcare sector is not taking into account when the policies that led to these crises formulated, with regard to climate change. All experts' reports indicate that the developing countries will be the first to be affected by the adverse effects of the climate change, the warming of the planet will take place in a gradual manner, but the effects will be extreme, more climatic events will suddenly and sharply occur to all people (Chan, 2008). The (WHO) report in Feb 2018 about the key facts for medical waste in the world, mentioned that the healthcare sector is one of the most important sectors that producing waste in the world. In terms of Palestine context, the solid waste generated from healthcare organizations estimated about 472 tons in the West Bank (WB), distributed as 120 tons per month in the northern WB, and 178 tons per month in the central WB and 174 tons per month in the southern WB (PCBS, 2009), where these wastes need critical managerial activities to be assessed, corrected and monitored. Existing research showed that the healthcare sector on average accounts for 5% of the national CO_2 footprint in Member countries of the Organization of Economic Co-operation and Development (OECD), china and India, rendering this sector similar in significance to the food sector (Pichler et al., 2019).

In general, the medical waste in developed countries is managed through legislation from government for sure of management and sustainability of it. Green practices have been identified, with guidelines for methods of environmental assessment, sustainability and proactive environmental strategies, to eliminate the negative effects from healthcare sector on environment and human to the lowest level of risk (Pinzone & Lettieri, 2016; Pinzone et al., 2016; Romero & Carnero, 2017). On the other side, developing countries such as Palestine, the environmental practices are not receiving enough attention from government and decision makers. Although the hazardous wastes produced from this sector exposing the public and the environment to great risks, the environmental issues are still not taken into consideration (Mishra et al., 2014; Malik et al., 2017; Rawashdeh, 2018). Besides, the vital part of healthcare sector effected in the economic development of nations, and waste generated from it effects negatively of environmental issues and resource usage (Nollet & Beaulieu, 2003; WHO, 2018; PCBS, 2009). So rising needs for adopting effective and efficient environmentally friendly practices that can minimize environmental impacts of this vital sector (Rehman et al., 2016).

1.4 Research questions

In accordance with the background of the research and the problem statement debated in the previous section, the following three questions set as the questions of this study:

1. What is the implementation level of GHRM practices in the Palestinian healthcare organizations?

2. How do GHRM practices effect on organizations' sustainability in the Palestinian healthcare organizations?

3. What is GHRM framework that can be adopted to boost environmental culture in the Palestinian healthcare organizations?

Based on the research questions the following hypotheses have formulated to use:

HP1. The GHRM bundle has a positive impact on Environmental Performance (EP) in Palestinian healthcare organizations.

HP2. The GHRM bundle has a positive impact on Economic Performance (Ec.P) in Palestinian healthcare organizations.

HP3. The GHRM bundle has a positive impact on Social Performance (SP) in Palestinian healthcare organizations.

1.5 Research objectives

In order to answer the three-research questions, the study dedicated to meeting the following three research objectives:

1. To assess the level of implementing the GHRM practices in Palestinian healthcare organizations.

2. To investigate the relationships between GHRM and sustainable performance in Palestinian healthcare organizations.

3. To develop a framework that helps to implementing GHRM in the Palestinian healthcare organizations.

1.6 Significance of the study

This research clarifies an exploration of GHRM practices in the context of Palestinian healthcare sector through literatures of GHRM practices and sustainability. In the context of the developing country, a significant empirical contribution, through a research design which included mixed approach in collecting data from managers working in healthcare sector, the authors reveal the role of HR in facilitating green initiatives, and enhance employees' involvement in such initiatives, beyond formal HR practices in creating sustainable performance. This research also reveals the level to which GHRM practices increase our understanding of the role of HR in facilitating sustainable performance in developing country.

1.7 Organization of the thesis

The current thesis is structured as follows:

The first chapter includes the background and introduction of the study, research problem, research questions and objectives, significance of the study. The second chapter reveals review literature about GHRM. Specifically, literatures on GHRM practices and their relationship with sustainable performance, also the current literatures of GHRM in

healthcare sector. Subsequently, based on the literature review, this chapter debates the hypotheses formulated and the theoretical framework adopted for this research. The third chapter clarifies the study methodology used to obtain the research objectives and questions. It includes research design, population and sampling design of the study, pilot study, survey method, and, finally, techniques of data analysis. The fourth chapter presents the data analyses and the research results, and discusses the findings in detail by linking them to past works. Moreover, develop a framework. Finally, the fifth chapter highlights implications and conclusions of the results. Recommendations and future studies are presented, as well as the limitations of the research.

1.8 Chapter summary

This chapter presents the background of the study by showing the important of green issues and sustainable performance in this century. Then the problem statement have been revealed by focusing on the impact of waste from health care sector on environmental. The research questions and objectives adopted that the study will answer. Additionally, significance of the study highlight the relationship between GHRM and sustainable performance focused on developing countries (Palestine) in important service sector(healthcare sector),   . Finally, this chapter displays the organization of the thesis that followed in this study..

Chapter Two
Literature Review

2.1 Chapter overview

This chapter aims to present an overview about the GHRM practices, specifically the current situation of these practices in the healthcare sector. Moreover, it provides a brief description of GHRM and their impact on sustainable performance in healthcare organizations.

2.2 Green Human Resource Management

2.2.1 Overview in GHRM

Since the beginning of the industrial revolution, the organizational goals of firms are to establish economic growth. Notwithstanding, the environmental practices have often been at odds, and do not take the serious attention (Florida & Davison, 2001). Among the most challenges facing any organizations today are the urgent need to reform ongoing environmental degradation and stop future degradation as a result of the negative effects from their business activities (Andersson et al., 2013). The researchers around the world have been demonstrating increased attention in environmental issues.

Nowadays, a new trend of research in the field of human resources called GHRM appears as results of combination and integration between two green organizations and environmental sustainability (Al Kerdawy, 2018). In the twentieth century, environmental issues are one of the most

complexes and significant managerial challenges, which include many aspects such as climate, change, depletion and reduction of natural resources, and there is little argument about climate change and environmental harm among environmental experts (Opatha & Arulrajah, 2014; Mancha & Yoder, 2015; IPCC, 2014). The organizations try to find techniques to reduce environmental footprints and adverse effects from their business activities, and in the same time improve financial performance of firms (Ahmad, 2015). Whereas, the HRM literature suggests that HRM practices effect on organizational performance through its influence on employees work behavior and attitudes, since attributes of HRM practices define what employees behavior is probably to be affected (Dumont et al., 2017). Similarly, green organization requires implementing green practices to help in environmental safeguard, which is dependent on the selecting and hiring of right workforce and managers (Gupta, 2018). Wehrmeyer (1996) published a book titled greening people human resources and Environmental Management System (EMS) to examine the HR practices and dimensions of EMS, and how HR departments EMS impacts on EMS. After that, numerous studies have appeared on that topic which highlight the importance of implementing GHRM practices in organizations and influence of these practices on sustainable performance (Jabbour & Jabbour, 2016). Noteworthy, the core of development of GHRM as Wehrmeyer (1996) stated," If a company is to adopt an environmentally-aware approach to its activities, the employees are the key to its success or failure".

2.2.2 GHRM definitions

Generally, companies that implemented green policies and practices at workplace accomplish a competitive advantages and benefits from increasing branding recognition and sales, as well as employees satisfaction of the outcomes, and create a positive image (Dumont et al., 2017; Chowdhury et al., 2017). Regulations and awareness from governmental and non-governmental organizations are the motivational factors, which have pushed organizations to go green in their workplace (Yusoff et al., 2015).

GHRM refers to the side of HRM practices that is interested with transforming normal workforces into green workforces to help organization to achieve environmental goals by making a significant contribution to environmental sustainability (Opatha & Arulrajah, 2014).

Through reviewing studies and literature of GHRM, there are numerous definitions for GHRM as follows; Jackson et al. (2014) defined GHRM as phenomenon relevant to recognition links between organizational actions that affect the natural environment and the evolution, design, implementation and impact of HRM systems. On the other hand, Teixeira et al. (2016, p 6) described GHRM as "the alignment between traditional human resources practices (such as training and performance appraisals) and environmental policies and objectives, which can contribute to greater employee engagement in sustainability management". Another definition by Gupta (2018) employing HRM practices to boost environmental

sustainability, and raise employee commitment on the environmental sustainability issues. Consequently, it is clear after review the definitions of GHRM from different sources that it is a collection of HRM practices and EMS practices. Until 2008, the combination of HR and environmental management stayed nameless, and then they started to appear with a study by Renwick et al. (2008). After that, the area of GHRM began to incorporate more into the research agenda of HRM, consequently encouraging scholars to include and integrate the human resources and the environmental issues in their studies (e.g. Jabbour & Santos, 2008; Jackson & Seo, 2010; Jackson et al., 2011; Jabbour & Jabbour, 2016).

The GHRM can be measured using multidimensional nature. For example, Jabbour et al. (2008) proposed that the development in environmental performance depends on teamwork, training of workforces, appraising and evaluating environmental goals, financial and non-financial rewards and compensations, and organizational cultures. Renwick et al. (2013) proposed that selecting, hiring, training, and developing environmental skills and knowledge could be considered as the dimensional of GHRM.

2.2.2.1 Green Recruitment and Selection (GRS)

Generally, recruitment and selection practices focus on selecting employees who are suitable for specific job responsibilities and lead performance between a set of candidates (Ramasamy et al., 2017). Nowadays, many companies have concerned to establish a job description

that can define a number of environmental issues and tasks, which are linked with responsibilities and duties of the job (Wehrmeyer, 1996; Renwick et al., 2008). Shifted to web-based recruitment and selection activity can give employer an opportunity to supply more details and information's about their EMS activities that traditional media cannot provide (Ehnert, 2009). Organizations could announce about their green image, environmental performance and environmental policy in their recruitment advertisement, which help in attracting the suitable talents and candidates for their job vacancies (Mandip, 2012; Chaudhary, 2018).

In addition, organizations should recruit candidates who support environmental issues (Zibarras & Coan, 2015). Consequently, the main characteristic of green recruitment and selection (GRS) are hiring candidates whose have environmental awareness and knowledge (Jabbour, 2011; Nejati et al., 2017; Tang et al., 2018). Mishra (2017) founded that the green recruitment and selection have two main parts:

(1) Using eco-friendly ways for hiring and selecting talent such as online web and tools to reduce paper usage at recruitment and selection operations.

(2) Using green criterions for measuring attitudes in the process of selection, taking into account candidate who follow basic environment-friendly activities and value green practices such as less printing, recycling and preservation of energy.

A study by Brekke & Nyborg (2008) provided a theoretical approach and created a model to clarify how environment-friendly initiatives can attract best candidates. Aiman-Smith et al. (2001) found that the positive environmental image was a powerful predictor that can be used from organizations to help in selecting attractive talents, which also should match with hiring practices for organizations. A survey from Chartered Institute of Personnel and Development (CIPD), (2007), which includes 757 CIPD members in UK finds that graduates judge the reputation of a company and the environmental performance as a standard for decision making when looking for a job (Philpott & Davies, 2007). It is obvious that adopting green agenda for any organization requires establishing green criteria that employers require in new recruitments. For example, a survey in Brazil that includes 94 firms with ISO14001 certification found employers prefer workforces with environmental skills and knowledge and have motivation with these issues (Jabbour et al., 2010b).

2.2.2.2 Green Performance Management (GPM)

Green Performance Management (GPM) refers to the measurement of activities that are used for appraisal and evaluation of the interaction between business and environmental issues to judge of the organization's commitment in achieve their environmental goals (Yang et al., 2013). Adopting a GPM standard and indicator is therefore a priority for various types of firms (Tang et al., 2018), and a useful way to improve performance indicators and standards for each environmental hazard area (TUSDAC, 2005).

Early research conducted at 186 US firms on the Forbes list findings a strong link between CEO reward and environmental reputation for the firm, but it is not necessarily that CEOs were compensated for their firms' EMS register (Stanwick & Stanwick 2001). The main attributes of (GPS) are as follows: using indicators for appraisals green performance, setting green targets for employees, setting goals for managers which reflect in green outcomes from staff, negative evaluation for unaccomplished environmental objectives, assessment employee after attending green training, and take feedback from staff about environmental goals (Jackson & Seo, 2010; Jackson et al., 2011; Arulrajah et al., 2015).

2.2.2.3 Green Training (GT)

Green Training (GT) refers to implementing of activities and learning practices that encourage workforces to learn about environment safeguard, pay attention to environmental issues and increase staff skills, awareness, and knowledge in environmental activities (Jabbour, 2011). Teixeira et al. (2016) defined (GT) as an approach of on-the-job training and continued education to achieve organizations environmental management goals and objectives. GT is the most human resource practice that attracts the researchers and practitioners nowadays (Jabbour et al., 2010a). The main goal of environmental training is to provide employees with skills and knowledge to take environmental action to prevent and manage effectively the natural resource of organizations. Moreover, it is significant for greening the organizations in several sectors, which include military, industry, service and mining sectors (Jabbour, 2013).

According to Tang et al. (2018), GT includes three aspects: climate building, awareness enhancement and knowledge management. Furthermore, GT has main practices such as: developing training programs about environmental management for staff (e.g. climate change, water diversity, air pollution, energy, waste management, heavy metals, chemicals, toxins, ozone layer depletion, oceans and fisheries), using online material to reduce paper cost, green knowledge and awareness management initiatives, and involving employees in environmental problem solving (Renwick et al., 2008; Jabbour, 2013; Arulrajah et al., 2015; Mishra et al., 2014). Fernández et al. (2003) found that adopting an environmental approach in organization need increased employees' skills, awareness and knowledge in both materials and processes, which requires incorporated training in EMS to make an involvement in environmental issues. Jabbour et al. (2013b) explored the features of GT at Brazilian companies which certified by ISO 14001, the results display the rating of firms in evolutionary stages of EMS.

2.2.2.4 Green pay and reward (GPR)

Green Pay and Reward (GPR) are considered a critical tool that helps organizations to establish their goals, and persuade the staff to commitment with environmental organizational goals. The GPR includes a system of financial (monetary) and non-financial rewards that help to improve employees commitment toward environment management program, and inspiration employees to contribute and align with environmental goals (Bangwal & Tiwari, 2015; Gupta, 2018; Daily & Huang, 2001). It is also a

method to help organization keeping talented workforces, also recruit new candidates with awareness and knowledge of green practices (Mandip, 2012).

Berrone & Gomez-Mejia (2009) highlighted the importance of inspired environmental behaviors in achieving environmental performance. Moreover, firms should support environmental strategies by using environmental performance criteria to reward their CEOs. The result displays that organizations with obvious environmental payment policy and an environmental committee for compensation do not reward environmental strategies more than those without rewards system. There are many examples of using green reward and compensation system for boosting environment-friendly attitude in modern organizations; for example, CIPD/KPMG conducted a survey at UK organizations which indicated that 8% of companies rewarding green behaviors with different types of compensation and financial incentives (Phillips, 2007). Merriman & Sen (2012) conducted a study at the US, which included middle-level managers, the results find that indirect compensation benefits related with sustainable projects are not enough reason to catch senior management attention to environmental initiatives. Moreover, in English Universities, HEFCE connected capital funding for these universities with carbon management, and prevent 40% of funding, if they do not create environmental plans (Kane, 2011).

2.2.2.5 Green Involvement (GI)

Green Involvement (GI) is defined by Quagraine (2010, p. 3) as "creating an environment in which people have an impact on decisions and actions that affect their jobs". GI relates to encourage employees' involvement by empowering them with an environmental practice and generating a friendly organizational culture (Kim et al., 2018; Gupta, 2018). Employee involvement is vital for social and environmental responsibility that supports employee commitment to the environmental goals (Ramachandran, 2011). Commitment employees and involvement with EMS is considered as a key success for improving the outcomes from EM systems, which includes some benefits such as reducing waste, efficient resource usage and decreasing pollution from employees (Florida & Davison, 2001; Kitazawa & Sarkis, 2000).

GI included a wide range of practices such as traditional ones (e.g. newsletters, problem solving groups, and suggestion schemes) and other like low carbon champions, participate staff in improving organizations to become more environmentally friendly (Renwick, et al., 2013; Tang et al., 2018). The GI practices can appear in organizations through three core procedures which are summarized in: i) utilization the employees' knowledge obtained through their link to production operations, ii) empowering and engaging employees to create suggestions for environmental problems and improvements, iii) improving a culture in the staff (Govindarajulu & Daily, 2004). Brio et al. (2007) found that environmental involvement to EMS would be positively related with

environmental outcome measures. Similarly, data from Chinese manufacturing firms top management team appears that senior employees present a powerful firm environmental behavior (Ji et al., 2012).

In this study, a literature review (LR) of past research was conducted using papers published from (1990- 2018) and search engines such as Google Scholar. Used keywords such as "GHRM", "GHRM with healthcare sector" and "GHRM and sustainable development". Table 2.1 presents a summary of the studies that were reviewed form literature review in the contexts of GHRM.

Table 2.1: Previous studies of GHRM practices.

No	Authors (Year)	Sector	Methodology	Findings
1.	(Jabbour & Santos, 2008)	LR	Empirical	Highlight the role of HRM in contributing of EMS in organizations, and propose a modal to increase understanding of the relationship between HR and EMS.
2.	(Wagner, 2013)	German / manufacturing	Quantitative approach	The results confirm the positive links of the GHRM benefits for application on a huge scale in manufacture firms.
3.	(Renwick et al., 2013)	LR	Theoretical	The effects of GHRM practices to motivate employees for becoming involved in green activities which will be reflected in improve environmental ability and EMS at organizations.
4.	(Ahmad, 2015)	LR	Theoretical/Used secondary data	Review of GHRM practices, provided explanation and simplified meaning of such practices.
5.	(Yusoff et al., 2015).	Malaysia	Empirical	The results revealed that most of the investigated companies place a very high importance on GHRM.
6.	(Jabbour, 2013).	LR	Empirical	Proposed a framework to guide the researchers about the state-of-the-art of GT, and highlight the gaps in LR related to this practice
7.	(Rehman et al., 2016)	India	Survey/ questionnaire	The study offers helpful guides and insights about how industries sector should link both aspects performance measures and critical green manufacture (GM) factors, in order to improve environmental, financial and operational performance.

8.	(Teixeira at al., 2016)	Brazil / Firms	Quantitative approach /questionnaire	The results show that GT is positively interrelated with the adoption and improved of green supply chain practices green supply chain management (GSCM) in firms.
9.	(Masri & Jaaron, 2017)	Palestine/ manufacturing	Mixed approach	A model offers to help manufacturing organizations at strategic level of how implementing EMS, and connect their HR practices to progressed their EP vital to establish benefits and competitive advantage.
10.	(Zaid et al., 2018a).	Palestine/ manufacturing	Quantitative approach	Progressing the current GHRM and GSCM literature through responding to needing of examined the joint impact of these practices on sustainability performance.
11.	(Zaid et al., 2018b).	Palestine/ manufacturing	Quantitative approach	Propose a conceptual model to show and explain the connection between organization performance and GHRM bundle practices.
12.	(Nejati et al., 2017)	Iran/ firms	Quantitative approach /questionnaire	The study discusses the relationship between GHRM and GSCM, considering of the moderating impact of staff resistance to change.
13.	(Tang et al., 2018)	China / firms	Empirical	The first study proposed an instrument to measure the main GHRM practices for EMS
14.	(Longoni et al., 2018)	Italy/ manufacturing and service firms	Quantitative approach /questionnaire	The study offering GSCM plays as an intermediate role in the link between GHRM and EMS.
15.	(Pinzone et al., 2016)	England/ Healthcare Sector	Quantitative approach /questionnaire	GHRM practices are positively impacting the voluntary behaviors toward the environment, and contribute to the literature with confirm construct rules in light of how to supportiveness use GHRM to improve employees' collective attitudes and behaviors towards the environment issues.
16.	(Pinzone & Lettieri, 2016)	Italy/ Healthcare Sector	Quantitative approach /questionnaire	The role that GHRM plays in mediating the effect of the pressure of adoption of Proactive Environmental Strategies (PES).
17.	(Romero & Carnero, 2017)	Spanish/ Healthcare Sector	Empirical	Designed a model for environmental assessment and evaluation in healthcare organizations to be used as a helping tool for EMS and contributing enhancements in sustainability in health centers.
18.	(Rawashdeh , 2018)	Jordan/ Healthcare Sector	Quantitative approach /questionnaire	The results display a moderate implementation of GHRM in Jordanian hospitals, also there are a statistical positive association between GHRM practices and environmental performance

19.	(Mishra et al., 2014)	India/ Public enterprises	quantitative and qualitative approach	The study identifies the best GHRM practices that can be applied contribute to sustainable development.
20.	(Al Kerdawy, 2018)	Egypt/ firms	Quantitative approach /questionnaire	Proposed a conceptual framework to the theoretical concepts of CSR and GHRM, also show the positive connection between CSR and GHRM.

It is cleared that commitment with green actions and HRM tasks are vital, since that implementation of HRM practices will support the environmental management system and also maintain it. Thus, it supports a company to achieve an efficient environmental performance (EP) (Jabbour & Santos, 2008). Therefore, three main gaps appear through reviewing the GHRM literature reviews as follows:

First, Green HRM literature largely provides insights about western societies in specific at manufacturing firms, and GHRM contributions to service organizations (e.g. healthcare) don't have the same attentions in researches (Jabbour & Santos, 2013; Renwick et al., 2013; Haddock-Millar et al., 2016; Siyambalapitiya et al., 2018; Yusliza et al., 2017). However, given the concentration of developing countries and Asian economic for environmental management, this is a significant gap to address in future studies (Yusoff et al., 2015; Rehman et al., 2016; Mishra et al., 2014).

Second, according to several scholars in the field of GHRM, there is a need to explore more across different organizational functions research. Limited studies have been conducted qualitatively on GHRM context (Yusliza et al., 2017). Moreover, the advanced studies should focus on examining GHRM in relation with other practices and cross- functions such as

sustainability (Fisher et al., 2010; Jabbour & Jabbour, 2016; Nejati et al., 2017; Longoni et al., 2018; Yusliza et al., 2017).

Third, most of present literature addresses GHRM at the organizational level, the present researches begin to concentrate on green attitude and behavior at the personal level, while the green training is the most practice that frequently studied from GHRM practices (Ren et al., 2018; Jabbour, 2013; Saturnino Neto et al., 2014; Aragón-Correa et al., 2013; Daily et al., 2012; Jackson et al., 2014). In this study, we trying to fill the gap in the literature in GHRM practices in developing countries, specifically in important service sector such health care sector and their influences on sustainable performance.

2.3 Benefits of GHRM practices

There are many benefits of implementing GHRM including expense reduction, establish competitive advantage through Corporate Social Responsibility (CSR), appropriate talent management, waste reduction, productivity increase, higher profit and quality, and improvement in sustainability (Renwick et al., 2013; Chowdhury et al., 2017). In addition, GHRM helps organizations to facilitate employees' retention, improve public image, attract better candidates, and reduce utility cost, tax and rebates benefits and increase business opportunities (Chowdhury et al., 2017). Wagner et al. (2013) provided a quantitative evidence about the benefits of implemented EMS and GHRM focusing on staff satisfaction,

recruitment and retention; the results showed positive relationship between environmental performance and economic performance of firms.

According to a recent review of previous literature on GHRM, several empirical studies proposed using a cluster of GHRM practices (i.e. the so-called GHRM bundle), rather than individual practices to improve environmental performance by diffusion environmental principles and values within the organization (Renwick et al., 2013; Nejati et al., 2017; Longoni et al., 2018; Rawashdeh, 2018). This study will consider GHRM bundle as a coherent set of HR practices, which has impact on the performance of healthcare organizations through: i) Green Hiring. ii) Green Training and Involvement. iii) Green performance management and compensation. Table 2.2 summaries the definitions of GHRM bundle and the practices involve it.

Table 2.2: Green human resource management bundle.

GHRM bundle definition	GHRM bundle Practices	GHRM bundle Practices definition
A bundle of coherent and consistent GHRM practices which is considered to have major impacts on company environmental performance (Renwick et al., 2013; Longoni et al., 2018).	Green Hiring	Adoption of environmental criteria in selection and hiring procedure (Jabbour & Santos, 2008; Renwick et al., 2013).
	Green Training and Involvement	Boost of reward and competencies system, which reinforce organizational performance, and enhance the commitment to environmental initiatives, thus providing employees the opportunity to participate with the environmental progress debate within the organization (Daily et al., 2012).
	Green performance management and compensation	Reward and monitoring systems to support employees to EMS (Berrone & Gomez-Mejia, 2009).

2.4 Sustainability in organizations

The sustainability concept is now a worldwide issue which turned out to be progressively essential in HRM. Balancing of economic environmental performance has become focus and attention for organizations which faces pressures from regulatory, stakeholders, competitors, and society (Rehman et al., 2016; Paill et al., 2014; Mishra et al., 2014). Therefore, there are positive relationship between environmental performance, environmental management, and economic performance, and many HR practices for the refinement of environmental performance (Siyambalapitiya et al., 2018). Generally, sustainability is adopted by governments, communities, business leaders, and consumers (Rayner & Morgan, 2018).

The World Commission on Environment and Development defines sustainable development as "development that meets the need for the present without compromising the ability of future generations to meet their own needs" (Butlin, 1989). Sustainable development varies from traditional approaches to development by jointly combination regard of economic development, environmental protection and social inclusion, which are related to organizations activities and especially HRM practices (Ren et al., 2018). Furthermore, an influential estimation of sustainable performance in organizations passes through the simultaneous assessment of economic, environmental and social performance (GRI, 2006); these three pillars of the sustainability performance have the same weight in assessment (Svensson et al., 2018). The human resources practices have a

major role contributing on adoption of modern sustainability practices at organizations (Aragão & Jabbour, 2017; Mishra et al., 2014).

Furthermore, the scholars on the link between HR factors and environmental sustainability is slowly rising (Jabbour, 2013), thus HR is considered as powerful practices to merge employees with and allows companies to align HR practices with their environmental targets, which lead the organizations on its journey toward environmental sustainability (Aragão & Jabbour, 2017; Haddock-Millar et al., 2016).

Moreover, the social performance refers to the impacts of GHRM practices related to the social aspect and connected with the image of organization and their products from the viewpoint of various stakeholders such as suppliers, employees, the public and customers (Newman et al., 2016). According to the Chowdhury et al. (2017), green programs support organizations to improve social responsibility between employees, thus HRM plays a significant role in developing and boosting social performance. Al Kerdawy (2018) explored the role of GHRM in adopting CSR in Egyptian organizations, the results found a positive relationship between GHRM and CSR which will be reflected in more socially and environmentally responsible for the organization. Noteworthy, such initiatives can help organizations in accomplishing sustainability to ensure positive effect on the society and environment.

Environmental performance refers to the organization capability to decrease waste produced and air emissions as well as minimize the consumption of toxic and hazardous material, and decrease the frequency of environmental accidents (Zhu et al., 2008). Coherently with the context of environmental performance, Paill et al. (2014) studied the relationship between HRM and environmental performance management in Chinese firms. The results showed that organizational citizenship behavior mediates the relationship between HRM and environmental performance. Haddock-Millar et al. (2016) focused on the serious commitment to environmental sustainability from the firm; the determination of HR and the environment function are two different things. Moreover, they identified the factors that clarify the variation in approaches including strategic and performance driver's and cultural dimensions. Moreover, Dubey & Gupta (2018) highlighted the role of GHRM in organization sustainability which not just includes awareness toward environmental issues, but also economic and social performance, and how these initiatives can increase employee awareness and support sustainable practices. Continue with sustainability performance, the economic performance relates with marketing and finance performance development from applying green practices which resulting in enhance a position of the organization compared to the other organizations in industrial sector (Zhu et al., 2005). Thereby balancing economic, social, and environmental performance today is considered a responsibility of companies toward society (Longoni et al., 2018). Taylor et al. (2012) with a survey from 41 Italian companies include 89 HR and sustainability managers, found that the sustainability is an organizations

'moral obligation' for the society to protect employees from injury or hazard. In addition, HRM systems are considered as a key factor to enhance sustainability in general in organizations. Notably, to enhance long-term sustainability in organization, there is a need to confess and participate in green practices and behaviors such as recycling and waste management. Moreover, understanding of the role of GHRM in sustainability issues such as, building a green culture, using resources more efficiently and reduce the harmful effects on environment as possible as, and engaging staff in reducing waste (Rayner & Morgan et al., 2018).

2.5 GHRM in Palestine

Consistently with, at the level of Palestinian context, a few studies are conducted in GHRM practices, Masri & Jaaron (2017) assessed the GHRM practices in three manufacturing sectors (i.e. pharmaceutical, food and chemical sectors) in Palestine; as well, they tested the relationships between these practices and the EP for organizations. As well, they encourage other scholars to replicating that study in other developing countries. However, in the Palestinian context, Zaid et al., (2018b) investigated the effect of GHRM practices as a bundle on sustainability of organizations which includes environmental, economic, social, and operational performance among Palestinian manufacturing firms. The study contributed to the increase in environment safeguard and whilst growth for sustainability at manufacturing firms. Another study by Zaid et al. (2018a) examined the relationship between GHRM bundle practices and green supply chain management (GSCM) (i.e. external and internal practices).

Moreover, their influence by the three dimensions of sustainability performance (i.e. environmental, economic, and social performance), and it is conducted in the most polluter manufacturing firms (i.e. chemical, food, and pharmaceutical sectors). The results revealed the direct effect of GHRM practices on sustainable performance with GSCM mediating this effect.

2.6 GHRM in healthcare sector

Notably, a few studies were conducted in the context of GHRM in healthcare sector especially in developing countries (Rawashdeh, 2018). Coherently with this view, Pinzone et al. (2016) provided the first theories and empirically test at the organizational level in healthcare sector. Also the role that GHRM practices play in supporting employees collective engagement in activities to aid environment protection and original perspective on (EMS). The study was conducted in National Health Service (NHS) organizations in England in 2013; they chose this sector due to be considering as the largest public sector responsible of produce emissions in the UK. Furthermore, the researchers motivate scholars of EMS to test hypotheses in various institutional settings like developing countries and use other mediating factors, such as collective job satisfaction and collective efficacy. Pinzone & Lettieri (2016) debated in their study the role that GHRM plays in mediating the effect of the pressure to adoption a Proactive Environmental Strategies (PES). The survey was implemented at the hospitals located in the Northern and Central regions of Italy, noteworthy that the mangers from healthcare sectors exposed a societal

pressure and stakeholders pressure to not just provide service of high quality with low cost and safe care, but also should be extended to include environmental practices and initiatives. The results provide original evidence about: i) the role that GHRM plays in mediating the effect of the pressure of adoption of (PES), ii) display that establishing a GHRM system enhances hospitals professionals' and also ability, motivation and opportunity employees to behave in a way that will protect their environment. Moreover, Romero & Carnero (2017) designed a model with multi-criteria for environmental assessment and evaluation in healthcare organizations. The model guarantees easy to apply and includes a series of criteria that relevant to the processes of the internal environmental auditing in hospital. After that, they applied a practical case in Spanish hospital.

At the level of healthcare sector in emerging economies such as India Malik et al. (2017) examined the innovation in the resource-context in India's healthcare industry, and highlighted the role of HRM plays in such context the authors provided evidence that the high commitment of use HRM practices has a positive influence for inspiring contextual ambidexterity in the healthcare sector. Further, the important role that managerial and leadership style in bringing cultures of trust, employee empowerment, openness and risk taking which supported by an suitable rewards and appraisal system. This study added an empirical contribution in the light of emerging economies context, also exposed the role of HR practices in creating contextual ambidexterity and facilitate the innovation in healthcare sector at emerging economies. Similarly, Rawashdeh (2018)

implemented a study that aims to investigate the impact of GHRM practices on environmental performance in Jordanian healthcare organization. This study considers the first in Jordan that shed light about GHRM functions that could provide environmental performance in health service organizations especially in hospitals. The results revealed a moderate level of implemented to extract three GHRM practices which are green recruitment and selection, green rewards, and green training and development. Moreover, he found that strongest correlation from these practices related to Green recruitment and selection, while the weakest correlation was for training and development. Moreover, there are statistical positive associations between GHRM practices and environmental performance in the healthcare sector

2.7 Theoretical frameworks

2.7.1 Existing frameworks

Undoubtedly, that there is not any comprehensive model of GHRM implementation that can be applied successfully in the service sector, but from the other side there are models that build through conducting studies in GHRM in many countries. Masri & Jaaron (2017) developed a conceptual model that explained GHRM practices, which is designed to be as a guide to help managers in implementing GHRM in order to develop EP. The model is divided into three stages, in the first stage; the organizations should enhance the environmental awareness among the employees. At the second stage, the organization should focus on attracting

and hiring employees and candidates interested with environmental issues. At last stage, the organization should keep developing and improving employees skills and provide them with the programs that supports EMS, and also training new employees to develop their awareness about the environmental issues, as well define green goals and objectives to involve employees with green performances and boosts the reward and appraisals system to increase their interest in environmental issues. Similarly, in the Palestinian context, Zaid et al. (2018b) developed conceptual framework that links the GHRM bundle practices with social, economic, environmental and operational performance. Where the GHRM literature is focused primarily on the impact of GHRM practices bundle on the organizational performance. Coherently with this view, Pinzon et al. (2016) suggested a model that used GHRM practices in healthcare sector and linked it with EMS through mediator factor which is collective affective commitment, and summarized that GHRM is considered as an investment for organization, as shown in Figure 2.1.
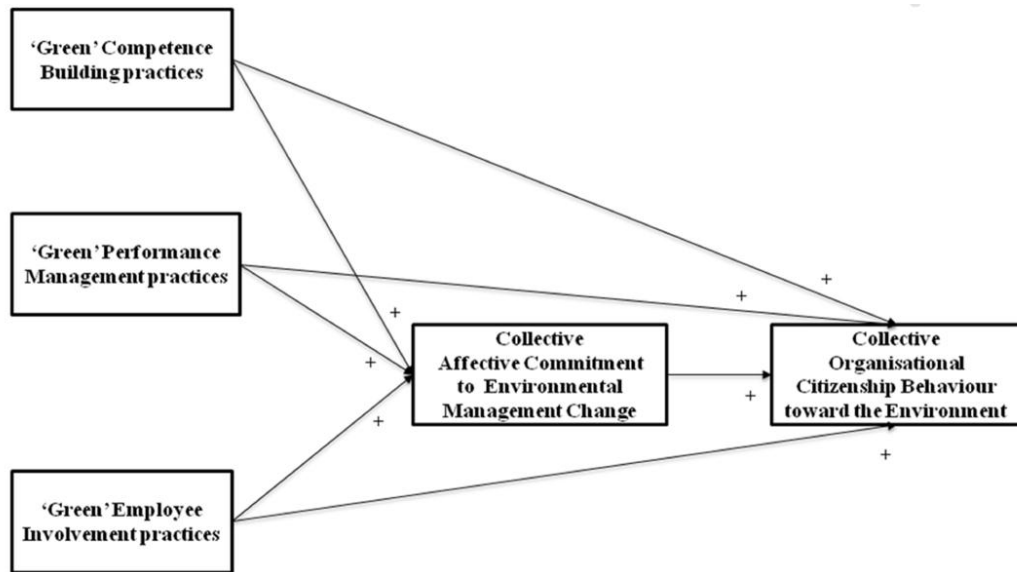
Figure 2.1: Theoretical model connecting GHRM practices with OCBs. Source: (Pinzone et al., 2016).

Mishra (2017) proposed a framework that linked the general GHRM activities with the sustainable development in organizations in developing countries, to establish such a framework the data was collected from manufacturing organizations in India in two phases. Furthermore, Siyambalapitiya et al. (2018) developed a conceptual model clarifies GHRM practices, for organizations to implement green culture and GHRM practices for their staff. These green practices are designed to guide HR professionals and managers to implement GHRM practices in their organizations and develop environmental performance. The model included six environmental performance factors and eight GHRM practices coordinated to support and boost the environmental performance of the organizations, as shown in Figure 2.2.
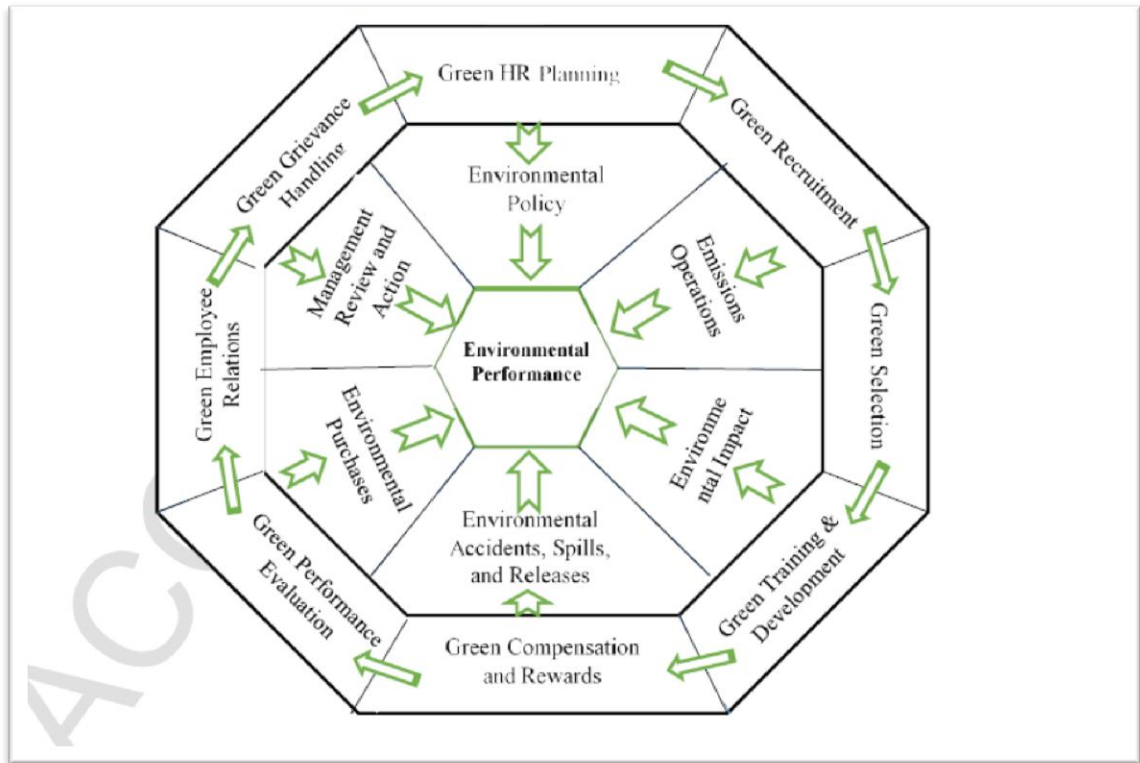
Figure 2.2: GHRM Model developed to Support for Environmental Performance.   Source: (Siyambalapitiya et al., 2018).

2.7.2 Research framework

The following framework is based on previous studies (e.g., Masri & Jaaron, 2017; Zaid et al., 2018b, Pinzone et al., 2016, Mishra, 2017, Siyambalapitiya et al., 2018, Zaid et al., 2018b, Rawashdeh, 2018). This framework suggests three sets of relationship bonds (GHRM bundle bonds that include GH, GTI and GPC bonds, and sustainability bonds that include environmental, economic and social bonds) as antecedents to improve and enhance environmental practices and sustainability performance with healthcare sector. In addition, strength of national healthcare sector images in terms of environmentally friendly practices, and improving the environmental, economic and social satisfaction (see Figure 2.3).
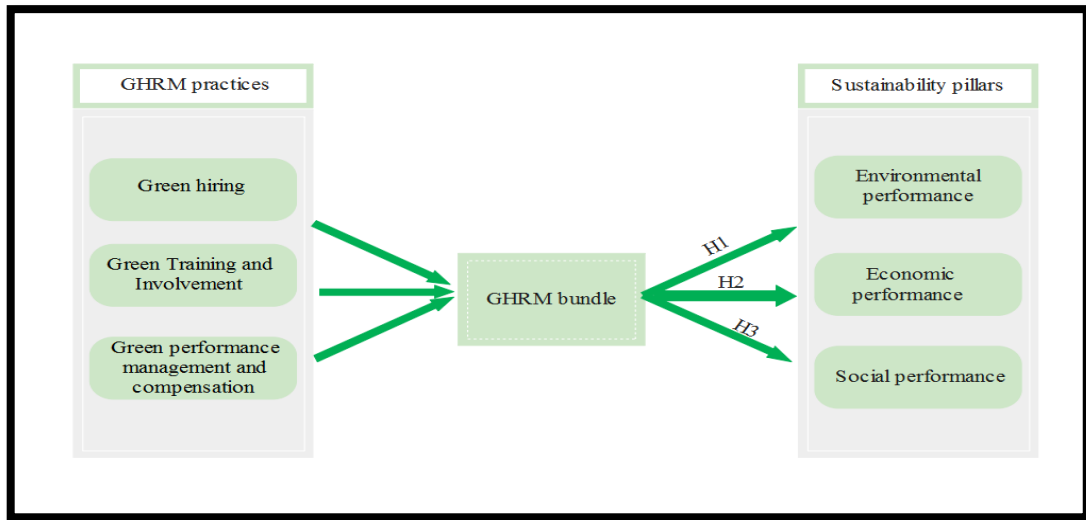
Figure 2.3: Proposed theoretical framework.

2.8 Healthcare sector

2.8.1. Overview of healthcare sector

Healthcare sector is considered as an important service sector that provides medical services for all categories of society. Moreover, this sector has the focus of the organizations concerned with environmental issues due to the waste produced from it (Romero, 2017). The mangers from this sector are under growing pressure from society because of the impact of this sector on environment, thereby their responsibility is not limited of delivering a service with high quality and low cost, but it should be expanded to involve environmental protection issues and also saving the natural resources (Pinzone & Lettieri, 2016).

The healthcare industry generally ignores environmentally sustainable practices and environmental effect from that sector for some reasons, for

example, obliviousness, and fears of extra expenses (Mbongwe et al., 2008; Yellowlees et al., 2010).

2.8.2 Healthcare sector in Palestine

Environment Quality Authority (EQA) is considered as the legal body that have the authority to implement the law and regulations of preserving the environment in Palestine, and this environmental legislation are implemented and monitored in many sectors such as: agriculture, public health, economic, tourism and archeology, and plant protection. Notably, the environment objectives for EQA are; keeping the levels of environmental pollution under control and reducing the effects of climate change, responding to environmental disasters, spreading and increasing levels of awareness and environmental knowledge, and preserving the sustainability of the natural environment (EQA, 2018).

The healthcare sector is an important service sector due the size of government expenditure in this sector. According to the annual report in health accounts in Palestine published by Palestinian Central Bureau of Statistics (PCBS) and Ministry of Health (MOH) in 2016, healthcare industry accounts for 10.9 % of the Gross Domestic Product (GDP) in Palestine in 2016, and the monetary revenues of the Palestinian MOH during the year 2016 is about $ 8,389,189 (PCBS, 2016; MOH, 2016). Figure 2.4 shows the total health expenditures during 2016, 2015 in US dollars. The finance department in MOH, declared that the budget of

ministry in 2017 was NIS 1,726,773,000 (477273157.61 dollars), and 51% of the budget goes to salaries of employees (PHIC, 2017).
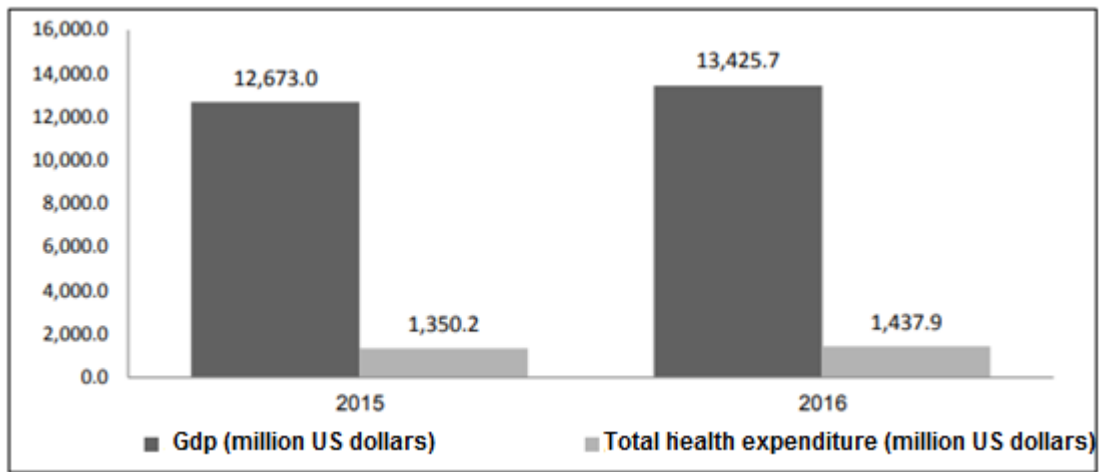
Figure 2.4: Total health expenditure and GDP in Palestine for 2015 and 2016 years. Source (PCBS,2016).

The healthcare sector produces all type of wastes including hazard and non- hazard waste and these wastes are not separated and handled properly in general in Palestine. According to a study conducted by khatib (2003) entitled "Management of Medical Waste in Palestine: Studying the status quo", which its main goal is to contribute to the development of an integrated system for the management of medical waste based on clear principles and criteria. It has been shown through fieldwork that solid waste is never weighed in Palestinian hospitals, as is the case as for volume, it is not measured, and this is a strong indicator of lack of interest in the problem of medical waste, and its management.

MOH in Palestine is responsible for providing medical services in Palestine be side others non-governmental organization such as private

sector, NGOs, UNRWA and Military Medical Centers (MMS), the health system in Palestine according to MOH is classified to:

✓ Primary healthcare (PHC): Primary and comprehensive healthcare, including diagnosis, initial treatment, health supervision, management of preventive health services and chronic diseases. The provision of primary healthcare does not require advanced equipment or devices or specialized sources. The number of primary healthcare centers in Palestine reached 739, of which 587 in the WB and 152 in the Gaza Strip, which belong to Palestinian MOH, NGOs, UNRWA and MMS. This PHC centers provided service to 2,383,661 patients in 2017.

✓ Secondary and Tertiary healthcare in Palestine: It is defined as a treatment provided by a hospital specialist to patient who is transferred from primary healthcare or in case of emergency, and it's provided in a center with specialized treatment facilities like hospitals (PHIC, 2017; PCBS, 2016; MOH, 2016).

2.8.3. Hospitals in Palestine

The number of hospitals in Palestine in 2017 is 81 hospitals, 51 of them in the WB including Jerusalem. Hospitals are classified according to specializations: public hospitals, private hospitals, maternity hospitals, rehabilitation, and physiotherapy centers, where the number of the hospitals by specialty reached about 43, 21, 13, and 4 respectively (PHIC, 2017) as shown in Table 2.3.

Table 2.3: Number of hospitals in Palestine. Source (PHIC, 2017).

Type of hospitals	Number	Capacity
General Hospitals	43; 29 hospitals in West Bank.	2,750 beds
Private Hospitals	21; 8 hospitals in West Bank.	673 beds
Maternity Hospitals	13; 11 hospitals in West Bank.	220 beds
Rehabilitation and Physiotherapy Centers	4; 3centers in West Bank	189 beds
Total	81; 51 hospitals in West Bank.	3,832 beds

2.8.4. Laboratories and blood banks

Laboratories: according to MOH, laboratories in Palestine classified into three categories as follows (PHIC, 2017):

✓ Central laboratories: Advanced laboratories where samples are examined from all over the WB. This category includes the Central Public Health Laboratory in Ramallah and the Histopathology Laboratories (In WB, these Histopathology Laboratories are available at Rafidia Surgical Hospital, Beit Jala Hospital and Palestine Medical Center).

✓ Intermediate labs: they are 14 intermediate labs in the WB in the hospitals of MOH.

✓ Terminal laboratories: these laboratories serve the patients in the PHC, and there are 193 laboratories in the West Bank.

During 2017, there are 8,081,849 laboratory tests conducted by the laboratories of MOH in the WB.

Blood banks in hospitals: This service is proving from the hospitals of the MOH and at National Blood Bank (PHIC, 2017).

2.8.5. Human resources in healthcare sector in Palestine

Many parties such as MOH, MMS, the UNRWA, non- governmental health institution and the private sector, provide the medical service in Palestine. The number of manpower are working in health sector in various fields in Palestine reached 28,915 employees, where 21,731 of them working in the WB with percentage 75.2%, and 7,184 in Gaza Strip with percentage 24.8%. While the number of labor working in MOH about 7,225 employees with percentage 25% from all labor working in health sector in WB. Fig (2.5) presents the distribution the health Human Recourse in in Palestine (PHIC, 2017).
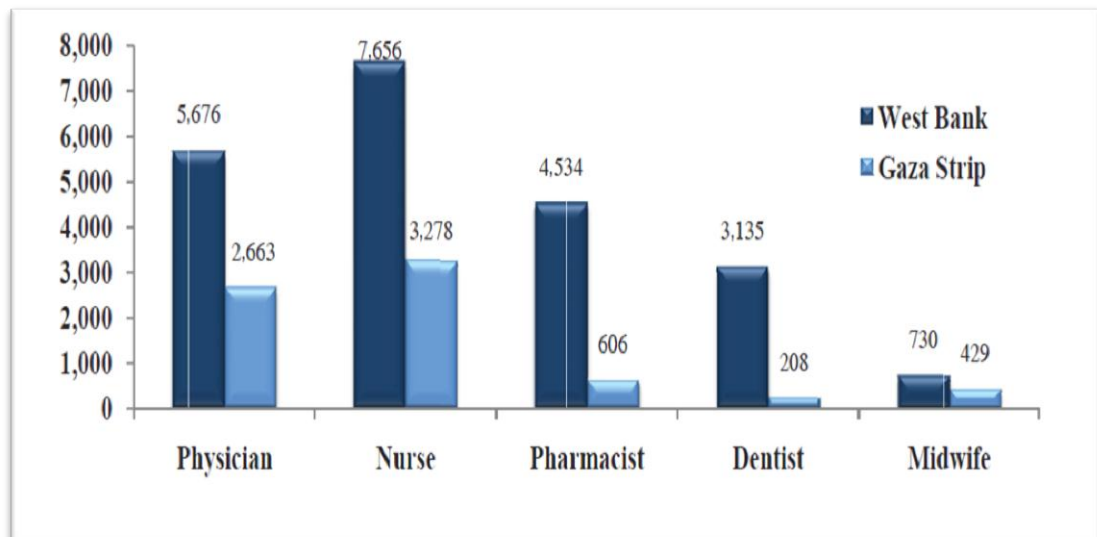
Figure (2.5): The distribution of health Human Resource in Palestine. Source (PHIC, 2017)

2.9 Chapter summary

Based on the findings from a review of literatures about the relationship between GHRM and sustainable performance in the healthcare sector, the following conclusions were being appeared. Researches on GHRM and sustainability terms have mainly focused on developed countries and western societies specifically at the manufacturing firms sector, where the GHRM contributions in service organizations' don't have the same attentions from the researches, as well for examining the GHRM in relationship with other practices and cross- functions such as sustainability. Based on that literature gap, this study added evidence about the GHRM practices in developing countries at one of the most important service sector, which is the healthcare sector.

Finally, this research also revealed that despite the significance of environmentally friendly practices in healthcare sector, a few studies empirically explored the relationship between GHRM practices and sustainable performance in the context of healthcare sector. Where the literature review mentions that the relationship between these practices and sustainable performance (environmental, economic and social) has received a little attention and need more explore in GHRM literature.

Chapter Three
Research Methodology

3.1 Chapter overview

This chapter the hypotheses formulate to assess the impacts of GHRM bundle on sustainable performance in Palestine healthcare organizations. The debates the study design, population and sampling, interviews method, survey method (questionnaires), pilot study, techniques of data analysis for both qualitative and quantitative approach and finally chapter summary.

3.2 Hypotheses development

It is undisputed that green practices are vital tasks that support the maintenance and implementation of EMS, which will be helping organizations to obtain greater environmental performance (EP) (Jabbour & Santos, 2008). In fact, GHRM practices play a fundamental role in spread green culture with organizations efficiently (Nejati et al., 2017). In addition to the tangible benefits from implementation of green practices like rising organizations attraction and retention to talent, this makes GHRM practices a critical part of EMS (Patel, 2014). Therefore, we hypothesize that:

HP1. The GHRM bundle has a positive impact on Environmental performance (EP) in Palestinian healthcare organizations.

Furthermore, the employee competence and involvement, connected to environmental-oriented practices such, GHRM, which also can lead the financial performance (Turban & Greening, 1997). Indeed, attracting and hiring employees who are interested with environmental development surely leads to hire talented workforces committed by firm's environmental reputation. Similarly, reinforce the employees involvement and commitment with environmental activities and providing environmental training may progress their skills, thus developing the economic performance of the firms (Longoni et al., 2018). Therefore, we suggest that:

HP2. The GHRM bundle has a positive impact on Economic performance (Ec.P) in Palestinian healthcare organizations.

Notably there are many benefits for companies connected and commitment with environmental issues; such as increase the satisfaction level of employees, better relationships with stakeholder, workforce retention, and a more acceptable reputation image (Khurshid & Darzi, 2016). In fact, companies which invested in social responsibilities had obtained some tangible benefits reflected to customer and staff satisfaction. Excellent talent hiring is considered an important factors to support a firm's social performance (SP) (Wagner, 2013). This study's research hypotheses were developed, as follows:

HP3. The GHRM bundle has a positive impact on Social performance (SP) in Palestinian healthcare organizations.

According to Longoni et al. (2018), environmental management can be effective in various organizational functions such as GHRM and GSCM, as it is linked to environmental and economic performance within the organization, the results from study showed that GHRM positively impacted on EP, and the GHRM bundle helped in disseminating environmental principles and values within corporations. Similarly, the GHRM bundle also positively impacted Ec.P by dissemination, and motivating employees to create economic value.

3.3 Research Types

In general, research can be conducted using three steps; 1) determine the research question, 2) collect data of the question, 3) find an answer of the question (Creswell, 2012). Depending on the research objectives, the research can be divided into the following categories (Kumar, 2019):

✓ Descriptive research: this type of study aims to describe more than the examination of relationships. This study systematically attempts to describe problems, situations or phenomena, to provide information about these communities, or to describe attitudes towards certain issues.

✓ Exploratory research: this type of study aims at exploring a new area of study, which we know little about or the possibility of undertaking a particular research study.

✓ Explanatory research: in this type of research, the researcher tries to emphasize or clarify how and why there is a relationship between two aspects of a phenomena or situation.

This study aims to investigate the GHRM practices and their impact on sustainability with its three aspects (environmental, economic, and social) in healthcare sector. As it has been clarified in the literature review chapter about the importance of this study, since there are a few studies conducted in service sector, especially with the absence of these types of studies in healthcare sector in the developing countries. The best type of research to conduct is the exploratory study, specifically sequential exploratory research.

3.4 Research approach

Research approaches are defined as plans or procedures for research that span the steps from wide assumptions to detailed approach of data gathering, analysis, and interpretation (Creswell, 2014). According to nature of the research, an appropriate approach is chosen as follows:

➢ Quantitative approach: in this approach, specific hypotheses or theories are tested, and numerical data are collected to support or disprove the hypotheses. The data are collected using tools that measures attitudes such as questionnaires, and analyzed using the statistical and hypothesis testing software (Creswell, 2012).

➢ Qualitative approach: in this scenario, the researcher seeks to investigate about phenomenon or an issue from the perspective of participants. The data can be collected using methods such as observations or interviews from participants of the study (Creswell, 2014).

➢ Mixed methods research is defined as a systematic integration or combining of quantitative and qualitative methods in a research study, to increase the understanding of a phenomenon and gaining a full and complex picture about it, also when using one type of approaches is not enough to answer and address the research question (Johnson et al., 2007; Creswell, 2012). The qualitative data responses will be without predetermined and usually be open-ended responses, whilst quantitative data tends to be closed-ended responses such as questionnaires (Creswell, 2014).

There are many reasons for conducting such approach such as; first, combination of qualitative and quantitative approach provided a way to enable cooperation and confirmation and collect the advantages from each approach. Second, combinations help to boost and develop analysis which enables us to give richer data. Third, mixed approach helps to begin new modes of thinking by preparing paradoxes from two data sources. In general, the purposes of using mixed methodological in researches are summarized as following: (a) triangulation, (b) complementarity, (c) development, (d) initiation, (e) expansion (Johnson et al., 2007).

3.4.1 Type of mixed approach

In this research, a mixed approach has been adopted specifically the exploratory sequential design using qualitative and quantitative approaches to improve and increase the understanding of the GHRM practices and the research problem. In the first phase, a semi − structured (qualitative) with experts of GHRM in health care sector using thematic analysis approach to identify themes, and find variables that will be used in quantitative phase (survey). Moreover, a few studies are conducted in this field in the world (Rawashdeh, 2018; Malik & Mitchell, 2017). At the second phase, questionnaires are distributed in the healthcare sector which is the instrument used to collect data in this study. Nevertheless, this approach has disadvantages such as; extensive data are required to be collected, the longtime requires this process takes long time to be completed. Moreover, the researcher needs to make decisions about the suitable qualitative data which should be used in the next quantitative data phase (Creswell, 2014).

3.5 Research methodology flow chart

In this study, we conducted the research as the flowchart presented in Figure 3.1, the methodology starts by defending the problem of the study, aim, purpose and the scope of the study, with deep review of the literature of GHRM practices to find the gab of the study, and formulate the research questions and hypotheses. The second phase is start collecting data in the study. The next phase is to choose the suitable sample that represent the population of the study. After that the data collection is start, firstly, semi-

structure interviews were conducted with HR experts from healthcare sector and academic experts in GHRM, follows with distribution questionnaires to the sample represented the Palestinian Healthcare sector. Four phases, after the data collected from the previous phase, the data collecting are analyzed to test the hypotheses, answer the research questions, and find the correlation between variables. The final step is developing a framework to help mangers working in healthcare sector for implementation such environmental practices. Moreover, present the suggestion, recommendations and future studies related of the study.

Research Methodology FloW Chart

Problem of statement	-Define the aims and scope for the study. - Review and analyze literature. - Define the research problem.
Data collection methodology	- Decide the methodology to conduct the study (Mixed approach). - Decide the population and Sample Size.
Collect the data	- Conduct the interviews and analyze it using Thematic analysis approach. - Conduct the survey.
Data analysis	- Analysis of quantitative and qualitative data. - Present the results and discussion.
Develop a framework	Develop a framework
Implication	Present the recommendations , implications for policy maker limitations and future studies.

Figure 3.1: Research methodology flow chart.

3.6 Research population and sample size

The study is conducted in the healthcare sector in the WB in the academic year 2018/2019; the population of the study consists of three classifications that cover all the services with healthcare sector according to the MOH.

First, primary care centers from the fourth level which include in their facilities clinics of several specialties, laboratories, pharmacies and x-ray photography's according to the classification of MOH. Notably, these centers are under governmental authority such as MOH and MMS.

Second, secondary and tertiary care centers (hospitals and rehabilitation centers) that follow to MOH, private sectors, NGOs and MMS. Where hospitals are classified according to specialization to general hospitals, specialized hospitals, maternity hospitals and rehabilitation centers.

Third, from laboratories and blood bank we took the central laboratories which are advanced laboratories, under this classification the following laboratories:

✓ Central Public Health Laboratory in Ramallah.

✓ Histopathology Laboratories.

Consistency with, the National Blood Bank will represent this category.

The MOH and MMS provided us with the names and numbers of primary care centers, hospitals and central laboratories and blood bank in

WB as shown at Table 3.1. We took the primary care centers and the central laboratories and national blood bank that follow to MOH and MMS, where there are a good number of employees and also HR department at it, which makes them suitable to answer the questionnaires. Also from the secondary and tertiary care centers (Hospitals) we take all the hospitals in WB regardless of the sector it belongs.

Table 3.1: Distribution of care centers in the health sector. Source (MOH, 2017; MMS, 2019).

No	Healthcare classification	Population
1	Primary care centers (level four)	10 Primary healthcare centers of the MMS. 11 Primary healthcare centers of the MOH
		Total 21
2	Secondary and tertiary care centers (Hospitals)	General Hospitals= 29. Specialized Hospitals= 8. Maternity Hospitals= 11. Rehabilitation and Physiotherapy centers= 3. Total= 51.
	Central laboratories and blood bank	Central Public Health Laboratory in Ramallah+ Laboratory of Histopathology (3)+ National Blood Bank= 5
	Total	77
	Requested sample	66
	Response rate	89,6%

To determine the suitable and representative minimum sample size to conduct the survey, the statistical approach is the proper approach to calculate the sample size (Denscombe, 2014). Thompson formula is used (Thompson, 2012):

$$n = \frac{N * P(1-P)}{\left[\left(N-1\right) * \left(\frac{d^2}{z^2}\right)\right] + P(1-P)}$$

Where:

n= the sample size.

N= the total number of population, 77.

d= the percentage error (0.05).

P= proportion of the property offers and neutral (0.5).

z= is the upper α/2 of the normal distribution (1.96 for 95% confidence level).

Or since we use structure equations model Smart- PLS in analyzing quantitative data, and as recommended by Hair et al. (2016), there some rule of thumb to calculate the sample size, where it should be equal to the larger of

1. 10 times the largest number of formative indicators used to measure a single construct, or 2. 10 times the largest number of structural paths directed at a particular construct in the structural model.

The results from the sample size equation show that more than 66 responses need to complete the survey. Almost 77 electronic and hard questionnaires have been distributed in healthcare sector; the survey targeted the top managers, managers of Administrative Affairs, HR mangers and quality mangers. 69 questionnaires were obtained and all of it is valid, and therefore the response rate and response effective is 89.6%.

3.7 Data collection

In this stage a combination of primary and secondary data have been used, at primary data phase we depend on the semi- structure interview and questionnaires to generate the primary information. Otherwise, the source of secondary data was the WHO, PCBS documents and reports from Health Information Center.

3.7.1 Semi- structured interviews

The interviews are considered as one of the main paraphernalia that used with qualitative research, it begins with recognize that there is an essential need to increase understand about phenomena from the experts perspectives, to be able to discover more about it (Englander, 2012).

Interviews are used as the data collection method, where they are appropriate methods when the researcher looks for insights into things like: 1) people's feelings, opinions, emotions and experiences. 2) Sensitive cases. 3) Privileged data (Rubin & Rubin, 2011). There are many advantages of such method such as: depth of information, insights, requires simple equipment, informants' priorities, flexibility, high response rate and validity. Otherwise, it has disadvantages such as: time consuming, analyzing the data, reliability, interviewer effect, invasion of privacy and finally the resource cost (Denscombe, 2014).

Interviews can be classified in to three main types (Denscombe, 2014):

➢ Structured interviews: where the researcher has predetermined questions such as questionnaires, and asks the respondent (face- to- face) to offer limited option answers.

➢ Semi-structured interviews: with semi-structured interviews, the interviewer still has an obvious list of questions to be answered and issues to be addressed. Notably, the researcher should be willing to be flexible with topics are considered, and probably more important to give the interviewee improved ideas and talk widely about the topics raised by the interviewer. The answers will emphasis on the points interested to the researcher; also they are an open -ended answer's (Denscombe, 2014). The purpose of semi-structured interview is to identify themes, and then design a tool to subsequently test it at the next phase. In general, the researcher uses this approach when he or she doesn't know about the variables, instruments and measurements about the population of the study, which requires him or her to explore more about it (Creswell, 2014).

➢ Unstructured interviews: the researcher doesn't need a list of questions, and the researcher role is to introduce a topics or themes and then allowing the interviewee to improve their ideas and explore in depth about it. Generally, unstructured interviews aim to discover the issues rather than checking it.

Since this study is an exploratory research, semi- structure interviews are conducted in depth with general managers, HR mangers and quality mangers at healthcare sectors to understand and get more information about that sector and the GHRM practices in it. Moreover, to raise the validity of the GHRM practices which identified from reviewing the literature survey, were used a questionnaire draft through the interviewees to investigate and identify a sets of GHRM practices that implemented in this sector. The questions asked during the interviews are presented in Appendix D.

3.7.2 Survey

Survey "provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (Creswell, 2014, p 41). In this method, the researcher collects quantitative data (numerical data) using an instrument such as questionnaires or interviews (e.g. one-one interviews), and after that these data are statically analyze to depict trends from the answers of the responses about the research questions and hypotheses (Creswell, 2014).

In this study, we used the questionnaire as a research tool to collect data in quantitative stage, which is an instrument used in survey that allows participants in the study to choose answers to understand attitudes, facts and opinions about a specific problem (De Vaus, 2013). The questionnaire is suitable for many reasons such as; cover large responses in different locations which save the time and cost, need to answer a standardized data from similar questions without personal interaction. Moreover, the

respondents can be able to answer and understand the questions without any misunderstanding (Denscombe, 2014). Furthermore, there are several types of questionnaires such as: postal questionnaires, mailed questionnaires and web-based questionnaires. We used both postal for all healthcare organization, and mailed questionnaires using Google Drive for organization hard to reach such Jerusalem.

3.7.2.1 Questionnaire design

A closed questions structure has been established by the researcher to answer from respondents by selecting from many options, or from a five point likert scale to assess the existence of target practices in healthcare organizations, where the respondent chooses just one option that represent the current situation of their organization with the practices under the study. The questionnaire was designed by reviewing the literature from academic papers and the other survey that related to the study as a first draft, after that display it on experts in healthcare sector and takes feedback. The last revision from the questionnaire contains as following:

▪ The first section: (11 items) the purpose of this section is to collect general information about the organization such as the gender of respondent, the classification of organization in healthcare sector, the number of employees, the geographic location, job position and years of experience at organization. Moreover, we used multiple options in this section.

▪ The second section: (22 items) it aims to assess the degree of applied and adopted of GHRM practices and environmental behavior in healthcare organizations. The section is divided into three categories; 1) Green hiring, 2) Green Training and Involvement, 3) Green performance management and compensation. A five-point likert scale of 1 (not at all) to 5 (a Very Great Extent) was used in this section. This sections adapted from (Nejati et al., 2017; Siyambalapitiya et al., 2018; Yusliza et al., 2017; Longoni et al., 2016; Al Kerdawy et al., 2018)

▪ Section three: (23 items) the indicators of sustainability are measured and their effects on healthcare organizations in terms of applying GHRM practices. A five-point likert scale of 1 (not at all) to 5 (a Very Great Extent) was used in this section. This sections adapted from (Longoni et al., 2016; Paillé et al., 2014; Al Kerdawy et al., 2018; Rawashdeh , 2018; Zhu et al., 2005; Zaid et al., 2018a; Abdullah et al.,2015).

A space for notes and any comments from respondents were left at the end of the questionnaire. After preparing the last draft of the questionnaire, it has been revised by a group of experts in the field of study to judge the validity and reliability of the survey. All of comments are related to the classifications of the sector, addition or long of sentence, language and other modifications have been taken into account to improve the internal validity of the questionnaire. The final revision of the questionnaire was prepared in English (see appendix A), but since the mother language in Palestine is Arabic, we translated it to Arabic (see appendix B). In the next stage, the questionnaires were distributed, an electronic copy from the

questionnaire was established using Google drive, and this copy was used to reach hospitals and primary care centers that are hard to reach due to political situation (like Jerusalem and Gaza strip). The questionnaire sent by email has a cover letter that explains the purpose of the study and definitions of some terms and guidelines to help the respondents to fill out the questionnaire in the right way. Also, we phoned the HR managers in these hospitals to explain the questionnaire and not to consider it as a junk mail, and also to remind the non-respondents to answer the questionnaire. Moreover, in all other city, we used a hard copy from the questionnaires to complete distribution process; a month and a half period were spent to collect the data from all cities.

3.7.2.2 Pilot study

The concept of pilot study or feasibility studies refers to a mini version of overall study, it is a crucial research instrument to increase the likelihood of the success of research study. Conducting pilot study helps researchers in many ways such as; testing and developing a sufficiency of research instruments, assessing the feasibility of a survey, and identifying problems which may occur using proposed methods (Van Teijlingen & Hundley, 2002). A number of questionnaires were distributed to a group of the study sample consisting of six experts in healthcare sector to judge the validity and reliability of the questions before starting the study (see appendix C).

3.7.2.3 Questionnaire reliability

The first criteria to evaluate quality of results is Reliability, which relates to the extent consistency of a result over time; the study is considered reliable if the results can be copied and produced under many situations and similar methodologies (Golafshani, 2003). To test the reliability of the five- point likert scales used in the study, the convergent validity test is conducted which refers to extent that the items correlate positively with each other in the same construct. The traditional internal consistency is expressed as Cronbach's alpha, which gives an evaluation of the reliability based on the intercorrelations of the indicator variables. The Composite reliability (Cronbach's alpha) should be above 0.7 (Hair et al., 2016).

3.7.2.3 Questionnaire validity

Another critical indicator to evaluate the quality of results produced from the study is internal validity (Hair et al., 2016). Noteworthy, validity refers to the extent to measure a concept accurately in a quantitative research (Heale & Twycross, 2015). Validity helps to determine whether the research actually measures what it was prepared to measure it or the reality of the research results (Golafshani, 2003).

It is worth mentioning that most items used in questionnaire are adopted from previous literature reviews in GHRM studies, where the reliability and validity of these items were already tested. Beside of conducted a pilot study to reveal any problem that effected the quality of results. To evaluate

the validity of research data, Discriminant Validity test is used which includes the Fornell-Larcker criterion and cross loadings.

3.8 Methodology of analysis

Notably, this study used a mixed approach method, thereby the analyzed data approach was also applied using a mixed analysis approach. This section presents the techniques used in analyzing the data from qualitative stage (the data from the interviews), and quantitative stage (the data collected from the questionnaires).

3.8.1 Interview analysis

Fourteen semi-structure interviews were conducted to understand and familiarize the practices of GHRM from the point of view the organizations of healthcare sector in Palestine. Thematic analysis approach is used to analyze data generated from conducting interviews with mangers and experts in healthcare sector. Thematic analysis is considered as one of the most popular research analytic approach methods in the world where it has many features such as flexibility, easy method for learning, and useful in qualitative analyses approaches (Braun & Clarke, 2006). Thematic analysis is a method for recognizing, analyzing patterns (themes) and finally reporting it within data (Vaismoradi et al., 2013; Willis, 2015). This approach was introduced by Braun & Clarke (2006); as following:

"1.Familiarizing yourself with your data: Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.

2. Generating initial codes: Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.

3. Searching for themes: Collating codes into potential themes, gathering all data relevant to each potential theme.

4. Reviewing themes: Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.

5. Defining and naming themes: Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.

6. Producing the report: The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis."

In this stage, we listened to recording interviews many times to be familiarize with it, generating codes, then gathering similar codes to searching for themes, after that reviewing the themes, and finally defining the themes.

3.8.2 Questionnaire analysis

Quantitative data generated from survey (questionnaire) analyzing by Structural Equation Modeling (PLS-SEM) software, Version 3.2.7, to check and explore the relationships between elements in the questionnaire.

To achieve the objectives and test the research hypotheses, we used Smart-PLS software, which includes two essential methodological elements should be considered as following (Hair et al., 2013; Hair et al., 2011).

3.8.2 .1. Assessment of the measurement model

Reflective measurement models were used and evaluated on the base of their internal consistency, the convergent validity of the measures related with the constructs and their discriminant validity, as used in previous literature and studies in GHRM. As recommended by Hair et al. (2011) and Hair et al. (2016), there are some rules of thumb for evaluating reflective measurement model aspects related to the evaluation of the convergent validity and discriminant validity test as following:

- Reliability test (Convergent validity): refers to extent that the items correlate positively with each other in the same construct.

✓ Internal consistency reliability: composite reliability (CR) should be more than 0.708 (in exploratory research, 0.60 to 0.70 is acceptable).

✓ Indicator reliability (item loading): the indicator's for outer loadings should be higher than 0.708.

✓ Convergent validity: the AVE should exceed 0.50.

• Validity test (Discriminant Validity test):

✓ Cross loadings: should be higher than all its cross loadings with other items.

✓ Variables correlations- The square root of the AVE (Fornell-Larcker criterion): should be higher than its highest correlation with any other construct.

• Rules of thumb for evaluating formative measurement model:

✓ Collinearity of indicators: Each indicator's tolerance (VIF) value should be higher than 0.20 (lower than 5).

✓ Examine each indicators outer weight and outer loading and use bootstrapping to estimate her significance.

3.8.2 .2. Assessment of the structural model

Assessment of the structural model conducted five testes as following (Hair et al., 2016; Hair et al., 2011):

✓ Coefficient of Determination (R^2): R² values of 0.75, 0.50, or 0.25 for endogenous latent variables can be described as substantial, moderate, or weak, respectively.

✓ Effect Size (*f²*): Guidelines for evaluating the results values of (*f*2) according to (Cohen, 1988), that the values of 0.02, 0.15, and 0.35,

considered as small, medium, and large effects respectively for the exogenous latent variables.

✓ Predictive Relevance (Q2): If Q^2 is positive (above zero), the model has predictive validity; if it is negative, the model considers does not have predictive validity (Tenenhaus, 1999).

✓ Path Coefficients (hypotheses test): Bootstrapping procedure is used to assess the path coefficients magnitude, where Bootstrapping define as" a resampling technique that draws a large number of subsamples from the original data (with replacement) and estimates models for each subsample" (Hair et al., 2016, p 201). The minimum number of bootstrap samples should be 5000, and the number of cases should be equal to the number of observations in the original sample. Critical t-values for a three-tailed test are 1.65 at a level of significance of 0.10, 1.96 at a level of significance of 0.05, and 2.58 at a level significance of 0.01 (Hair et al., 2013).

✓ Goodness-Of-Fit Index (GoF): not recommended to use in exploratory studies according to Hair et al. (2013).

3.9 Chapter summary

This chapter discussed the methodology of the study. Additionally, this chapter presented the research design, the target population and sample represented with justification of the choice, also explained the tools used based on the relevant literature review. Pilot study conducted to ensure the validity and reliability of the measurements. Finally, this chapter presents

the data collection procedures for qualitative and quantitative approach, and information about the statistical techniques used in the study.

Chapter Four
Data Analysis and Results

4.1 Chapter overview

This chapter presents the results of data analysis generated from mixed approach. Descriptive analysis results obtained through Structural Equation Modeling (PLS-SEM). The chapter starts by submitting key results after primary analysis of survey responses and screening of the data. After that, the results generated from a qualitative approach (interviews) were analysed using thematic analysis approach. Also assessment of the study model quality by PLS-SEM is presented by the reporting of the key findings from the evaluation of the measurement model and the structural model. The evaluation of the measurement model includes construct, convergent and discriminant validity, and for the structural model reliability analysis, predictive relevance of the model and effect size. Finally, discussion of the results.

4.2 Interviews analysis

An exploratory research is adopted to get more information about the research questions, and to be more familiar with GHRM practices in the healthcare sector. The initial step in a qualitative approach are conducting a semi-structured interviews with HR experts in the healthcare sector. Therefore, 14 semi- structure interviews were conducted with experts in the healthcare sector working in 11 organizations from many classifications like primary and secondary care centers from

many sectors (e. g. governmental, private, non-profit organization and military sector). The interviews include five general directors, two HR managers, four adminstrative directors, two quality managers and one expert with GHRM from the academic sector (see Table 4.1).

Table 4.1: Classification of organizations and their role in interviews.

No	Sector	Organization classification	Organization	Job position
1	Private	Secondary Care (Hospital)	Hospital A	General Director
2	Private	Secondary Care (Hospital)	Hospital B	Director of Administration
				HR manger
3	Nonprofit organizations	Primary care center		Director of Administration
4	Private	Secondary Care (Hospital)	Hospital C	HR manger
5	Nonprofit organizations	Secondary Care (Hospital)	Hospital D	General Director
				Director of Administration
6	Govermental	Secondary Care (Hospital)	Hospital E	Director of Administration
				Quality manager
7	Govermental	Secondary Care (Hospital)	Hospital F	Quality manager
8	Nonprofit organizations	Secondary Care (Hospital)	Hospital G	General Director
9	Govermental	Primary care center		General Director
10	Military	Primary care center		General Director
11	Academic			GHRM expert

The initial step of the interviews process starts with acknowledging that there is a critical need to recognize practices related to the role of HR department, which contribute in improving green culture from the perspective of employees with an experience in achieving environmental goals to be able to discover GHRM practices implemetiing in healthcare sector.

All interviews with respondents were recorded using a recording machine to analyze the interviews easily and avoid unbiased (Willis, 2015). The interviews are analyzed based on guidelines from thematic analysis approaches by Braun & Clarke (2006). The mainly focus was to find themes related of interesting features that reflect the current situation of green culture and EMS. Also to be more familiar with the role of HR department in developing green initiatives and their impacts on sustainability in healthcare sector. Table 4.2 summarizes the codes, and themes for interviews .

Table 4.2: Codes, and themes for interviews.

Codes	Topics discussed	Themes
Governmental Legislation	Separation of medical waste.	Environmental practices
Environmental issues	Reduce the effects of medical waste.	
System	Use electronic systems instead of paper.	
Government support	Use clean energy	
Reduce costs	Use electronic systems to reduce energy consumption.	
Development	Developing employees skills and knowledge.	HRM role
Benefits	Appraisal and Rewards	
Needs	Hiring	HRM Contribution in EMS
Awareness	Training	
Motivation	Rewards and Punishment	
Governmental legislation	Commitment to waste separation system	Environmental sustainability
Top management support	Energy conservation	
Preserving the environment	Supporting environmental activities	
Financial	Medical service, more than profit	Economic performance
Profit	Reduce the cost	
Social responsibility	Society and staff health	Social performance
Medical responsibility	Reduce infection	
Professional responsibility	Code of ethics of profession	
Medical responsibility	Antibiotic control policy.	

Six themes are emerged from conducting the semi structured interviews and analyzed as following:

4.2.1 Theme one: Environmental practices.

Environmental practices theme helps the researcher to identify the environmental practices that are applied in the healthcare sector. Most of the respondents mention that their healthcare organizations apply some green practices such as separation of medical waste, reduce the effects of medical waste, use electronic systems instead of paper, use clean energy, and use systems to reduce energy consumption. Most applicable practices were separation of medical waste, reduce the effects of medical waste, where the MOH committed all healthcare organizations to apply it by the law no. (10) for the year 2012, and there are a supervised from the MOH for its application. The using of electronic systems instead of paper is a policy implemented from the MOH in all of its facilities.

4.2.2 Theme two: HRM role.

All of the interviewees highlighted the role of HR department in development employees skills and knowledge, especially in terms of learning of medical waste, separationit, disposal mechanism, and incorporate these practices into appraisal and rewards system of the organization.

4.2.3 Theme three: HRM Contribution in EMS.

In this theme, all of the interviewees confirmed with the important role of human factors in developing and promoting green culture in healthcare organizations. The first step is hiring process and choosing employees with sufficient knowledge in medical waste. Moreover, training employees about the mechanism of separation the medical waste which will increase the awareness of employees. Finally, the rewards and punishment system in general motivating the employees to engage with organizations policy of medical waste.

4.2.4 Theme four: Environmental sustainability.

The interviewers consider the environmental sustainability are important issues in healthcare sector, and they confirmed commitment with waste separation system and disposal it with cooperation of relevant authorities like municipalities will leverage environmental sustainability culture and reduce the negative effects on the environment. Notably, energy conservation is a priority for all of the interviewers, and mentioned that they use different ways to save energy like using clean energy, electronic systems instead of paper and systems to reduce using of energy without need.

4.2.5 Theme five: Economic performance.

In terms of economic sustainability it's important to mention that the vast majority of the health sector follows MOH and nonprofit organizations, and it aims to provide medical service for several segments of society without any profit and in some sector like MMS they provide medical service for their employees and their families without any cost. In contrast, the government sector is exempted from medical waste fees and other government fees, thus will reducing costs in general.

4.2.6 Theme six: Social performance.

All of the interviewees emphasize on the humanitarian role of healthcare sector organizations, which is represented in keeping the society and staff healthy. Moreover, they ensured that the ultimate goal of this sector is not just to provide medical service with low cost, but also with high quality and commitment to environmental conservation standards. As well as keeping the society from infection and control it, and commitment from all employees from different levels with code of ethics of the profession Likewise, keeping the health of the community from using antibiotics and not expose them to high-level of antibiotics, also commitment with antibiotic control policy.

All notes from the interviews were taken into account and used it to develop the finale questionnaire, whether in formulation of items or added or deleted some items.

4.3 Analysis of survey response

4.3.1 Response rates

After distribution of the questions and screening the data collected, the final data set of 69 respondents (N=77), where the respondents rate was 89.6%. As summarized in Table (4.3), the respondents in the present study included 68 percent (n=47) males while 32 percent (n=22) females. In terms of organization classification, more than 59 percent (n=41) of the respondents are secondary care centers (Hospitals), about 31 percent (n=21) of the respondents are triple care centers (Rehabilitation centers) and the other laboratories or blood bank with 4 and 6 percent (n=3, n=4) respectively. It is also obvious that the respondents have been employed at the local government with 39 percent (n=27) of the sample. Otherwise, about 16 percent (n=11) worked at military sector, and the percentage of the private sector and non-profit organizations were 23 and 22 percent (n=16, n=15), respectively. Most of the respondents in this study, in terms of organizations size (number of employees) about 36 and 23 percent (n= 25,16) are with number of employees 250 above and 100-249 employees, while 12 percent (n =8) with 50-99 employees, and 22 percent (n=15) are from 20-49 employees.

This study includes all heads of department who are participated in HR and EMS process, where about 22 percent (n=15) General manager/CEO, 25 percent (n=17) are Human Resources Manager, also 40 percent (n=28) are director of Administration and finally 13 percent

(n=9) are Quality Manager. Out of 69 respondents, about 7 percent (n=5) of the respondents have less than two years in HR and EMS experience, 7 percent have 2-5 years experience, and 13 percent of the respondents have 6-10 years experience, a majority of the respondents with 64 percent have more than 15 experience. In terms of educational level only 7 percent (n=5) have a diploma graduate, 52 percent (n=36) have a bachelor degree, 36 percent (n=36) have master's degree, and 4 percent (n=3) have Ph.D degree.

It is also obvious that most of the respondents have been located in Ramallah, Nablus and Bethlehem with 19, 16,16 percent of the sample , and the lowest level for Qalqilya, Salfit, Tubas, and Jericho and the Jordan Valley. The most of the respondents have been agreed on the role of HR in support EMS with 86 percent (n=59) of the sample.

Table 4.3: Summary of respondents' profiles.

Items	Options	N	Percentage (%)
Gender	Male	47	68%
	Female	22	32%
	Total	**69**	**100%**
Classification the organization	Primary care center	21	31%
	Secondary care center (hospitals)	41	59%
	Triple care center (rehabilitation centers)	3	4%
	Laboratories or blood bank	4	6%
	Total	**69**	**100%**
The sector	Governmental	27	39%
	Military	11	16%
	Private sector	16	23%
	Non-profit organizations	14	20%
	UNRWA	1	2%
	Total	**69**	**100%**
Enterprise size	1-9	2	3%
	10-19	3	4%
	20-49	15	22%
	50-99	8	12%
	100- 249	16	23%
	250 above	25	36%
	Total	**69**	**100%**
Respondents' site	Ramallah	13	19%
	Nablus	11	16%
	Jerusalem	4	6%
	Jenin	8	12%
	Bethlehem	11	16%
	Qalqilya	3	4%
	Salfit	2	3%
	Tubas	3	4%
	Hebron	7	10%
	Jericho and the Jordan Valley	3	4 %

	Tulkarm	4	6%
	Total	**69**	**100%**
Respondents' position	General manager/CEO	15	22%
	Human resources manager	17	25%
	Director of administration	28	40%
	Quality manager	9	13%
	Total	**69**	**100%**
Respondents' educational level	Diploma	5	7 %
	Bachelor	36	52%
	Master's degree	25	37%
	Ph.D.	3	4%
	Total	**69**	**100%**
Respondents experience	Less than two years	5	7%
	2-5 years	5	7%
	6-10 years	9	13%
	11-15 years	7	10%
	15 years and over	43	63%
	Total	**69**	**100%**
Environmental management	Currently exist	37	54%
	There are currently no implementation plans	8	12%
	Plan of implementation within 12 months	3	4%
	Plan of implementation in more than 12 months	1	1%
	Not sure	4	6%
	Some practices exist through activities in the institution	16	23%
	Total	**69**	**100%**
Role of HR	Yes	59	86%
	No	10	14%
	Total	**69**	**100%**

4.3.2. Descriptive analysis

A descriptive analysis was being conducted to describe the general situation and degree of implementation GHRM bundle (Green hiring, Green training and involvement, Green performance management and compensation) and the dimensions of sustainability (environmental performance, economic performance and social performance) in the WB context. As can be seen in Table 4.4, the mean and standard deviation of the structure were reported. For making easy of interpretation of the Likert scale five- point that used in the current study, we used five equal sized categories as follows: scores less than 1 were considered very low; scores from 1-2 were considered low, scores between 2-3 were considered moderate, and those in between 3-4 were considered high, and those more than 4 were considered very high.

Table 4.4: Level of implementation.

	Mean	Standard Deviation	Level of implementation
Green hiring	2.4806	1.1018	Moderate
Green training and involvement	2.4331	1.1878	Moderate
Green performance management and compensation	2.3712	1.1931	Moderate
Environmental performance	3.5506	1.0695	High
Economic performance.	2.7610	1.000	Moderate
Social performance	3.9647	0.9021	High
Total for GHRM	2.4283	1.1609	Moderate
Total for sustainable performance	3.4254	0.9905	High

The results revealed that GHRM and sustainability have listed 2.4283 and 3.4254 values respectively of implementation level, which reflects a moderate level of applied of GHRM practices also high level of applied of sustainable performance in the Palestinain context. All of practices were chosen in order to assess the extent of the organization used HR practices to encourage and promote green culture in healthcare sector. Table 2, in Appendix C, presents the descriptive anlaysis of all items used in surveying.

These results show that the highest level of GHRM practices is listed for green hiring, and green training and involvement, otherwise the lowest level of green performance management and compensation. In terms of sustainability the most implementation practices for social performance and followed it by environmental performance, while the lower level was for economic performance (see Table 2 Appendix C).

4.4 Questionnaires analysis

In order to validate our measures and test our hypotheses (formulated in chapter two), we used the quantitative data collected from the questionnaires for this purpose. We used the Partial Least Squares (PLS) approach using the Smart- PLS 3.2.7 software which is one of the second generation tools of the multivariate analysis includes the implementation of statistical methods that simultaneously analyze various variables (Hair et al., 2016). PLS-SEM in general aims to maximize the explanation of the variance of the dependent latent structures (Hair et al., 2011).

The structural equation model (Smart PLS) with latent constructs has two main methodological elements. The first element is the measurement model or the outer model in the PLS-SEM software. The measurement models are a   models estimate the   relationships   between   each latent variable and its associated indicators. The second element of the structural equation model is the structural model or the inner model in the PLS-SEM   software.   The   structural   model   describes the relationships between the latent variables (paths). Noteworthy, we should distinguish between endogenous and exogenous variables. The concept exogenous variables refer to the variables that only work as independent variables in a structural model. While the endogenous variables are being variables act as dependent variables in a structural model (Hair et al., 2016). Figure 4.1 clarifies these two stages in Smart- PLS software.
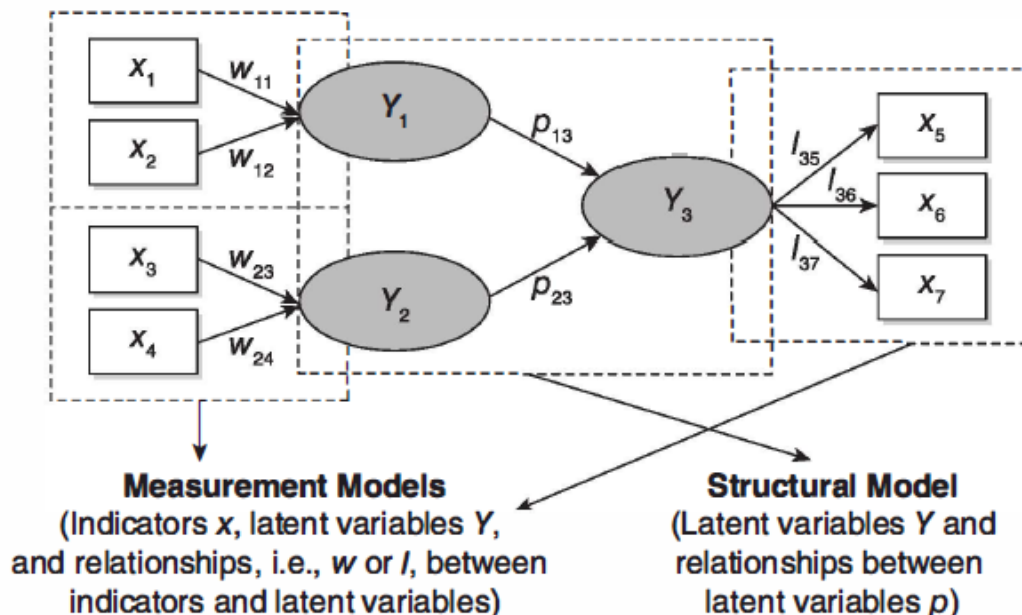
Figure 4.1: Measurement model and structural model. Source: (Hair et al., 2016, p.76)

The PLS-SEM handles both reflective and formative measurement models. The reflective measurement models represent the effects of an underlying variable, therefore it's symbolisms as single headed arrows pointing from the latent variables to their indicators (measures). While the formative measurement models are the measurement model in which the indicators generate the construct, and arrows point from the indicators (measures) to the variable (Hair et al., 2016).

In this study, a reflective model used for dimensions of GHRM bundle practices (GH, GTI, GPC), a formative model for GHRM bundle, otherwise we used a reflective model for three components of sustainable performance (EP, Ec.P, SP), as recommended in previous literature and studies used in establishing the questionnaire. The model of the study included 39 reflective measurement items for six latent variables, including three independent variables (GH, GTI, GPC) and three dependent variables (EP, Ec.P, SP), which constitute 3 relationships (3 hypotheses) between them based on the hypotheses proposed study. Consequently, analyzing the data using Smart- PLS software includes two essential methodological elements should be considered the assessment of measurement models and structural models (Hair et al., 2013; Hair et al., 2011).

4.4.1. Assessment of mesurement models

The systematic implementation of these criteria contains two-step to enable the researcher to assess the validity and reliability of the

construct measures.　　　 Figure　　　 4.2 shows the process to　　　 evaluate the measurement model in the study.
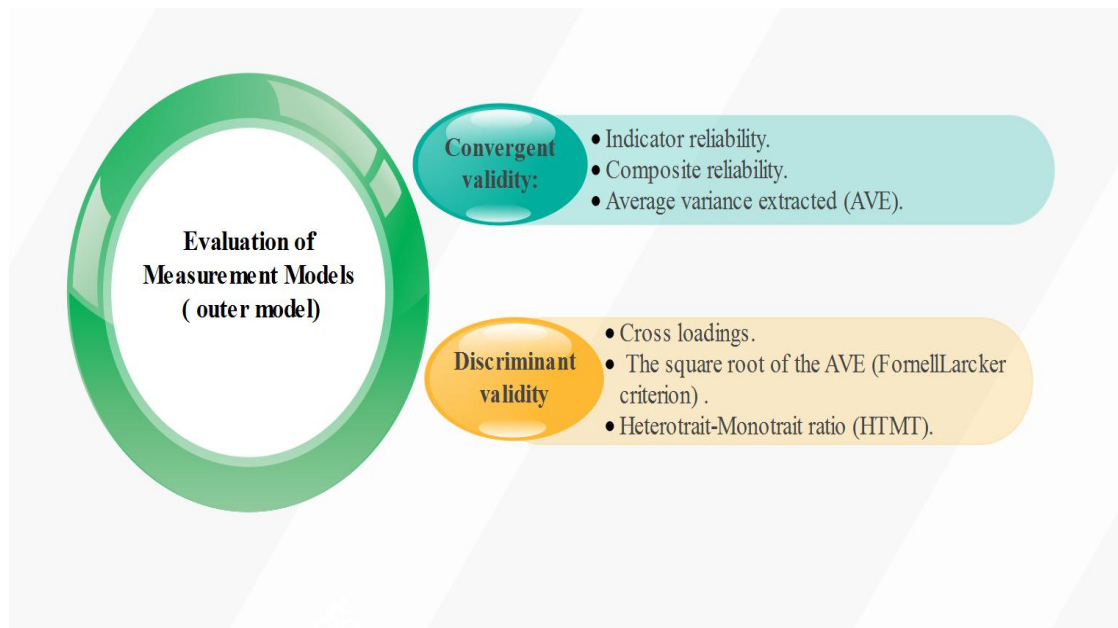
Figure 4.2: The flow chart of the measurement model. Source: (Hair et al., 2013).

As we mentiond above, this step is conducted to evaluate the validity and reliability of the data collected. This model includes five steps to establish this purpose as following:

4.2.1.1 Convergent Validity

Convergent Validity refers to the extent　 that measure correlates positively with alternative measures of the same variable or the level to which many items measuring the same variable (Ramayah et al., 2011).

Assessment of convergent validity　 (reflective measurement models) includes three tests as suggested by Hair et al. (2011), and encourage the researcher to utilize the factor loadings, composite reliability (CR) to estimate internal consistency, and average variance extracted (AVE). All

the items loadings agree with the recommended value of 0.70 and allowed to be above 0.60 in exploratory studies (Hair et al., 2016), also the CR should be greater than 0.70 as suggested by Hair et al. (2011). On a final note, the (AVE) should be higher than 0.50 in order to justify the utilize of the construct (Hair et al., 2011).

Constructs for GHRM practices and components of sustainable performance (EP, Ec.P, SP). All the relevant tests related items loading, composite reliability (CR), and average variance extracted (AVE) confirm the rules of the convergent validity of the reflective model. In this study, all the CR values ranged from 0.86 to 0.94, as shown in Table 4.5 , furthermore the AVEs ranged from 0.53 to 0.80, which indicating good convergent validity

Table 4.5: Measurement properties of reflective constructs.

Reflective constructs	Construct items	Items loading	CR	AVE	
Green hiring (GH)	Company prefers to hire employees that have environmental knowledge in the selection process.	**0.78**	**0.93**	**0.71**	(Nejati et al., 2017)(Siyamb alapitiya et al., 2018) (Yusliza et al., 2017)
	Applicants for jobs in the company are subject to interviews that include environmental knowledge.	**0.84**			(Nejati et al., 2017)
	In addition to other criteria, employees are selected based on environmental standards.	**0.91**			(Longoni et al., 2016)
	Organizations' use environmental image and policies to attract job seekers	**0.86**			(Siyambalapiti ya et al., 2018) (Yusliza et al., 2017)

	The job description includes the job's environmental aspects	**0.84**			(Siyambalapitiya et al., 2018)
	The recruitment message includes organizations' environmental values in job advertisement	**0.83**			(Siyambalapitiya et al., 2018)
Green training and involvement	Environmental training programs are provided to large-scale individuals in the organization.	**0.89**	**0.94**	**0.80**	(Nejati et al., 2017)
	In general, staff is satisfied with the organization's green training.	**0.89**			(Nejati et al., 2017)
	Topics offered through green training are modern and suitable for the institution's activities.	**0.89**			(Nejati et al., 2017)
	The foundation provides formal environmental training programs for employees to increase their ability to promote them.	**0.86**			(Nejati et al., 2017)
	Environmental training is a priority and an important investment.	**0.89**			(Yusliza et al., 2017)
	Analyses green training need to familiarize employees with environmental practices	**0.93**			(Siyambalapitiya et al., 2018)
	Green training and development are evaluated to understand employees' level of green knowledge and awareness	**0.90**			(Siyambalapitiya et al., 2018) (Al Kerdawy et al., 2018)
	Green training and development are integrated with organizations' environmental objectives	**0.91**			(Siyambalapitiya et al., 2018)
Green performance management and compensation	Every manger and employee has specific environmental goals	**0.77**	**0.95**	**0.70**	(Nejati et al., 2017) (Longoni et al., 2016) (Yusliza et al., 2017)

	Employees are rewarded for making suggestions for improvement on environmental programs	**0.85**			(Nejati et al., 2017) (Al Kerdawy et al., 2018) (Yusliza et al., 2017)
	Employees who have achieved or exceeded the objectives of the environmental institution are rewarded with non-cash equivalents or other cash prizes.	**0.86**			(Siyambalapiti ya et al., 2018) (Yusliza et al., 2017)
	Section managers reward staff in their departments when they improve environmental programs.	**0.87**			(Nejati et al., 2017)
	Environmental performance is recognized publicly.	**0.86**			(Nejati et al., 2017) (Longoni et al., 2016) (Yusliza et al., 2017)
	The achievement of environmental objectives is used as one of the criteria in assessing employee performance.	**0.91**			(Nejati et al., 2017) (Longoni et al., 2016)
	There are adequate assessments of staff performance after attending courses on environmental topics.	**0.89**			(Nejati et al., 2017) Siyambalapiti ya et al., 2018)
	Employees are punished for non-compliance with environmental standards in the organization.	**0.64**			Interviews
Environment al Performance	Reduce total direct and indirect toxic emissions	**0.69**	**0.86**	**0.53**	(Longoni et al., 2016) (Paillé et al., 2014) (Al Kerdawy et al., 2018)
	Increase the volume of recycled materials and reduce waste.	**0.61**			(Longoni et al., 2016) Rawashdeh , (2018) (Al Kerdawy et al., 2018)

	Commitment to the system of separating medical waste from the public sewage system.	**0.62**			Interviews
	Increase the rate of purchase of environmentally friendly goods (e.g., purchase of environmentally friendly products and medicines).	**0.81**			(Longoni et al., 2016) (Al Kerdawy et al., 2018)
	Increase activities that protect our natural environment such as the presence of green areas in the institution.	**0.75**			(Al Kerdawy et al., 2018)
	Reduced the risk of environmental accidents such as medical waste leakage, poisoning or radiation emissions.	**0.82**			(Paillé et al., 2014)
Economic performance.	Growth in the organization's profits in general due to the reduction of energy consumption and materials.	**0.91**	**0.93**	**0.77**	(Longoni et al., 2016)
	Rise in the market share of the enterprise and improve the reputation of the organization.	**0.88**			(Longoni et al., 2016); (Rawashdeh , 2018)
	Reduce the cost of energy use	**0.88**			(Zhu et al., 2005) (Rawashdeh , 2018);(Zaid et al., 2018)
	Reduce processing fees and waste disposal	**0.84**			(Zhu et al., 2005); (Zaid et al., 2018)
Social Performance	Increase attention in the rules of the health and safety of employees, especially when using hazardous materials and radiation.	**0.84**	**0.93**	**0.65**	(Abdullah et al.,2015) (Zaid et al., 2018) (Al Kerdawy et al., 2018)
	Improving community health and safety ،and infection control.	**0.83**			(Abdullah et al.,2015)

	Developing economic activities in the community and providing more job opportunities.	**0.73**			(Zaid et al., 2018)
	Reducing the negative impact of the institution's waste on the community.	**0.82**			(Abdullah et al.,2015)
	Improving the quality of service provided, and commitment to the code of ethics.	**0.85**			(Rawashdeh , 2018)
	develop and design better service and participation of staff initiatives in management decisions	**0.86**			(Rawashdeh , 2018)(Al Kerdawy et al., 2018)
	Increased commitment to professional ethics, infection control and antibiotic control policy.	**0.72**			Interviews

We also listed the values of Cronbach's alpha and CR of all constructs used in the study. It is obvious that all constructs exceeded the recommended value of 0.70. Hence, the reliability of the constructs was confirmed (see Table 4.6).

Table 4.6: Cronbach's alpha and composite reliabilities of constructs.

	Number of items	**Cronbach's Alpha**	**Composite Reliability**
GH	6	0.918	0.936
GPC	8	0.939	0.950
GTI	8	0.966	0.941
EP	6	0.812	0.862
Ec.P	4	0.902	0.932
SP	7	0.912	0.930

4.4.1.2 Discriminant validity

Discriminant validity refers to the degree that construct is different from other constructs, by examining the correlations between constructs, also how many indicators represent only one construct. For evaluation discriminant validity two criteria have been proposed. The first one is by examining the **cross loadings** of the indicators. Where the indicators of outer loading for the associated construct should be higher than all of its loadings on other constructs (see Table 4.7).

Table (4.7): Discriminant validity of the measurement model – Cross Loadings.

	EP	Ec.P	GH	GPC	GTI	SP
EP-1	0.690	0.382	0.164	0.275	0.275	0.515
EP-2	0.606	0.399	0.128	0.196	0.213	0.242
EP-3	0.609	0.247	0.236	0.207	0.215	0.536
EP-4	0.802	0.378	0.398	0.417	0.455	0.427
EP-5	0.749	0.430	0.300	0.369	0.438	0.507
EP-6	0.811	0.388	0.230	0.344	0.310	0.717
Ec.P-1	0.435	0.915	0.285	0.343	0.363	0.309
Ec.P-2	0.416	0.884	0.393	0.389	0.418	0.410
Ec.P-3	0.515	0.880	0.276	0.350	0.366	0.472
Ec.P-4	0.456	0.838	0.373	0.355	0.331	0.371
GH-1	0.194	0.292	0.779	0.531	0.569	0.160
GH-2	0.187	0.250	0.837	0.592	0.621	0.208
GH-3	0.322	0.324	0.907	0.649	0.692	0.295
GH-4	0.490	0.463	0.863	0.651	0.735	0.376
GH-5	0.315	0.344	0.837	0.683	0.726	0.203
GH-6	0.300	0.237	0.826	0.591	0.700	0.266
GPC-1	0.359	0.251	0.704	0.777	0.723	0.231
GPC-2	0.420	0.313	0.724	0.853	0.726	0.348
GPC-3	0.399	0.353	0.511	0.864	0.566	0.228
GPC-4	0.468	0.346	0.554	0.877	0.608	0.314
GPC-5	0.287	0.267	0.564	0.867	0.581	0.244
GPC-6	0.309	0.396	0.652	0.918	0.677	0.258
GPC-7	0.330	0.396	0.670	0.895	0.622	0.246

GPC-8	0.427	0.457	0.515	0.637	0.527	0.378
GTI-1	0.434	0.406	0.658	0.599	0.887	0.270
GTI-2	0.447	0.370	0.643	0.625	0.893	0.326
GTI-3	0.387	0.357	0.722	0.621	0.892	0.261
GTI-4	0.387	0.343	0.725	0.629	0.862	0.337
GTI-5	0.378	0.356	0.753	0.755	0.891	0.294
GTI-6	0.476	0.414	0.800	0.761	0.933	0.389
GTI-7	0.445	0.402	0.763	0.727	0.909	0.364
GTI-8	0.436	0.383	0.693	0.678	0.912	0.357
SP-1	0.529	0.349	0.202	0.264	0.237	0.836
SP-2	0.491	0.252	0.199	0.204	0.290	0.833
SP-3	0.541	0.462	0.335	0.329	0.319	0.731
SP-4	0.539	0.281	0.243	0.241	0.334	0.821
SP-5	0.645	0.362	0.223	0.276	0.306	0.847
SP-6	0.584	0.422	0.291	0.335	0.325	0.861
SP-7	0.525	0.350	0.148	0.162	0.189	0.722

Additionally, completing the assessment of discriminant validity, we should assess the formative model of the GHRM bundle. To verify the formative model test each indicator's weight and loading use bootstrapping to assess their significance. Critical t-values for a two-tailed test is 1.65 (significance level = 10 percent), 1.96 (significance level = 5 percent), and 2.58 (significance level = 1 percent). If all the indicator weights are significant, that means there is empirical support to all the indicators.

Similarly, assess the collinearity of indicators by check the Variance Inflation Factor (VIF), which related to the tolerance value and quantifies the severity of collinearity between the indicators in a formative measurement model. Table 4.8 shows the weight of all the reflective factors from the GHRM bundle. As offered in this table, the factor (VIF) for all factors was lower than the value of five (Hair et al., 2016), showing that multicollinearity criterion was acceptable in the research model.

Table 4.8: Formative construct assessment.

Second-order construct	First-order construct	Weight	t-value	VIF
	GH	0.21	8.72	3.16
	GTI	0.145	11.56	3.37
GHRM bundle	GPC	0.14	13.73	2.59

The Fornell-Larcker (1981) criterion is a second test for discriminant validity, where it compares the square root of the (AVE) values with the latent variable correlations, the square root of each construct's (AVE) should be exceed than its highest correlation with another construct. Table 4.9 displays the results of applied Fornell-Larcker criterion with our model, where the results confirm this criterion.

Table (4.9): Discriminant validity of the measurement model –Fornell-Larcker criterion.

Constructs	Ec.P	EP	GH	GPC	GTI	SP
Ec.P	**0.880**					
EP	0.516	**0.716**				
GH	0.381	0.364	**0.842**			
GPC	0.410	0.444	0.734	**0.840**		
GTI	0.423	0.472	0.803	0.754	**0.898**	
SP	0.445	0.684	0.302	0.332	0.363	**0.809**

Moreover, as proposed by Henseler et al. (2015), discriminant validity can be assessed using the heterotrait-monotrait ratio (HTMT) of the correlations, which is the average of the heterotrait-hetero method correlations (i.e., the correlations of indicators across constructs measuring different phenomena), relative to the average of the monotrait-hetero method correlations (i.e., the correlations of indicators within the same construct). Each HTMT ratio should be less than 0.85. We listed all of results from (HTMT) test in Table 4.10; all of results are less than a

threshold of 0.85 which demonstrates a healthy of discriminant validity property.

Table 4.10: Heterotrait-Monotrait ratio (HTMT).

	Ec.P	EP	GH	GPC	GTI	SP
Ec.P						
EP	0.606					
GH	0.411	0.385				
GPC	0.450	0.487	0.786			
GTI	0.450	0.499	0.848	0.787		
SP	0.481	0.792	0.313	0.350	0.375	

After establishing all the results from the assessment of the measurement model of the study Figure 4.3 displays the model of research study we conducted.
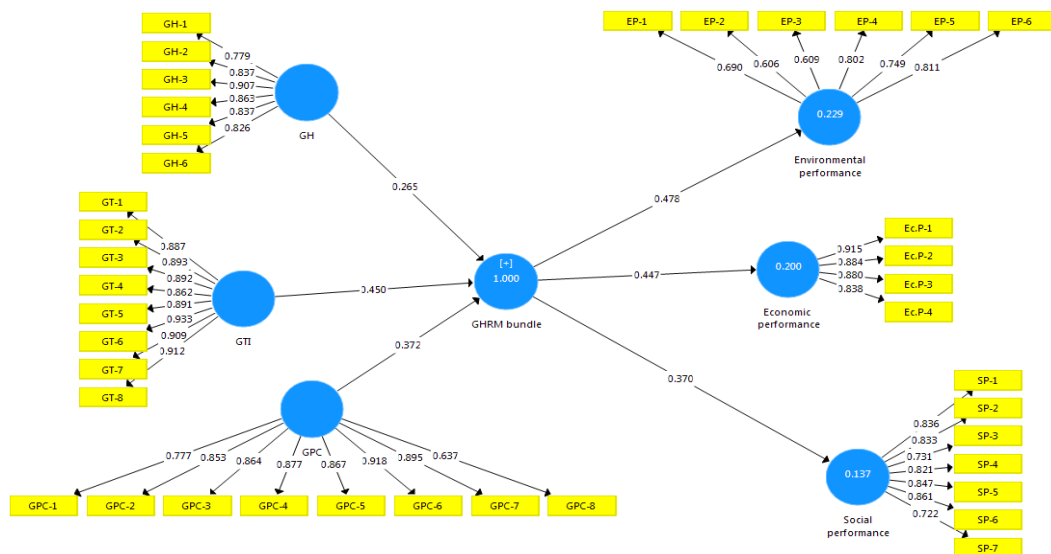

Figure 4.3: The measurement model.

4.4.2. Assessment of structural models.

Once we have assessed the reliability and validity of measurement model, the next step in the PLS is to analyze and assess the structural

model results (inner model). Assessment of the structural model results authorizes you to decide how well empirical data from the study supports the concept / theory, therefore to determine if your concept / theory has been empirically approved (Hair et al., 2011). For this purpose, four different tests are conducted to an assessment of the structural model as follows:

- Coefficient of Determination (R^2 Value).

- Effect Size (f^2).

- Blindfolding and Predictive Relevance ($Q^{2)}$).

- Path Coefficients –Hypotheses test.

- Goodness –of- fit index (GoF)

4.4.2.1 Coefficient of Determination (R2 Value).

A commonly criterion to assess the structural model is the coefficient of determination (R^2). This coefficient helps a researcher to predict accuracy of the study model, also calculated the squared correlation between a specific endogenous variable actual and predicted construct. The coefficient R^2 amount ranges from zero to one, where the high levels of indicating refer to high levels of predictive accuracy.

However, it is hard to determine rules of thumb for acceptable R^2 values, since it depends on the complexity of the research model and the research purposes. Thus, we can consider R² values of 0.75, 0.50, or 0.25

for endogenous latent variables can be described as high, moderate, or weak respectively (Hair et al., 2011). Table 4.11 shows medium R^2 of environmental and economic with R^2 values of 0.529 and 0.508 respectively, and weak R^2 of social construct with R^2 values 0.460.

4.4.2.2 The Effect Size (ƒ2).

In addition to estimating R^2 values for endogenous variables, it is important also to evaluate the coefficient of (ƒ2) effect size. The effect sizes of the effect of specific latent variables on the dependent latent variables are determined by f^2 analyses. This measure enables the researcher to analyze the link of structural model in explaining chosen endogenous latent variables. More specifically, the researcher can analyze how much a predictor structure participants to the R^2 value of an objective structure in the structural model. The effect sizes of the effect of specific latent variables on the dependent latent variables are determined by f^2 analysis (Hair et al., 2016). Where the effect size ƒ2can be calculated using the formula:

$$ƒ2 = (R^2\text{included} - R^2\text{excluded}) / (1- R^2\text{included})$$

As recommended by Cohen (1988) the f^2 values of 0.02, 0.15 and 0.35, respectively, were used to explicate small, medium and large effect sizes of the predictive variables. Table 4.11 shows medium effect size of environmental, economic and social construct with ƒ2 values of 0.301, 0.251 and 0.160, respectively.

4.4.2.3 The predictive relevance (Q2 value).

To assess the magnitude of the (R^2) values as a standard of predictive accuracy, the researchers also should be examined Stone-Geisser's Q^2 value, which is a criterion or a director of the model predictive relevance. Notably the results of Q^2 values should be larger than zero as an indication that the exogenous structure have predictive relevance to the endogenous structure under consideration based on the recommendation of Hair et al. (2011). Table 4.11 shows that the obtained cross-validated redundancy values for environmental, economic and social satisfaction were listed to be 0.194, 0.243 and 0.171, respectively. These results support the assumption that the model has a sufficient predictive quality. All of the tests' results from conducting the Stone-Geisser's Q^2 (all exceeded the threshold value of 0), R^2, and relative effect sizes (f^2) of the GHRM bundle constructs were sufficient prediction of the study model.

Table 4.11: R2, Communality, and Redundancy.

Construct	R^2 adj	Q^2	f^2 EP	f^2 Ec.P	f^2 SP
GHRM bundle	---------	0.597	0.301	0.251	0.160
EP	0.529	0.194	------	------	------
Ec.P	0.508	0.243	------	------	------
SP	0.460	0.171	------	------	------

4.4.2.4 Path hoefficients –hypotheses test.

The final step was to test the hypothesized relationships by using the path coefficients test, which is used to estimate the path relationships for the variables in the structural model, where it be similar to standardized beta **(β)** in a regression analysis. Although path coefficients are very

significant in PLS analysis, Hair et al. (2011) approved that when paths are non-significant or reveal signs that are against the hypothesized direction, the prior hypothesis should be rejected. Furthermore, significant paths showing the hypothesized direction support the proposed causal relationship empirically.

To test the hypotheses formulated (direct effects) in this study, as proposed by Hair et al. (2016), we are running the bootstrapping option. The outcomes from this procedure are presented in Table 4.12 and Figure 4.4. The Table includes the numerical data related to the beta, Std. Error, corresponding t-values and P-value that are critical based on the two-tailed t-test.

Table 4.12: Direct relations results.

Path	Hyp.	(β)	Std. Error	T- value	P-value	Decision
GHRM bundle →EP	**H1**	0.478	0.110	5.738	**0.00**	Supported
GHRM bundle →Ec.P	**H2**	0.446	0.089	4.198	**0.00**	Supported
GHRM bundle →SP	**H3**	0.372	0.107	3.848	**0.00**	Supported

As presented in Table 4.12, there is a positive relationship between GHRM bundle practices and sustainable performance with its three components, EP, Ec.P, and SP, hence supporting H1, H2, and H3, where the hypothesized relationships below were tested:

H1: Result revealed that the proposed relationship between environmental performance and GHRM bundle was highly significant (β = 0.478, t = 5.796, P-value =0.00) and hence the hypothesis was supported.

H2: Result revealed that the proposed relationship between economic performance and GHRM bundle was highly significant (β = 0.446, t = 4.201, P-value =0.00) and hence the hypothesis was supported.

H3: Result revealed that the proposed relationship between social performance and GHRM bundle was highly significant (β = 0.372, t = 3.795, P-value =0.00) and hence the hypothesis was supported.
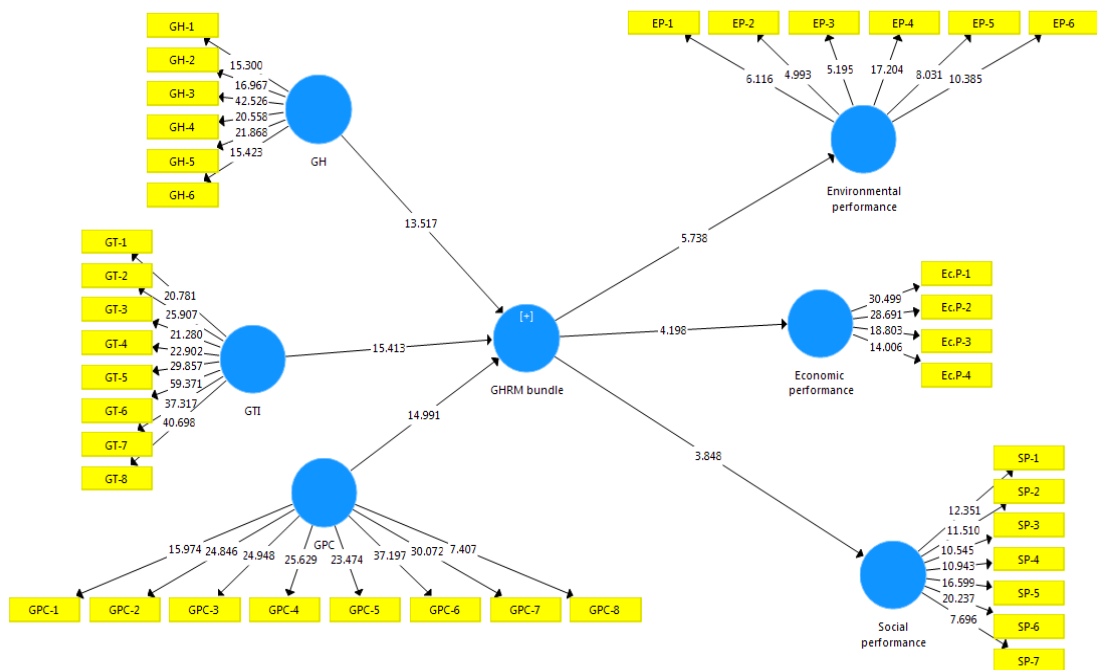
Figure (4.4): PLS Bootstrapping (t-values) for the Study Model.

4.5 Discussion.

This study aims to explore the impact of GHRM practices in relation to components of sustainable performance (EP, E.cP and SP) in Palestinian healthcare organizations. GHRM practices literature reviews and field data from managers in several areas contribute in green culture among employees in Palestinian health organizations, it was possible to abstract

three mains GHRM bundle. "Green hiring", "green training and involvement", and "green performance management and compensation" were proposed.

4.5.1 Discussion of GHRM practices.

This research assesses the level of implemented GHRM practices in Palestinian healthcare organizations, which help in promoting a green culture at this important service sector. Findings revealed that healthcare organizations implement GHRM practices moderately among their employees, which is similar to the results from other studies in manufacturing sector in term of developing country context (e.g. Masri & Jaaron, 2017; Rewashed, 2018; Zaid et al., 2018a; Zaid et al., 2018 b; Mishra et al., 2014; Mishra, 2017). Therefore, it means that the healthcare organizations still did not take the full benefits of adopting these environmental practices. The results showed that the implementation of the GHRM bundle was at a moderate level; also that there is a statistically positive and significant association between GHRM bundle and sustainable performance. Where, the most influential green practice was "green hiring", followed by "green training and involvement" whereas the least influential green practice was "Green performance management and compensation". Through reviewing the literature, a few organizations have been using environmental standard in their hiring process (Jabbour, 2011; Jabbour, 2013). Where the results from Teixeira et al. (2012) suggested that green hiring as an important tool for attracting already qualified competencies and environmental skilled employees in organizations; as

being more effective and lower cost than formal training courses about environmental issues. In the case of hiring, currently, not all organizations in healthcare sector are using the online portals and social media for hiring process, where shifted to web-based hiring activity can give employers an opportunity to provide more information's about their EMS activities and practices that traditional media can't provide it (Ehnert, 2009).

Furthermore, considering green standards in the job description to access green skills and personality in the recruitment and selection process is still not applicable in this sector. Thus, the job description should state and clarify the environmental tasks related to the job, also the skills and knowledge of candidates required for doing the environmental activities (Mandip, 2012). Notably, that the HR managers can improve environmental culture in their organizations by establishing a workforce that is interested in environmental issues which can improve their environmental performance (Arulrajah et al., 2015).

Though the environmental culture requires governmental and top-management's support of healthcare sector, which is considered as a significant factor to apply such practices, the results represent a lack of commitment from the top management's outlook toward this issue, and focus more on providing medical service rather environmental practices. These policies should be alongside with a strategic approach from top management for reward system to upgrade environmental system goals in organizations (Govindarajulu & Daily, 2004; Ji et al., 2012; Ramus, 2002).

The "Green training and involvement" was the second most used GHRM practice at healthcare organizations also with moderate level of implementation.

A probable reason for this result that most of healthcare organizations depend on informal means and training to raising environmental awareness among their employees in terms of environmental issues, where this way is less expensive than formal environmental training (Mishra, 2017), due to economic crisis influences the country. Barr (2003) mentioned irrespective of the cost, it is important for organizations to provide their staff with formal training programs and education to boost pro-environmental practices and behavior. In addition to assessment and feedback for formal training and education, training programs also should be documented. Although, "Green training and involvement" has considered as the most important practice for environmental management organizations (Jabbour et al., 2013a; Daily, 2012; Jabbour, 2013), this practice needs more attention from governmental and top management support to encourage environmental practices at healthcare sector.

Based on the fact, that the training programs require resources, both administrative and financial to implement efficiently, it is probably that healthcare organizations perceive green training and involvement practices as expensive. Therefore, this indicates that Palestinian healthcare organizations should be investing more in green training programs rather than focusing on medical training, after that organizations will be able to develop their level of GHRM practices

implementation from a moderate level and transition to a high level. Similar findings were noticed in the manufacturing sector in Palestine (Masri & Jaaron, 2017). Moreover, it is obvious that without improving green training and involvement of staff, it may be hard to achieve high levels of sustainable performance in the future (Daily, 2012).

The results in terms of the "Green performance management and compensation" revealed that it was the lowest level of implementation from the GHRM bundle. Several studies emphasized that the rewards and compensation can be a useful way for implementing GHRM practices in organizations (Daily & Huang, 2001; Jackson et al., 2011; Govindarajulu & Daily, 2004). The findings present that "Green performance management and compensation" do not use widely within healthcare organizations to support pro-environmental culture of employees. Only those aspects related to production and medical services are evaluated. There is no clear point taking into account about green practices, which are evaluated in the appraisal system. The "green performance management and compensation" were not used widely to promote the environmental behavior. Another reason for the insufficient utilization of a reward system is using the reward system to encouragement that staff for different reasons not related to environmental goals, therefore, it is difficult to apply a reward system meets the needs of employees.. This result is considered scarce in the literature since it exists only in companies and organizations with high level of environmental performance (Fernandez et al., 2003).

Indicators of green performance spread a comprehensive view of the healthcare sector environmental performance, and provide a method to collect, envisage and prioritize refinement efforts, which reflected in promoting environmental practices in this sector. Based on this fact, it is probably not surprising that "green performance management and compensation" are not used to motivate environmental practices the extent as other methods used to promote productivity and quality of medical service provided, especially in healthcare organizations with huge numbers of employees.

The top management should motivate their employees initiated through offering differentiated rewards and benefits for those willing to promote an environmental system in the organization, which confirmed the result from (Malik et al., 2017). Finally, it was also suggested that the performance management indicator for supervisory employees to encourage involvement and participation and flow of ideas and linked to performance management need to be facilitated in a hierarchical organization structure in emerging economy context (Malik et al., 2017). Despite that several empirical studies have highlighted the important role of GHRM practices such as recruitment and selection, training, rewards and appraisal, in the greening of the organizations and improving EMS (Jabbour & Santos, 2008; Ramus, 2002; Daily & Huang, 2001; Al Kerdawy, 2018; Jackson et al., 2011; Gupta, 2018; Mishra, 2017). Unfortunately, the GHRM practices are still emerging in developing countries, and require more attention from decision maker in the healthcare sector. Therefore, many

organizations consider GHRM practices as fundamental assets when they insert the environmental value to the organizations structure management. Where the human factor must be reinforce in organizations through building environmental culture by supporting employees' involvement (Jabbour et al., 2015; Al Kerdawy, 2018).

Moreover, the important role of stakeholder pressure for environmental safeguards triggers healthcare organizations to develop, implement and execute proactive environmental strategies. In fact, healthcare managers realize this demand from stakeholders and decision maker as an important trigger to develop the current situation. The study results are coherent of previous findings from other studies such as (Ramus, 2002; Pinzone et al., 2015; Pinzone & Lettieri, 2016; Rewashed, 2018; Malik et al., 2017).

Furthermore, in general there is lacking in documentation and formalization of GHRM practices in developing countries in various sectors, thus making their presence at a superficial level. Without adopting a formal system, it is hard to assess the impact of GHRM practices in encouraging pro-environmental culture among employees. Hence, there is a need to take into account both the number of ecological initiatives introduced and their related influences on the environment (Ones & Dilchert, 2012; Mishra, 2017).

GHRM practices should be defining their objectives and goals, implementing and measuring of the environmental impacts as a comprehensive approach in future. Whereas the lack of the employee's

obligation to environmental issues appear in healthcare organizations due to lack of resources and difficulties in assessing their impacts and the economic crisis influencing the country.

4.5.2 Discussion of the sustainable performance.

The findings show a positive relationship between GHRM bundle and EP (supporting H1); with the probable explanation that the effective spreading of knowledge and values of environmental culture through GHRM bundles enhance the EMs based on the skills and motivations of employees. Thereby, creating an opportunity for employees to participate in environmental development of their organizations (Cantor et al., 2012). Our results also match with Pinzone et al. (2016) that show environmental performance aspects at healthcare organizations increases employees' willingness to use additional efforts into EMs. The results show a high level of environmental sustainability performance, and environmental impact indicators (e.g., natural resources used, separation of medical waste, pollution levels) achieve progress toward environmental sustainability in the healthcare sector. This may be due to governmental support and the adoption of Law No. (10) For the year 2012 on "Medical waste management and handling system" in Palestine (MOH, 2012), which it imposed all organizations working in this sector to apply in their organization or they will be subject to legal liability.

We should highlight that the environmental performance is not limited to separation of medical waste as recommended by MOH. The

environmental performance includes many criteria such as criteria for environmental management, criteria for environmental behavior, and criteria for environmental condition according to Romero & Carnero (2017).

Each criterion contains a series of indicators that have been defined by first level sub-criteria, which, in turn, include second level sub-criteria, which covered many aspects of EP, and not limited with waste management, such as: Energy consumption, atmospheric emissions, consumption of materials, water and waste (Romero & Carnero, 2017), which worthily reviewed by decision makers at healthcare sector.

Although, the environmental effect still gives a little guidance on how mitigated future impacts on the environment (Ones & Dilchert, 2012). The reason for that is the culture instilled in developing economies and Asian, where recycling, reduces resource usage, and environmental practices are not really implemented. Where the industrial manufacturers and services consider the green practices unrealistic in a developing country context (Geng et al., 2017).

The findings match with results from Chaudhary (2018), where the impact of an indirect approach (GHRM being as a tool to execute corporate environmental responsibility and CSR) for sustainability from the prospective of employees' attitudes. Where organizations concern of environmental issues will reflect the adoption of GHRM practices on its activities. The employers in healthcare organizations can establish the

advantages of connecting employee's involvement in environmental programmers to boost organizational environmental performance, such as focus on waste management, recycling and using green products. Unions of employees also can support employers to adopt GHRM practices and policies that help environmental safeguard and reinforce worker health (Mishra et al., 2014).

In addition, a positive relationship is found between the GHRM bundle and Ec.P (supporting H2) and these results confirm with the other studies such as (Longoni et al.,2016; Zaid et al., 2018b; Rewashed, 2018) , where the Ec.P implemented in a moderate level. It is obvious that GHRM practices play an important role in spreading environmental standards and ideologies, and give employees the opportunity to implement environmental standards and ideologies for business development (Jackson & Seo, 2010; Ahmad, 2015; Jabbour & Jabbour, 2016) which able to produce better Ec.P. The probable reason for that is healthcare sector is a service sector that aims to provide medical service with high quality and low cost for all segments of society more than economical profit. Where government controlled a large proportion of it and some of that governmental healthcare organization such as MMS they do not take any financial return for her services (MMS, 2019).

Several studies provide an empirical evidence support that investment of environmental management and in GHRM practices domains progress, environmental and financial performance, where GHRM can provide the organizations competitive advantage (Longoni et al., 2016; Pinzone et al.,

2016; Mishra, 2017). Thus, improving the environmental performance of the organizations reflect with better financial performance and it is not essential to an expansion in cost (Stefan & Paul, 2008).

Furthermore, the sustainability crisis in developing countries like Palestine poses both an opportunity and challenge. The green practices need more attention, where it is still emerging and what is more concerning in these terms that there is low acceptance among healthcare organizations for greening the existing HRM practices. The organizations can be cooperated better for saving the environment through low cost initiatives of GHRM (Mishra et al., 2014).

Finally, a positive association found between GHRM bundle and SP (supporting H3). Chowdhury et al. (2017) clarified the role of GHRM practices related to CSR, where there is a very strong relationship between GHRM, CSR, and sustainability, where that GHRM practice is a powerful tool can help the organizations to facilitate spreading environmental culture among employees without decreasing profit. Traditional performance management systems focused on objectives like the enhancement of the organization's ability to maximize profit and ignoring sustainability aspect of the organizations, but in the future, keeping into consideration that GHRM researchers should focus on organizations and staff's ability to achieve green objectives and sustainability (Ramasamy et al., 2017). Furthermore, our findings are similar with Al Kerdawy (2018), where the results have found a positive relationship between GHRM and social performance, which will be reflected in more socially and

environmentally responsible for the organizations. Noteworthy, such initiatives can help organizations in accomplishing sustainability to ensure the positive effect on the society and the environment. In terms of social performance, the high level of implementation due to the humanitarian service provided by the healthcare sector as an ultimate goal. Several studies have focused on the benefits from social performance and (CSR) on the organizations (Renwick et al., 2013; Chowdhury et al., 2017; Al Kerdawy, 2018).

Although, CSR is obligated by law and regulations in some conditions, but it actually returns benefits to society and environment. Thereby other benefits from (CSR) such as achieving competitive advantages to the organization and supporting and gaining success to its reputation among stakeholders by inspiring shared value during adopting CSR practices. CSR has gained more interest between sustainable strategists in current days due to its advantageous contribution to societal, financial, and environmental attentions (Ağan et al., 2014; Al Kerdawy, 2018).

4.5.3 Hypothesis testing discussion

Based on assumptions and hypotheses that proposed in section 2.9 (H1, H2 and H3), the findings revealed that there is a positive and significant relationship between HRM bundle and EP, Ec.P, and SP. This is consistent with results from other studies (e.g. Rehman et al., 2016; Zaid et al., 2018b; Paill et al., 2014; Mishra et al., 2014). Based on that result, there are positive and significance correlation between GHRM bundle and EP,

which confirmed with result from (Siyambalapitiya et al., 2018; Rayner & Morgan, 2018; Zaid et al., 2018b; Masri & Jaaron, 2017; Rewashed, 2018). This also presented a positive and significant correlation between green hiring, green training and involvement, and green performance management and compensation and EP, which proves the H1.

Similarly, the findings showed a positive and significance correlation between GHRM bundle and Ec.P, which are consistent with results from (Zhu et al., 2005; Zaid et al., 2018b; Longoni et al., 2018; Rewashed, 2018; Rayner & Morgan et al., 2018). This also presented a positive and significant correlation between green hiring, green training and involvement, and green performance management and compensation and Ec.P, which proves the H2.

Finally, the results presented a positive and significance correlation between GHRM bundle and SP, which confirmed with results from (Newman et al., 2016; Chowdhury et al., 2017; Al Kerdawy, 2018; Zaid et al., 2018b; Masri & Jaaron, 2017; Rewashed, 2018). This also presented a positive and significant correlation between green hiring, green training and involvement, and green performance management and compensation and SP, which proves the H3.

4.6 A framework development

The healthcare sector in Palestine still needs more guidance to provide major and essential steps to improve their EMs. This practice requires support from many stakeholders and decisions makers such as

government (represented by Ministry of health), and other sectors provided medical services. While it is important to focus on governmental support in this area since it had the legal authority to force green policy in the healthcare sector which lead to better sustainable performance and also reflect in managing and saving the natural resource wisely. Suitability framework related to GHRM practices is a multi-layer, integral framework with a contextual, analytical and dynamic dimension. Practically, the framework starts with implementing such practices in healthcare sector requires from organizations a collective effort beginning from adopting environmental and green policies from decision makers and stakeholders, which pushes top management working in these organizations for adopting an environmental culture and find a way to implement it. The framework is constructed according to five points; the constitutional, strategic planning, behavioral, evaluation, review and corrective action perspective (see Fig. 3).

Subsequently, adopting environmental system and sustainability from decisions makers will be reflected in establishing sustainability plan with specific environmental goals and objectives for all employees working in these organizations, which require support from HR department since it is responsible for providing workers with the skills required. Notably, that the GHRM practices play a fundamental role in spreading green culture concept at organizations. The framework divides the GHRM practices into three stages to enhance the EP. The first stage, starts with attracting and selecting candidates with an interest in environmental issues, moreover, the

job description should state and clarify the environmental tasks related to the job, also the skills and knowledge of candidates need to achieve the environmental activities specifications, and the interviews criteria for selecting and hiring the best talent. At the second stage, an organization should focus on keeping, developing and improving employees skills and knowledge by providing them with the green programs, furthermore, training new employees is vital to develop their awareness about the environmental issues. At the last stage, define green goals and objectives linked it with green reward and appraisal system which include green indicators that provide employees with finance and non-finance rewards to increase their interest and commitment in environmental and sustainability issue.

The sustainable performance, with its three dimensions, environmental, economic and social, should be assessed with an integrated process. In terms of EP, this aspect should cover many criteria and not limited with medical wastes, despite being an important indicator in the healthcare sector. The environmental assessment should also include the following criteria: energy consumption, atmospheric emissions, and consumption of materials, water, and decrease of electrical energy consumption, refutation of waste, replacing the paper with modern and technological and electronic solution, and supporting environmentally friendly projects (Romero & Carnero, 2017). Otherwise, other criteria can be used in these terms such as green purchasing; the healthcare organizations purchase many products yearly (e.g., equipment, furniture, clinical materials, cleaning products,

papers, electrical apparatus, etc.). All these materials have an effect on the environment and economic performance through use and disposal; this may contain positive effects of natural resources in the future. The SP is an important criterion that should be assessed, since the healthcare is a service sector that aims primarily to provide medical services to all segments of society. Noteworthy, such initiatives can help organizations in accomplishing sustainability to ensure the positive effect on the society. In this regards of such initiative, there are many activities such as: reduce the number of injuries among employees, keep the society from infection and spread diseases, and increase the application of occupational safety standards among employees.
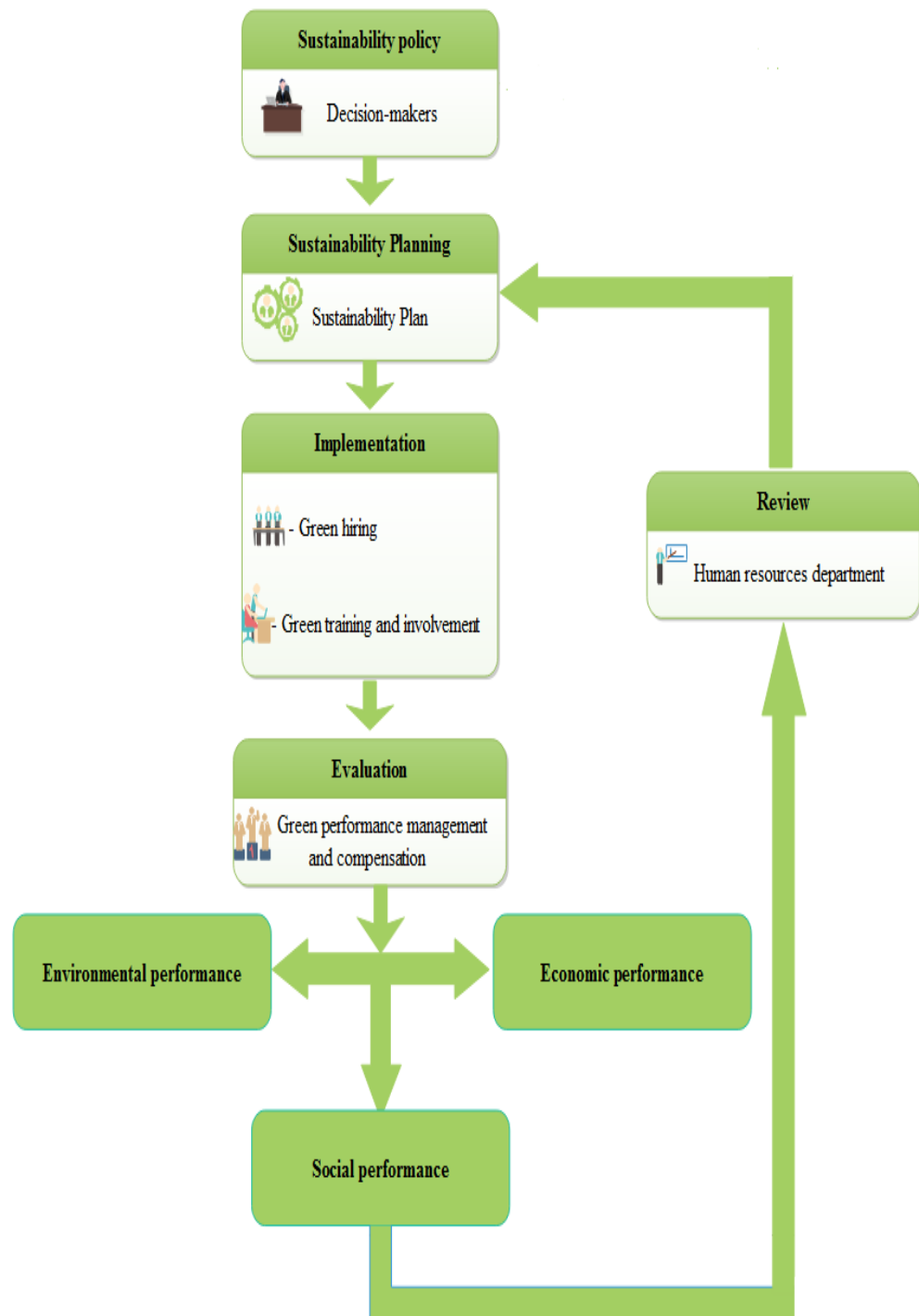
Figure 4.5: Proposed GHRM Model to support sustainable performance.

4.7 Summary of chapter

This chapter has documented the results offered from the study. It has also presented results on the response rate, descriptive analysis, techniques employed in the qualitative approach analysis (interviews), and analyses quantitative analysis (survey) and examines the validity and reliability of the survey. Respondents indicated moderate levels of GHRM bundle towards healthcare sector and high levels of sustainability performance.

Furthermore, this chapter has presented results of PLS analysis that gained from assessment of the measurement model and the structural model hypothesis testing. As mentioned in the different analyses above, three hypotheses were accepted as being significant which proposed in the previous chapter (chapter two: Literature Reviews). Finally, a conceptual framework was developed to facilitate implementation of GHRM practices to improve sustainable performance.

Chapter Five
Conclusions and Recommendations

5.1 Chapter overview

This chapter is devoted to summarizing the conclusions of the study, and highlighting its contributions to the theoretical and literature. In addition, it offers a guide and recommendations for managers working at healthcare organizations. It also shows the limitations of the study and offers suggestions for future research. Finally, it summarizes and concludes the main findings of the study.

5.2 Conclusions

This research aims to explore the extent of implementation of GHRM practices of healthcare organizations in the Palestinian context. The research includes firstly, assessing the GHRM practices, secondly, testing the correlation between GHRM practices and sustainable performance at healthcare organizations to develop the environmental culture in that important service sector. It addresses the most important issues that help to boost the environmental system at healthcare organizations, to catch all benefits from implemented such green practices. The findings also show that the GHRM bundle is implemented at a moderate level; also that there is a statistically positive and significant association between the GHRM bundle and sustainable performance (EP, Ec.P and SP). Where it founds that the most influential green practice is "green hiring", followed by

"green training and involvement" whereas the least influential green practice is "Green performance management and compensation".

Based on the literature review and current situation in the Palestinian healthcare sector, three hypotheses were tested. After analyzing the data collected from a mixed approach, it reveals some variables effecting the implementation of GHRM practices and promoting environmental culture at Palestinian healthcare organizations. Where the results are presented as follows:

✓ The GHRM practices in general are implemented at a moderate level in Palestinian healthcare organizations, due to many reasons from the managers' perspectives. The reasons are; lack of understanding and commitment of green practices from top management and employees, cost of implementation, and lack of supporting such practices from governmental and considering providing medical service for society the critical priority.

✓ The sustainable performance had more attention from the Palestinian healthcare organizations with a high level of implementation, especially the social performance. Where the healthcare organizations goal is providing medical service for all segmentations of society, and not gains financial profits.

✓ Notwithstanding that, the WHO is focusing on the environmental issues as a major goal, followed by health issues. This policy is not reflected at healthcare organizations in a developing country, and still needs a boost,

where the pro environmental practices consider emerging in this country in general.

5.3 Research contribution

The current study contributes to the body of the literature by responding to the lack of the empirical researches of the relationship between GHRM practices and sustainable performance in developing countries, especially in service sector (e.g. healthcare sector), where a few studies were conducted in this context since these practices are still emerged in developing countries and require more attention and focus from decision makers who work in Palestinian healthcare organizations.

The study adds a link that has not yet been explored in the healthcare organizations of developed and developing countries, in the context of integrating the GHRM practices with sustainable performance to improve sustainability of healthcare organizations through adoption of environmental culture and GHRM practices. It highlights the best practices of GHRM that are used in Palestinian healthcare sector and their impact on sustainable performance. In addition, this study provides an empirical evidence for the statement that the implementation of EMS in the HR promote sustainable performance in healthcare organizations. Also it improves and affirms the essential understanding declared in the previous literature. Furthermore, the study tests the relationship between GHRM practices and sustainable performance, where this study is considered the

first study in GHRM practices at service sector in general, and healthcare sector specifically in Palestine context.

Finally, a conceptual framework, that discusses how the GHRM practices effect on sustainable performance in healthcare organizations, is developed. This conceptual framework is considered as a valid mechanism that helps mangers working in the healthcare sector to facilitate implementation and adopting green culture in their organizations which will be reflected in positive sustainable performance in the future, and how healthcare organizations should link their green strategic plans with HR practices to enhance their sustainable performance.

5.4 Recommendations

The Palestinian healthcare organizations can improve their environmental culture and sustainable performance, which will provide many benefits for organizations in term of economic, social and environmental benefits. This section provides some recommendations for top management at healthcare organizations to boost their environmental practices and performance as following:

• Top managements and decision makers support is the key success for implementing green policy in any organizations. The governmental (MOH and MMS) should adopt environmental management system in healthcare organizations, where it has the legal authority to force healthcare organizations for implementing green culture and green HR in their organizations.

- Establishing sustainability manager position in healthcare organizations with responsibility and duties to reduce the negative effects from their organizations on the environment. Moreover, sustainability manager is responsible for providing government (MOH) with annual reports to reduce the negative effects from their organizations on environment, and to boost environmental culture in their organizations.

- Linking environmental strategies with HR department in healthcare organizations, and having clear environmental goals and objectives for all employees working in it, which facilitate implementing environmental culture among employees and improving the sustainable performance in healthcare organizations.

- Spreading green culture is an integrated and comprehensive approach. The HR department in healthcare organizations should have responsibly to implement the green strategic plans starting with hiring candidates and talent interested in environmental issues through using descriptive job with green standards and criterions in healthcare organizations. Furthermore, keeping their awareness through green training and education programs to boost their environmental knowledge and focuses on environmental issues related with healthcare organizations. Finally, motivating system by green rewards and appraisal system with green indicators, and benefits to commitment with green practices from employees.

- Encouraging healthcare organizations from governmental institution's (e.g. MOH) to invest more on implementing environmental certification

such as ISO 14001 not only medical certifications, where there is a lack of such certification from Palestinian healthcare organizations.

5.5 Research limitations

A number of limitations were presented through this study. The first limitation is that the lack of GHRM concept among expert and HR manager working in healthcare organizations, which requires explaining some details and information related to it especially when conducting the survey. The second limitation is the political situation, which make it hard for researchers to access to some cities in the WB such as Jerusalem and Gaze strip.

5.6 Future research directions

This study provides opportunities for future studies to be considered by other researchers such as: firstly, future research might take a mediating factor (e.g. Organizational Citizenship Behaviors (OCBs), collective job satisfaction, collective efficacy and gender) to study their effects of improving environmental practices and EMS in the healthcare sector. Secondly, more studies should be done about the influence of GHRM and GSCM practices on the sustainable performance of healthcare organizations. Thirdly, the hypotheses proposed in this study in the healthcare sector in other developing countries should be tested to generalize the proposed framework.

5.7 Summary of chapter

This chapter has summarized the conclusions offered from the study. It has also presented recommendations and guides for mangers in healthcare sector to implementing GHRM practices in their organizations to boost sustainable performance in healthcare sector, limitations faced researcher in conducting the study, and finally directions and opportunities for future research.

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Appendixes

Appendixes A

An-Najah National University

Faculty of Graduate Studies

Engineering Management Program

Survey

Assessing the impact of green human resource management practices on sustainable performance in Palestinian healthcare organizations: An empirical study

Respected Sir/Mrs.

Thank you for dedicating part of your time to filling out this questionnaire, which aims at assessing the Green Human Resource Management (GHRM) practices in the healthcare sector in the West Bank, in order to complete the requirements for obtaining a master's degree in engineering management. **The GHRM uses policies and practices (including / recruitment, training, performance assessment and rewards) to increase employee awareness and commitment to environmental issues, which positively reflects the efficient use of resources, loss of resources and energy conservation, thus achieving the objectives of environmental management in the organization.**

We would like to thank you for your precious time and participation.

This questionnaire is divided into three sections:

<u>Section I:</u> aims to collect general information about the respondent in addition to the status of environmental management in the organization.

<u>Section II:</u> aims to evaluate the GHRM practices, which includes green employment, training and green participation, performance management and green rewards in the healthcare sector in the West Bank.

<u>Section III:</u> aims to identify the impact of these practices on environmental, economic and social performance (environmental sustainability) on organization operating in the healthcare sector.

This evaluation will take you 10 minutes to complete. Please read carefully all the paragraphs of the questionnaire and put the degree that you consider appropriate for each paragraph objectively and impartially. All information will be kept confidential and will only be used for scientific research purposes.

Regards, Sharifa Mousa.

Researcher, Master of Engineering Management

Email: eng.sharifamousa@gmail.com

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Section I: General and Personal Information

Please kindly answer the following questions by signal (X) in the answer that suits you.

1. Gender

☐ Female　　　　　☐ Male

2. Classification of your organization according to the health system:

☐ Primary care center　　　　　☐ Secondary care center(Hospitals)

☐ Triple Care Center (Rehabilitation centers)　　☐ Laboratories or Blood Bank

3. The sector you are working is:

☐ (Government)　　　　☐ (Military)　　　　☐ (Private sector)

☐ (Non-profit organizations)　　　☐ (UNRWA)

4. Number of employees in the institution:

☐ 1-9　　　　☐ 10-19　　　　☐ 20-49

☐ 50-99　　　☐ 100- 249　　　☐ 250 above

5. City

☐ (Ramallah)　　☐ (Nablus)　　☐ (Jerusalem)　☐ (Jenin)
☐(Bethlehem)　　☐ (Qalqilya)　☐ (Salfit)　　☐ (Tubas)

☐ (Hebron)　　　☐ (Jericho) and the Jordan Valley　☐ (Tulkarm)

6. Your current position in your company:

☐ General manager/CEO　　　　☐ Human Resources Manager

☐Director of Administration　　　☐ Quality Manager

7. Your education degree:

☐ Diploma　　　　　☐ Bachelor

☐ Master's degree　　☐ Ph.D.

8. You are working in the organization since

☐ (Less than two years)　　☐(2-5 years)　☐ (6-10 years)

☐ (11-15 years)　　　　☐15 years and over

9. Does your organization integrate environmental management practices into its daily activities?

☐ Currently exist   ☐ There are currently no implementation plans

☐ Plan of implementation within 12 months   ☐ Plan of implementation in more than 12
months   ☐ Not sure   ☐ Some practices
exist through activities in the institution

10. Your company has a formal environmental management program such as ISO (14001), or any environmental initiatives or certificates related to environmental issues

☐ Currently exist   ☐ There are currently no implementation
plans

☐ Plan of implementation within 12 months   ☐ Plan of implementation in more than 12
months

☐ Not sure

11. Do you think the HR department directly affects the organization's environmental program?

☐ Yes   ☐ No

Section 2: Assessing the implication of GHRM

This section aims at identifying the degree to which the organization applies the green human resources management, which is reflected in improving the environmental performance of the employees, please mark (√) in the appropriate column:

No	Statement					
Part 1: Green Recruitment and Selection which is intended to select candidates who have a commitment and knowledge about environmental issues as well as environmental criteria in the recruitment process.						
No	Statement	Not at All	To a slight degree	To a Moderate Degree	To a Great Extent	To a Very Great Extent
1	Company prefers to hire employees that have environmental knowledge in the selection process.					
2	Applicants for jobs in the company are subject to interviews that include environmental knowledge.					
3	In addition to other criteria, employees are selected on the basis of environmental standards.					
4	Organizations' use environmental image and policies to attract job seekers					
5	The job description includes the job's environmental aspects					
6	The recruitment message includes organizations' environmental values in job advertisement					
Part 2: Training and Green Participation it is intended to implement training and activities aimed identifying environmental issues to the employees and protect it, and providing staff with the necessary skills for that.						
No	Statement	Not at All	To a slight degree	To a Moderate Degree	To a Great Extent	To a Very Great Extent
7	Environmental training programs are provided to large-scale individuals in the organization.					
8	In general, staff is satisfied with the organization's green training.					
9	Topics offered through green training are modern and suitable for the institution's activities.					
10	The foundation provides formal environmental training programs for employees to increase their ability to promote them.					
11	Environmental training is a priority and an important investment.					
12	Analyses green training need to familiarize employees with environmental practices					
13	Green training and development are evaluated to understand employees' level of green knowledge and awareness					
14	Green training and development are integrated with organizations' environmental objectives					

	Part 3: Green performance and rewards It is intended to monitor and reward employees' performance in compliance with environmental standards.					
No	Statement	Not at All	To a slight degree	To a Moderate Degree	To a Great Extent	To a Very
15	Every manger and employee has specific environmental goals					
16	Employees are rewarded for making suggestions for improvement on environmental programs					
17	Employees who have achieved or exceeded the objectives of the environmental institution are rewarded with non-cash equivalents or other cash prizes.					
18	Section managers reward staff in their departments when they improve environmental programs.					
19	Environmental performance is recognized publicly.					
20	The achievement of environmental objectives is used as one of the criteria in assessing employee performance.					
21	There are adequate assessments of staff performance after attending courses on environmental topics.					
22	Employees are punished for non-compliance with environmental standards in the organization.					

Section 3: Environmental Sustainability

Please indicate the extent to which you agree with the following statements as they relate to the changes in your organization performance in the last two years caused by current the practices (as you indicated in section 2)

No	Part 1: Environmental Performance.	Not at All	To a slight degree	To a Moderate Degree	To a Great Extent	To a Very Great Extent
1	Reduce total direct and indirect toxic emissions.					
2	Increase the volume of recycled materials and reduce waste.					
3	Commitment to the system of separating medical waste from the public sewage system.					
4	Increase the rate of purchase of environmentally friendly goods (e.g., purchase of environmentally friendly products and medicines).					
5	Increase activities that protect our natural environment such as the presence of green areas in the institution.					
6	Reduced the risk of environmental accidents such as medical waste leakage, poisoning or radiation emissions.					
Part 2: Economic Performance.		Not at All	To a slight degree	To a Moderate Degree	To a Great Extent	To a Very Great Extent
7	Growth in the organization's profits in general due to the reduction of energy consumption and materials.					
8	Rise in the market share of the enterprise and improve the reputation of the organization.					
9	Reduce the cost of energy use					
10	Reduce processing fees and waste disposal					
Part 3: Social Performance		Not at All	To a slight degree	To a Moderate Degree	To a Great Extent	To a Very Great Extent
11	Increase attention in the rules of the health and safety of employees, especially when using hazardous materials and radiation.					
12	Improving community health and safety، and infection control.					
13	Developing economic activities in the community and providing more job opportunities.					
14	Reducing the negative impact of the institution's waste on the community.					
15	Improving the quality of service provided, and commitment to the code of ethics.					
16	Develop and design better service and participation of staff initiatives in management decisions					
17	Increased commitment to professional ethics, infection control and antibiotic control policy.					

<u>Notes:</u>

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THANK YOU

Appendixes B

جامعة النجاح الوطنية

كلية الدراسات العليا

برنامج ماجستير الإدارة الهندسية

تقييم ممارسات الإدارة الخضراء للموارد البشرية واثرها على الاداء المستدام في مؤسسات قطاع الرعاية الصحية الفلسطينية: دراسة تجريبية.

عزيزي القارىء\القارئة:

تحية طيبة،،،

أشكرك على تخصيص جزء من وقتك لتعبئة هذا الاستبيان ٍ الذي يهدف الى تقييم مستوى تطبيق ممارسات الادارة الخضراء للموارد البشرية في قطاع الرعاية الصحية في الضفة الغربية ٍ وذلك استكمالا لمتطلبات الحصول على درجة الماجستير في تخصص الادارة الهندسية. حيث تعنى **الموارد البشرية الخضراء باستخدام سياسات والممارسات المتعلقة بادارة المواردالبشرية (والتي تشمل / التوظيف، التدريب، تقيم الاداء والمكافئات) لزيادة وعي الموظفين والتزامهم اتجاه القضايا البيئة مما ينعكس بشكل ايجابي على استخدام للموارد بشكل فعال وتقليل الخسائر والفقد في الموارد وترشيد استهلاك الطاقة وبالتالي تحقيق أهداف الادارة البيئية في المؤسسة.**

ينقسم هذه الاستبيان الى ثلاثة اقسام:

<u>القسم الأول</u> : يهدف الى جمع معلومات عامة تخص القاريء\القارئة بالاضافة الى وضع الادارة البيئية حاليا في المؤسسة.

القسم الثاني: يهدف الى تقييم مستوى تطبيق الموارد البشرية الخضراء في المؤسسة والتي تشمل :
التوظيف الاخضر، التدريب والمشاركة الخضراء، ادارة تقيم الاداء والمكافات الخضراء في قطاع
الرعاية الصحية في فلسطين.

القسم الثالث: يهدف الى معرفة اثر هذه الممارسات على الاستدامة البيئية (الأداء البيئي والمالي
والاجتماعي) على المؤسسات العاملة في قطاع الرعاية الصحية.

هذا التقييم سوف يستغرق منك 10 دقائق لإتمامه ,الرجاء التفضل بقراءة جميع فقرات الاستبيان
بدقة ٍ ووضع الدرجة التي تراها مناسبة أمام كل فقرة بموضوعية وحيادية.علما بأن كافة المعلومات
سوف تكون سرية ولن تستخدم الا لأغراض البحث العلمي.

الباحثة: شريفة موسى.

ماجستير الادارة الهندسية

Email: eng.sharifamousa@gmail.com

Mob +972-599-583764

القسم الاول: المعلومات العامة والشخصية

نرجوا وضع علامة (√) في المكان المناسب:

1.الجنس :

☐ ذكر   ☐ أنثى

2.تصنيف مؤسستكم حسب النظام الصحي :

☐ مركز رعاية اولية   ☐ مركز رعاية ثانوية (المستشفيات)

☐ مركز رعاية ثالثية (مراكز إعادة التاهيل)   ☐ مختبرات وبنوك دم

3.انت تعمل في قطاع:

☐ حكومي   ☐ عسكري   ☐ قطاع خاص

☐ منظمات غير ربحية (اهليه)   ☐ UNRWA

4.عدد العاملين في المؤسسة:

☐ 1-9   ☐ 10-19   ☐ 20-49

☐ 50 – 99   ☐ 100 -249   ☐ 250 فما فوق

5.الموقع

☐ رام الله   ☐ نابلس   ☐ طولكرم   ☐ جنين

☐ القدس   ☐ بيت لحم   ☐ الخليل   ☐ قلقيلية

☐ سلفيت   ☐ طوباس   ☐ اريحا والاغوار

6. الموقع الوظيفي:

☐ المدير العام / المدير التنفيذي   ☐ مدير الموارد البشرية

☐ مدير الشؤون الادارية   ☐ مدير الجودة

7.الدرجة العلمية:

☐ بكالوريس ☐ دبلوم

☐ دكتوراه ☐ماجستير

8.أنت تعمل في المؤسسة منذ

☐ 6−10 سنوات ☐ 2−5 سنوات ☐ اقل من سنتين

☐ 15 سنة فأكثر ☐11−15 سنة

9. هل تدمج مؤسستكم ممارسات الادارة البيئية في انشطتها واعمالها اليومية

☐لا توجد حاليا خطط للتنفيذ ☐نعم موجودة حاليا

☐يوجد خطة للتنفيذ في اكثر من 12 شهر ☐ لدى المؤسسة خطة للتنفيذ خلال 12 شهرا

☐ توجد بعض الممارسات من خلال انشطة ☐ غير متا كد

في المؤسسة

10. لدى مؤسستكم برنامج رسمي للادارة البيئية مثل (الايزو 14001) ، او اي مبادرات بيئية او شهادات متعلقة بالقضايا البيئية

☐لا توجد حاليا خطط للتنفيذ ☐ موجودة حاليا

☐ خطة للتنفيذ في اكثرمن 12 شهرا ☐ خطة للتنفيذ خلال 12 شهرا

☐ غير متاكد

11. هل تعتقد ان دائرة الموارد البشرية تؤثر بشكل مباشر في البرنامج البيئي في المؤسسة

☐ لا ☐ نعم

القسم الثاني: تقيم مدى تطبيق ممارسات الادارة الخضراء للموارد البشرية

يهدف هذا القسم لمعرفة الى اي درجة تطبق المؤسسة ممارسات الادارة الخضراء للموارد البشرية بما ينعكس على تحسين الأداء البيئي للموظفين، نرجوا وضع علامة (√) في العمود المناسب:

بدرجة كبيرة جدا	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جدا	الجملة	الرقم
الجزء الاول: التوظيف والاختيار الاخضر ويقصد به اختيار المرشحين الذين لديهم الالتزام ومعرفة تجاه القضايا البيئية بالاضافة الى اعتماد معايير بيئية في عملية التوظيف.							
					تفضل المؤسسة اختيار المتقدمين للوظيفة الذين هم على دراية كافية بالبيئة والالتزام بالقضايا البيئية لشغل الوظائف الشاغرة.	1
					يخضع المتقدمون لشغل وظائف في المؤسسة لمقابلات تشمل القضايا البيئية.	2
					اضافة الى المعايير الاخرى، يتم اختيار الموظفين على اساس المعايير البيئية.	3
					استخدام التزام المؤسسة اتجاه القضايا البيئية بالاضافة الى ادائها البيئي لجذب الكفاءات المميزة .	4
					يتم تضمين واضافة الجوانب البيئية للوظيفة في الوصف الوظيفي.	5
					يتم تضمين القيم البيئية في الإعلان عن الوظائف للمؤسسة.	6

بدرجة كبيرة جدا	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جدا	الجملة	الرقم
الجزء الثاني : التدريب والمشاركة الخضراء ويقصد به تنفيذ تدريب وانشطة تهدف الى تعريف العاملين بالقضايا البيئية وحمايتها، واكساب العاملين المهارات اللازمة لذلك.							
					توفر المؤسسة التدريب البيئي للموظفين على نطاق واسع.	7
					بشكل عام ، يشعر الموظفون بالرضا عن التدريب البيئي في المؤسسة.	8
					يتم طرح مواضيع من خلال التدريب البيئي حديثة ومناسبة لنشاط المؤسسة.	9
					يتم تقديم برامج تدريب بيئية رسمية للموظفين من اجل زيادة قدرتهم على تحسين ادائها .	10
					يعتبر التدريب الاخضر مهم ومن اولويات المؤسسة.	11
					يتم تحليل الاحتياج للتدريب الأخضر لتعريف الموظفين بالممارسات البيئية.	12
					يتم تقييم التدريب والتطوير الأخضر لفهم مستوى الموظفين من المعرفة والوعي البيئي.	13
					يوجد تكامل بالتدريب والتطوير الأخضر مع الأهداف البيئية للمنظمة	14

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الرقم	الجملة	بدرجة قليلة جدا	بدرجة قليلة	بدرجة متوسطة	بدرجة كبيرة	بدرجة كبيرة جدا
	الجزء الثالث : ادارة الاداء والمكافئات الخضراء ويقصد به نظام مراقبه ومكافئة اداء الموظفين على التزامهم بالمعايير البيئية.					
15	يوجد لدى جميع المدراء و الموظفين أهداف بيئية محددة.					
16	تتم مكافأة الموظفين لتقديم اقتراحات للتحسين على البرامج البيئية					
17	يتم مكافئة الموظفين الذين حققوا أو تجاوزوا اهداف المؤسسة البيئية بمكافئات نقدية أو غيرها من الجوائز الغير لنقدية.					
18	يقوم مدراء الاقسام بمكافئة الموظفين العاملين في اقسامهم عند تحسينهم للبرامج البيئية.					
19	تقوم المؤسسة بالتعريف بالاشخاص الملتزمين بالقضايا البيئية الذين تتم مكافئتهم.					
20	يتم استخدام تحقيق الأهداف البيئية باعتبارها واحدة من معايير تقييم أداء الموظف.					
21	يوجد هناك تقييمات كافية لأداء الموظفين بعد حضور دورات تتعلق بالمواضيع البيئية.					
22	يتم معاقبة الموظفين على عدم الالتزام بالمعايير البيئية في المؤسسة.					

القسم الثالث: الاستدامة البيئية

يرجى الإشارة إلى مدى موافقتك على العبارات التالية من حيث صلتها بالتغيرات في أداء مؤسستك في العامين الماضيين بسبب الممارسات الحالية (كما أشرت في القسم 2)

بدرجة كبيرة جدا	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جدا	الجزء الاول: الاداء البيئي	الرقم
					تقليل المخلفات السامة المباشرة وغير المباشرة الصادرة عن المؤسسة.	1
					تقليل النفايات الصادرة من المؤسسة وإعادة تدويرها.	2
					الالتزام بنظام فصل المخلفات الطبية عن نظام الصرف الصحي العام.	3
					زيادة معدل شراء السلع الصديقة للبيئة (مثل شراء منتوجات وادوية صديقة لبيئة).	4
					زيادة الأنشطة التي تحمي بيئتنا الطبيعية مثل وجود مناطق خضراء في المؤسسة.	5
					تقليل الحوادث البيئية مثل تسرب المخلفات الطبية , التسمم او الانبعاثات الاشعاعية.	6
بدرجة كبيرة جدا	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جدا	الجزء الثاني : الاداءالمالي.	
					نمو في ارباح المؤسسة بشكل عام نتيجة لتقليل استهلاك الطاقة والمواد.	11
					ارتفاع في الحصة السوقية للمؤسسة وتحسين سمعة المنظمة.	21
					خفض تكلفة استخدام الطاقة في المؤسسة .	13
					انخفاض في رسوم معالجة وتصريف النفايات	14
بدرجة كبيرة جدا	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جدا	الجزء الثالث : الاداءالاجتماعي.	
					زيادة الاهتمام في قواعد الحفاظ على صحة وسلامة الموظفين خاصة عند استخدام المواد الخطرة والاشعة.	15
					تحسين صحة المجتمع وسلامته والحد من انتشارالعدوى.	16
					تطوير الأنشطة الاقتصادية في المجتمع المحلي وتوفير المزيد من فرص العمل .	17
					تخفيض التأثير السلبي لمخلفات المؤسسة على المجتمع المحلي.	18
					تحسين جودة الخدمة المقدمة في المؤسسة والالتزام بميثاق اخلاق المهنة.	19
					تطوير وتصميم خدمة افضل بمساعدة ومشاركة مبادرات الموظفين في قرارات الادارة	20
					زيادة الالتزام باخلاق المهنة ، ومكافحة العدوى ، و سياسة ضبط المضادات الحيوية.	21

<u>**ملاحظات :**</u>

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شكرا لتعاونك

Appendixes C

Table 1: experts and arbitrators who review the questioners

Number	Position
4	Teaching staff at An-Najah university of
1	Human resources expert
1	Green Human resources expert
Total	6

Table 2: Descriptive analysis of all aspects of the questionnaire

Section	Items	Mean	Standard Deviation
GH	Company prefers to hire employees that have environmental knowledge in the selection process.	2.870	1.102
	Applicants for jobs in the company are subject to interviews that include environmental knowledge.	2.377	1.091
	In addition to other criteria, employees are selected based on environmental standards.	2.348	1.153
	Organizations' use environmental image and policies to attract job seekers	2.739	1.138
	The job description includes the job's environmental aspects.	2.507	1.085
	The recruitment message includes organizations' environmental values in job advertisement.	2.043	1.042
GTI	Environmental training programs are provided to large-scale individuals in the organization.	2.435	1.148
	In general, staff is satisfied with the organization's green training.	2.493	1.199
	Topics offered through green training are modern and suitable for the institution's activities.	2.435	1.161
	The foundation provides formal environmental training programs for employees to increase their ability to promote them.	2.551	1.161
	Environmental training is a priority and an important investment.	2.522	1.211
	Analyses green training need to familiarize employees with environmental practices	2.362	1.239
	Green training and development are evaluated to understand employees' level of green knowledge and awareness.	2.348	1.261
	Green training and development are integrated with organizations' environmental objectives.	2.319	1.123

GPC	Every manger and employee has specific environmental goals	2.826	1.227
	Employees are rewarded for making suggestions for improvement on environmental programs	2.362	1.129
	Employees who have achieved or exceeded the objectives of the environmental institution are rewarded with non-cash equivalents or other cash prizes.	2.072	1.121
	Section managers reward staff in their departments when they improve environmental programs.	2.261	1.125
	Environmental performance is recognized publicly.	2.406	1.171
	The achievement of environmental objectives is used as one of the criteria in assessing employee performance.	2.290	1.217
	There are adequate assessments of staff performance after attending courses on environmental topics.	2.101	1.206
	Employees are punished for non-compliance with environmental standards in the organization.	2.652	1.349
EP	Reduce total direct and indirect toxic emissions.	3.826	1.063
	Increase the volume of recycled materials and reduce waste.	2.855	1.300
	Commitment to the system of separating medical waste from the public sewage system.	4.087	1.003
	Increase the rate of purchase of environmentally friendly goods (e.g., purchase of environmentally friendly products and medicines).	3.406	0.937
	Increase activities that protect our natural environment such as the presence of green areas in the institution.	3.029	1.179
	Reduced the risk of environmental accidents such as medical waste leakage, poisoning or radiation emissions.	4.101	0.935
Ec.P	Growth in the organization's profits in general due to the reduction of energy consumption and materials.	2.594	1.300
	Rise in the market share of the enterprise and improve the reputation of the organization.	2.986	1.346
	Reduce the cost of energy use	2.899	1.206
	Reduce processing fees and waste disposal	2.565	1.324
SP	Increase attention in the rules of the health and safety of employees, especially when using hazardous materials and radiation.	4.159	0.895
	Improving community health and safety، and infection control.	4.275	0.740

	Developing economic activities in the community and providing more job opportunities.	3.174	1.167
	Reducing the negative impact of the institution's waste on the community.	3.928	1.026
	Improving the quality of service provided, and commitment to the code of ethics.	4.188	0.839
	develop and design better service and participation of staff initiatives in management decisions	3.710	1.023
	Increased commitment to professional ethics, infection control and antibiotic control policy.	4.319	0.625

Appendixes D

Interview questions

Q1) whether the organizations record use of paper and optimally utilize it at the time of recruitment and selection; whether the organizations consider social networking sites for recruitment; whether during selection, factors such as green personality, green values, green attitudes, green skills or green behaviors were given due weight?

Q2) the company is invested the money to increase employee's awareness and capabilities to promote green behavior in the organization; environmental training programs; whether feedbacks from such training programs were implemented in similar forthcoming activities; whether there is any other activity that the organizations conduct for environmental development?

Q3) is the adopting and promoting green behavior by the employees was considered as one of the key performance indicators and measured during the performance appraisal process?

Q4) is the green behaviors were approved through any means, such as monetary rewards or recognition?

Q5) if the organizations collect and incorporate feedback on environmental policies from its employees?

Q6) whether a specific team or task-force was formed to analyze issues, brainstorm ideas and explore how, where and when environmental interventions can be introduced in the organization.

Q7) in many organizations, CSR is either dealt by an HR team or are carried out in close association with the HR department. Therefore, if CSR activities of any organization directly impact development or preservation of the environment.

'Would you like to highlight any additional thoughts on GHRM practices?'

'What would be the key interventions that would help identify HR managers' expected outcomes of GHRM practices?'.

جامعة النجاح الوطنية

كلية الدراسات العليا

تقييم ممارسات الإدارة الخضراء للموارد البشرية واثرها على الاداء المستدام في مؤسسات قطاع الرعاية الصحية الفلسطينية: دراسة تجريبية.

إعداد

شريفة خالد موسى

إشراف

د. محمد عثمان

قدمت هذه الأطروحة إستكمالاً لمتطلبات الحصول على درجة الماجستير في الإدارة الهندسية، بكلية الدراسات العليا، في جامعة النجاح الوطنية، نابلس– فلسطين.

2019

تقييم ممارسات الإدارة الخضراء للموارد البشرية واثرها على الاداء المستدام في مؤسسات قطاع الرعاية الصحية الفلسطينية: دراسة تجريبية.

إعداد

شريفة خالد موسى

إشراف

د. محمد عثمان

الملخص

خلال السنوات القليلة الماضية، واجهت المؤسسات ضغوطًا من أصحاب المصلحة لتبني ممارسات تجارية صديقة للبيئة، حيث أصبح من الضروري تحديد الممارسات الخضراء التي تعزز الاستدامة فيها. تهدف هذه الدراسة إلى استكشاف مستوى تطبيق الادارة الخضراء للموارد البشرية (GHRM) في مؤسسات الرعاية الصحية الفلسطينية. كذلك تم دراسة العلاقة بين حزمة الادارة الخضراء للموارد البشرية (GHRM) والأداء المستدام (SP) في هذه المؤسسات. تم استخدام منهج بحث مختلط باستخدام كل من الأساليب النوعية والكمية من خلال إجراء 14 مقابلة شبه منظمة مع مدراء تنفيذين ومديري الموارد البشرية من مختلف تصنيفات منظمات الرعاية الصحية في الضفة الغربية. بالإضافة الى ذلك استخدام المسح كأداة للمنهج الكمي لجمع البيانات حيث تم جمع البيانات من 69 منظمة لرعاية الصحية التي تستخدم ممارسات الإدارة الخضراء للموارد البشرية (GHRM) على مختلف المستويات الإدارية في مؤسساتها. تم تحليل البيانات التي تم جمعها باستخدام برنامج (Smart PLS-SEM 3). كشفت النتائج المتعلقة بالدراسة أن ممارسات الإدارة الخضراء للموارد البشرية (GHRM) تطبق على مستوى متوسط في مؤسسات الرعاية الصحية الفلسطينية. تم تحديد الممارسات الخضراء وتحديد أولوياتها من حيث درجة تطبيقها في مؤسسات الرعاية الصحية، حيث كانت أكثر الممارسات استخداماً هي "التوظيف الأخضر"، ثم "التدريب والمشاركة الخضراء" في حين كانت الممارسة الخضراء الأقل تأثيرًا هي "الأداء الأخضر والمكافآت."

بالإضافة إلى ذلك، كشفت النتائج أن ممارسات الإدارة الخضراء للموارد البشرية (GHRM) لها تأثير إيجابي على الأداء المستدام (SP). واخيراً تم تطوير نموذج يهدف لتقديم توجيهيات لصناع القرار العاملين في مؤسسات الرعاية الصحية الى كيفية تطبيق ممارسات الادارة الخضراء للموارد البشرية (GHRM) لتعزيز التزام الموظفين في مؤسسات الرعاية الصحية لتحقيق أقصى أداء مستدام (SP).