An-Najah National University
Faculty of Graduate Studies

Assessing Green Human Resources Management Practices in West Bank: An Exploratory Study

By
Hiba Awad Masri

Supervisor
Dr. Ayham Jaaron

This Thesis is Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Engineering Management, Faculty of Graduate Studies, An-Najah National University, Nablus, Palestine.

2016

Assessing Green Human Resources Management Practices in West Bank: An Exploratory Study

By
Hiba Awad Masri

This Thesis was defended successfully on 24/8/2016 and approved by

Defense Committee members	Signature
1. Dr. Ayham Jaaron / Supervisor	.....
2. Dr. Mahasen Anabtawi / External Examiner	
3. Dr. Mohammed Othman / Internal Examiner	.....

Dedication

To my father Eng. Awad Masri who taught me to never stop learning and be always ambitious... may his soul rest in peace.

To my beloved mother, Hiyam Al-Hwaiti, the one who loved me unconditionally and never gave up in my abilities even when I doubt myself.

Thank you for everything.

Acknowledgment

First and foremost, all praise and deep thanks are due to Allah (the creator), who helped and guided me through the challenges of my study. Glory is to Allah who has given me the strength, patience and knowledge to continue and finish this journey and proceed successfully.

This thesis would never have seen the sun without the guidance of my committee members, and without the full support and help from friends and family. So, first of all, I would like to express my deepest gratitude and sincere thanks to my supervisor, Dr. Ayham Jaaron, for his excellent guidance, support, caring, patience, encouragement, motivation, valuable advices and assistance throughout this research that have resulted in the completion of this thesis. I owe him heartfelt thanks for his time and effort that assisted me throughout my study.

I would like also to express my appreciation to all of the academic staff of the Engineering Management program at An-Najah National University for helping me in overcoming program courses successfully; and guiding me to develop my background in subjects that are related to this research. I would also like to thank committee members for their time and effort in reviewing this work.

Many thanks to my mother, sisters, and brothers for supporting me and encouraging me with their best wishes.

My dear colleagues, thank you for the friendly and many unforgettable memories inside the University, especially Nour Samaro for giving me the necessary support and great friendship that enrich my life and make me proud of being your friend. I cannot list all the names here, but you are always in my heart.

Finally, thanks to all study participants who provided me with valuable information and enrich this research with their experience.

الإقرار

أنا الموقعة أدناه، مقدمة الرسالة التي تحمل العنوان:

Assessing Green Human Resources Management Practices in West Bank: An Exploratory Study

تقييم ممارسات الإدارة الخضراء للموارد البشرية في الضفة الغربية: دراسة استكشافية

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

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 الطالبة: هبة عواد مصري

Signature: التوقيع: هبة مصري

Date: التاريخ: ٢٠١٦/٨/٢٤

List of Abbreviations

HRM	Human Resources Management
EM	Environmental Management
GHRM	Green Human Resources Management
EP	Environmental Performance
EMS	Environmental Management System
WB	West Bank
OECD	Organization for Economic Co-operation and Development
ISO	International Organization for Standardization
ET	Environmental training
ANOVA	Analysis of Variance
PMS	Performance Management System
EMIS	Environmental Management Information Systems
MENA	Middle East and North Africa
MEnA	Ministry of Environmental Affairs
PEnA	Palestinian Environmental Authority
NGOs	Non-Governmental Organizations
EQA	Environment Quality Authority
PFI	Palestinian Federation of Industries
EIA	Environmental Impact Assessment
OECD	Organization for Economic Co-operation and Development

Table of Content

List of Tables

List of Figures

Assessing Green Human Resources Management Practices in West Bank: An Exploratory Study

By
Hiba Awad Masri
Supervisor
Dr. Ayham Jaaron

Abstract

In the last few years, global concerns have increased regarding the environmental issues, especially after the consolidation of the industrial revolution which caused an increment in degradation of the environment. These concerns generated more pressure and inculcated business and industry to develop and use green management by adopting environmentally-friendly practices and products. Environmental Management (EM) has been included in many departments such as marketing, supply chain, finance and others. Recently, Human Resource Management (HRM) joined the green movement. The integration of EM into HRM practices is known as Green Human Resource Management (GHRM) which aims to help organizations improve Environmental Performance (EP) through increasing employees' involvement and commitment towards environment.

The industrial sector is considered to be a source of various forms of environmental pollution in Palestine which needs to be assessed, monitored and rectified. Therefore, it should involve all employees to achieve EM goals. This research aims to explore and assess the extent of implementing GHRM practices in Palestinian manufacturing companies from three industrial sectors (food, Chemical and pharmaceutical industries) in the

West Bank (WB). An exploratory research inquiry using structured questionnaires with semi-structured interviews is used. This research discusses the current trends of GHRM practices in these companies based on findings of 17 semi-structured interviews and questionnaires submitted to 110 companies. The result of this research indicates that HRM practices are not used to a great extent to encourage employees to become more pro-environmental. The total implementation of GHRM is 54.9% which is considered as a moderate level. It has been found that the preferable practice which increased employees' commitment and awareness toward the environment is the "Green management of organizational culture". On the other hand, the least used practices were "Green Reward and Compensation".

This study discusses the role of GHRM in creating a green culture and achieving EM goals which will improve EP. The results of hypotheses testing show that there is a statistically significant relationship between GHRM practices and EP. Furthermore, it devises a model that represents the best practices of GHRM to improve EP.

In addition, this research identifies the variables that could affect GHRM implementation by supporting or hindering and the expected benefits of GHRM implementation from the viewpoint of the targeted companies. The results of the descriptive analysis show that the main driver of GHRM is "Environmental Considerations", the main barrier of GHRM is "Cost of implementing GHRM programs" and the main expected benefit

of GHRM is “promotes social responsibility toward environment among employees”.

Finally, the findings of this research are expected to provide useful information for future research directions.

Chapter One
Introduction

Chapter One
Introduction

1.1 Chapter Overview

This chapter provides a general overview of this research. It includes a brief introduction, research problem, aims and objectives of the research, research questions and hypotheses, and finally thesis structure.

1.2 Introduction

The increased concern for environmental issues over the last two to three decades created new regulations, policies and an intangible culture. This required an increased organizational focus on their environmental impact, considered both from the perspective of its interaction with the firm's financial and social growth and in terms of its stand-alone virtues. Human Resources Management (HRM) is one of the main functions of any organization; it plays a vital part in shaping organizational culture, structure and strategy and policy development. Lado and Wilson (1994) defined the HRM system as "a set of distinct but interrelated activities, functions, and process that are directed at attracting, developing, and maintaining (or disposing of) a firm's human resources". Thus, HR is properly seen to play a key role in Environmental Management (EM) in the organization.

Many Researchers directed their attention toward the relation between HRM and EM and have emphasized the importance of individual green initiatives in the workplace. Based on the literature, it can be expected that this relation can be approached as Green Human Resources

Management (GHRM) to help organizations to improve Environmental Performance (EP) and achieve sustainability.

Mampra (2013) illustrated GHRM by using HRM policies to stimulate the sustainable use of resources within the organization and generate green culture through outlining strategies and rules to increase employees' awareness and commitment toward environment. HRM participates in order to reinforce and spread sustainable business activities which consecutively will boost up employee morale and satisfaction by working in an environmentally-friendly manner (Aggarwal and Sharma, 2014). GHRM practices can be seen during the whole of entry-to-exit processes in HRM (from recruitment to exit) (Jackson et al., 2011).

Although there is an increasing extent of the substantial literature about GHRM, there is still uncertainty about how an effective implementation of GHRM can help the organization to achieve green corporate culture and increase EP.

Therefore, this research endeavor is to develop a model which covers the GHRM best practices for the West Bank (WB) manufacturing companies, and to examine and assess the nature and extent of GHRM initiatives undertaken for innovating and improving the EP.

1.3 The Research Problem

"Industry is playing an important role in the economic and social wellbeing of the Palestinian society"(USAID & PFI, 2009). The industrial

sector is considered to be a source of various forms of environmental pollution in Palestine which needs to be assessed, monitored and rectified (Environmental Quality Authority, 2010). Because of the important role and effect of industrial sector in Palestinian society, there is an increasing need of adopting different environmentally-friendly practices. Based on the results of the estimation done by Environment Quality Authority (EQA) & PlanBleu (2015) for emissions from 600 industries across Palestine to the air, water and land it has been found that there is significant uncertainty in these estimates, primarily, due to the fact that there has been no source and/or ambient monitoring of industries in any of the three emission areas. Therefore, a meeting with a committee from EQA was conducted to decide which industries to target in this research. It was recommended to cover three industries (chemical, food and pharmaceuticals industries) due to their direct effect on human health and environment. Therefore, the targeted sample will cover companies from these three industries

Applying green practices is not a responsibility of specific departments. In fact, all organization’s functions are equally responsible to keep their organization's environment green. Managers have to involve their employees in the environmental practices. Therefore, it was questioned to what extent Palestinian managers involve their employees in achieving EM goals. This research will provide a clear guide to help managers in applying and developing GHRM in order to improve EP.

1.4 Aim and Objectives of the Research

The main of this research is to assess GHRM best practices in manufacturing companies from 3 industrial sectors (Food, chemical and pharma industries) in West Bank. This will be done through achieving two objectives. The first one, will explore to what extent Palestinian manufacturing companies are using GHRM practices to increase employees' commitment and awareness to environment, and show what the best GHRM practices to enhance EP are. The second, will identify the main variables/factors that are enhancing the implementation of GHRM and what obstacles this movement is facing in Palestinian manufacturing organizations and the expected benefits of GHRM practices from the viewpoint of these companies.

The expected outcome of this research is GHRM best practices model which is intended to give an explanation about the implementation of best practices of GHRM, in addition to help firms in understanding how they can improve their EP through HRM functions.

The primary aim, the two main objectives and the expected outcomes of this thesis are illustrated in Figure (1-1).

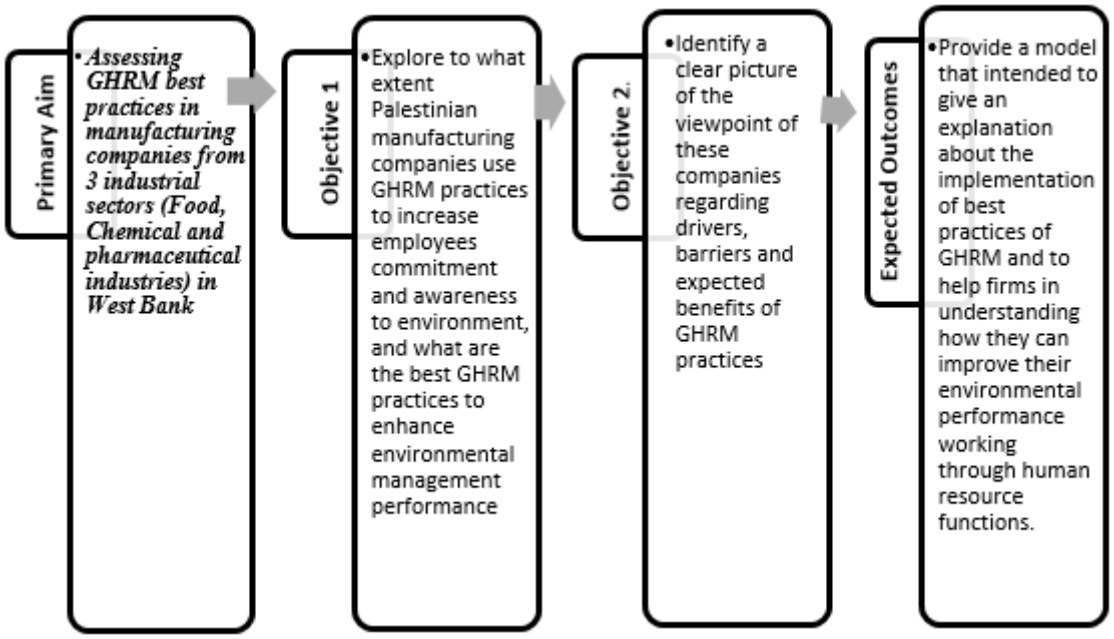

Figure (1.1): Aim, Objectives & Expected Outcomes of the Research

1.5 Research Questions and Hypotheses

To achieve the research's aim of assessing GHRM practices in WB, the following hypothesis and questions have been used:

- Achieving the first objective: to explore and determine the GHRM best practices. The research is based on the hypothesis that integration of HRM with environmental activities such as dedicated environmental training programs or the use of EP indicators can help to improve the overall effectiveness of these activities and hence the EP of a firm (Daily and Huang, 2001; Jabbour and Santos, 2008b; Daily et al., 2007; Renwick et al., 2008). This integration helps the organization to increase employees' awareness and commitment toward environment (Sharmin, 2015). The main hypothesis of this research is:

"GHRM practices have a positive impact on EP in Palestinian manufacturing organizations.**"**

Based on the assumption that using GHRM will improve EP, the following research sub-hypotheses have been used:

- H1: Green Recruitment and selection affects EP positively in Palestinian manufacturing organizations.
- H2: Green Training and development affects EP positively in Palestinian manufacturing organizations.
- H3: Green Performance management and appraisal affects EP positively in Palestinian manufacturing organizations.
- H4: Green Reward and compensation affects EP positively in Palestinian manufacturing organizations.
- H5: Green Employee empowerment and participation affects EP positively in Palestinian manufacturing organizations.
- H6: Green Management of organizational culture affects EP positively in Palestinian manufacturing organizations.
- H7: The components of GHRM practices are interrelated and a strong relation is available between them in Palestinian manufacturing organizations.

- Achieving the second objective: to identify variables that help or stop GHRM implementation and the expected benefits of GHRM practices from the viewpoint of these companies. The following questions were used:

1. What are the GHRM policy barriers/obstacles in Palestine?
2. What are the GHRM drivers in Palestine?
3. What are the expected impacts of GHRM practices in Palestine?

1.6 Significance of the study

This study is shedding light on a new concept that has not been searched in details in developing countries, especially in Palestine.

This study reviews the current situation of the GHRM practices and provides solutions for the companies who are interested in this area. These solutions will be presented by a conceptual model that will provide a blueprint for these companies to adopt GHRM practices. This study, in fact, will better define which HRM practices or cluster of HRM practices could be more correlated with EP. So, by using this study, companies would understand which actions to adopt and implement first practices that have more impact on dependent variable EP. Eventually, for firms who have already implemented GHRM practices, this study will be a guide in order to improve their sustainability purposes.

At the end of the research there will be a few recommendations for future studies; it opens up new researches avenues regarding GHRM and

green management in WB that can be applied. Additionally, GHRM best practices model can be tested for green activities irrespective of organization types and country context.

1.7 Thesis Structure

The thesis includes six chapters. The first chapter "Introduction" introduces the thesis subject through a brief background overview. It also encompasses the research problem and the importance to support this research. Also, it clarifies aims and objectives of the research, research questions and hypotheses.

The second chapter "*Literature Review*" introduces a literature review and summarizes studies that addressed the GHRM, and previous studies which support the hypotheses formulation. In addition, a broader view was taken to look into how HRM may help in greening the organization. Also, it discusses the expected drivers, barriers and benefits of GHRM practices.

The third chapter "*Methodology*" presents the methodology that has been followed in this research through discussing data collection process used, the population targeted, sampling process, the instrument development for data collection and the data analysis approach. The fourth chapter "*Data Analysis and Result*" presents the results and findings which illustrate the analytical results of quantitative and qualitative data and present the hypotheses testing results.

The fifth chapter "*Discussion and model development*" discusses the results illustrated in chapter four and presents the model development. Finally, the sixth chapter "*Conclusion and Recommendation*" gives brief conclusions on hypotheses' results with a set of recommendations and future research suggestions.

Chapter Two
Literature Review

Chapter Two
Literature Review

2.1 Chapter Overview

This chapter will present a revision and analysis of empirical and theoretical data found in the literature to demonstrate the importance that HRM practices have in the EM field, and the relationship between them. Then a brief description of GHRM practices that can be implemented by companies is to be made. Finally, research hypotheses will be designed at the end of the chapter based on the literature.

2.2 Background

Recently both developed and developing countries became more concerned about the importance of the environmental issues and sustainable development (Sharmin, 2015). Especially after the consolidation of the industrial revolution; the expansion of the levels of production and consumption in the world has been intensified causing an increment in degradation of the environment (Jabbour and Santos, 2008a). The increased awareness for environment has paved the way for establishing green concepts into several concerns such as green cities, green food, green education, green ethics and philosophy (Firdaus and Udin, 2014). The green movement inculcated business and industry to develop and use green management by adopting environmental friendly practices and products (Prasad, 2013). Haden et al. (2009) clarified green management by the process of using innovation organization-wide to

achieve sustainability by continuous learning and development and embracing integrating environmental goals and strategies with the goals and strategies of the organization.

In the past, economic and financial status of an organization was vital for organization success and progress (Kapil, 2015a). But now shareholders are expecting companies to focus on minimization of ecological footprints and increased attention to social and environmental aspects (Sudin, 2011). In the corporate world today the concept of sustainable development has become a major focus and interest (Venkatesh et al., 2014). The main influential idea was defined by The World Commission on Environment and Development (1987) as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs". In the environmental literature, the concept of ecologically sustainable development can be defined as the need for balance between industrial growth for wealth creation and safeguarding the natural environment so that the future generations may thrive (Daily and Huang, 2001). It became clear that sustainability in the organization and its Environmental Performance (EP) are critical factors for organization's survival and competitiveness (Lee, 2009). As a result, an effective implementation of EM has become vital for the company's' survival and achieving Sustainability (Preston, 2001; Hussain, 2013); which has grown the need to adopt a good Environmental Management System (EMS).

Since the 1990s, EMSs have stood out as one of the most effective tools to achieve sustainable development (Chan, 2011) through integrating aspects of EM into corporate decision-making (Wagner,2014). Wagner (2013) defined EMS as a set of common 'Green' practices aimed at improving EP. The most popular environmental-related standard is the ISO 14001 standard. However, EMS could be insufficient to solve the complexity of environmental issues, based on the fact its effectiveness largely depends on informal voluntary initiatives that are difficult to control (Boiral, 2009; Daily et al., 2009); and if organization did not consider a basic process where employees and other stakeholders accept change it may fail in implementing EMS (Ronnenberg et al., 2011). Both Daily and Huang (2001) and Renwick et al. (2012) agreed on the idea that HRM is probably essential to successful EMS implementation. It could only be effectively implemented if the companies have the right people with the right skills and competencies (Daily and Huang 2001).

Yet the issue of how to achieve sustainability through the green management movement in an individual organization or entire society is still debatable and unclear. Therefore, research to help business to enhance sustainability through green management initiatives is essential (Prathima and Misra, 2013; Sudin, 2011). Management scholars from areas as diverse as accounting, marketing, and supply-chain management are now analyzing how managerial practices in these areas can contribute to EM goals (Jackson et al., 2011), but HRM has not been explored sufficient yet as an aspect of EM (Renwick et al., 2012). Although Müller-Camen et al. (2012)

and Renwick et al. (2012) called for more researches into the linkage between HRM and EM, to date, there is few empirical works that have clearly addressed the extent to which strategic HRM stimulates employees' friendly environmental behaviors, enabling firms to improve their EP (Paillé et al.,2013b).

Renwick et al. (2012) proposed that GHRM has a considerable potential in management research area, but that academic research is rather lagging behind in practice. This indicates there is an imbalance between practitioner and academic publications. Jackson et al. (2011) called for more research on GHRM in relation to environmental sustainability in order to illuminate the role of HRM activities in supporting and driving EM initiatives.

As a response to (Renwick et al., 2012; Jabbour and Santos, 2008a; Jackson et al., 2011) calls to integrate EM and HRM as a subject of research, this research aims to contribute in suggesting GHRM best practices for manufacturing companies in WB to improve their EP.

2.3 Green Human Resources Management (GHRM)

Many researchers contend that the availability and ability of HRM determine the effectiveness and success in any management innovation and strategic tools (Boselie et al., 2001; Paauwe and Boselie, 2003). HRM is one of the most effective parts of management because it deals with the most valuable assets of an organization which is human resources. Lado

and Wilson (1994) defined the HRM system as “a set of distinct but interrelated activities, functions, and process that are directed at attracting, developing, and maintaining (or disposing of) a firm’s human resources.” HRM practices are executed in line with the culture and business strategy of the organization (Boselie, 2001).

Regarding the relation between human and environment, in general, human activity causes environmental issues; therefore, it should be worked on by changing human behavior (Ones and Dilchert, 2012), using suitable HRM practices to stimulate employees (Paille et al, 2013b). Research studies about greening the organization through the relation between HRM and EM started in the 1990s, perhaps originated in 1996 from the contribution by Wehrmeyer (1996) who edited a book titled “Greening people: human resources and environmental management”. With increasing numbers of these studies, organizations needs of HRM practices support to implement greening became more obvious (Daily and Huang, 2001; Govindarajulu and Daily, 2004). These needs were strengthened by studies discussed the positive effects of HRM to firms' performance (Schuler and Jackson, 2014; Renwick et al., 2012; Paauwe and Boselie, 2005). Since that time, a series of studies have appeared on this subject.

Before 2008 the combination of HRM and EM was nameless. In the work of Renwick et al. (2008), this combination by “Green Human Resource Management” (GHRM) was coined for the first time, and began to incorporate it more systematically into the research agenda of HRM,

thus encouraging human resources scholars to include an environmental focus in their studies. In 2011, Jackson et al. organized the first Special Issue on HRM, decisively merging the research areas of human resources and environmental/green management. Since then, studies on HRM have become more common, encouraging new special issues on the subject (Renwick et al., 2012).

The notion of GHRM is related to the HRM function as the main driver in an organization to take up the green initiatives (Mandip, 2012). GHRM is an off-shoot of green management philosophy, policies, and practices followed by a firm for EM (Patel, 2014).

Sharmin (2015) defines GHRM by using HRM practices with the intention to promote the sustainable use of resources which will reinforce cause of environmental sustainability in general. It encompasses human resource initiatives to advocate sustainable practices and increase employee awareness and commitments on the issues of sustainability. Opatha and Arulrajah (2014) describe GHRM by the process of making employees of the organization green for the benefit of the individual, society, natural environment, and the business by using policies, practices and systems and activities involved in development, implementation and on-going maintenance of a system. It is the side of HRM that is concerned with transforming normal employees into green employees so as to achieve environmental goals of the organization and finally to make a significant contribution to environmental sustainability.

Nagendra and Kansal (2014) portrayed GHRM as the ecological aspects of fiscal policies, foreign policies, and industrial policies as well; which will foster eco-friendly initiatives resulting in a cleaner environment, reduction in consumption of paper, high retention rate and proper disposal of wastage. While Yusoff (2015b) sum up the earlier concept of strategic GHRM by CSR activities, work-life balance, E-HRM that could help enhance the sustainability of all stakeholders of organizations which requires consideration of its economic, social, and environmental aspects. However, it should be noted that traditional HRM subsystems are various from GHRM subsystems; where GHRM which has unique characteristics (Fayyazi, 2015).

GHRM is essential for the effective greening of organizations (Aragon-Correa et al., 2013; Brío et al., 2008). The emergence of GHRM includes the extent of improving the social (e.g., work-life balance) and economic well-being (e.g., sustain profits) besides awareness towards environmental concern (e.g., reduced wastes). GHRM has actually held and supported the paradigmatic understanding of the concept of 'triple bottom-line'; that is to say, that GHRM involves practices aligned with the three sustainability pillars–environment, social and economic balance (Yusoff, 2015a). GHRM form part of wider programs of corporate social responsibility (Sathyapriya et al., 2013). The implementation of GHRM is needed to implement the HRM systems that fit the organization's culture and long-term objectives (Sudin, 2011).

In fact, environmental sustainability typically begins with the development of a successful vision and strategy; executing the new strategy requires changing work process and behavior through training, talent management and the basis of the basic competencies of HRM (Cohen et al., 2012). Even though many companies are trying to effectively influence and increase employees' environmental behavior; there is a clear discrepancy between environmental policies and actual behavioral patterns in organizational everyday life which create challenge in the HRM literature.

Renwick et al. (2012) have mapped out how the GHRM practice can motivate, engage and increase employee's involvement in the environmental activities. The concept of environmental sustainability must be comprehended to the talents as they are the prime leader in an organization. Thus, it can be said that through effective implementation of GHRM in talent management it can be connected to business sustainability and bring the benefits to the organization in the long run (Wagner, 2013).

It can be assumed that the full potential of GHRM in theory and practice has not yet been realized. Once organizations incorporate the environmental dimension into their dynamics, HRM have a crucial role in stimulating the success of its integration with the EM. However, it is noteworthy that GHRM is still in its early stages and many studies in this area is a theoretical phase (Jabbour, 2013b).

2.3.1 The role of HRM in greening the firm

Today, “being green” has become a norm (Margaretha and Saragih, 2013); greening is a holistic process aimed at smarter energy usage, low costs, low wastage using sustainable resources or recyclable materials for end results that are products, targets, etc. (Jafri, 2012). A Green Workplace is environmentally sensitive, resource efficient and socially responsible (Sathyapriya et al., 2013). In addition, it incorporates a virtual workplace and green buildings. A Green Workplace could have one or more of the following components: written environmental policy, specific targets for improving EP, publication of environmental reports, EMS, environmental purchasing policy, environmental training and education, fossil fuel use reducing policy and policy of reducing the use of the unsustainable product (Ramus, 2002). Google is leading the way publicizing their environmental record and in its environmental practices (Kaur, 2013).

Over the last three decades, organization’s relationship with the environment has been largely defined by environmental regulations. How organizations, primarily in developed countries, respond to the demands of environmental law has determined their relationship with the environment (Aragon-Correa and Sharma, 2003). Past research had developed various classifications for the relationship between business and the natural environment (Jabbour and Santos, 2006; Aragon-Correa and Sharma, 2003; Staffelbach et al., 2012). In general, “corporate strategies for managing the natural environment can be classified along a continuum that ranges from reactive to proactive” (Aragon-Correa and Sharma, 2003).

Jabbour and Santos (2006) classified environmental strategies into three types:

(1) Functional specialization of environmental dimension (or reactive stage); occurs when the area of EM created is strongly linked to the need of meeting legislative demands and with an isolated position within an organization;

(2) Internal integration of environmental dimension (or preventive stage); occurs when the organizational areas' involvement in EM increases; however, the environmental dimension is not considered systematically strategic;

(3) External integration of the environmental variable (or proactive stage); occurs when all the areas of a company are designed to explore competitive advantages systematically by using principles and tools of EM.

The evolution of EM throughout these stages depends on the contributions of HRM (Ferna´ndez et al., 2003). Obviously, proactive stage requires a huge amount of effort for training and restructuring the employees through HRM function involvement, since the company aims for a better and deeper understanding of the environmental issues.

Staffelbach et al. (2012) described the HR functions roles that can support the organization greening; (1) Strategic partner who understands the business model and gather the relevant stakeholders (including

employees, customers, shareholders, and society) together and encourage the dialogue between them, also shares with the managers' strategies, the value of human resources and the consequences of managing people effectively. (2) Innovator who enables the organization to develop the learning culture, guiding and directing people and does not just copy what others are doing and contributes special knowledge on environmental aspects to the initiative; (3) Collaborator who brings specific competencies of each function together to make a win-win situation understands how to build win-win situations, cooperates and supports and works task-oriented across internal and external organizational constraints. Finally, (4) Change Facilitator who manage and supervises the implementation of the initiative and is aware of the need for change and creates favorable conditions in the organization for it, helps leading changes in strategy and energizes others for the desired change.

Opatha and Arulrajah (2014) mentioned four roles for an employee to become a green employee; which are: a preservationist, conservationist, non-polluter, and maker. The_preservationist is the one who protect the natural environment from harm loss, or negative change and keep it in its original; Conservationist is the one who treat natural environment very carefully and use it at the minimum level in order to let it last as long as possible so that future generations will be able to utilize it.

Non-polluter, is the guardian who stops any behaviors and outcomes that could endanger the planet/earth where humans and non-humans are

living through preventing from (or minimizing) contaminating the water, air, atmosphere, etc. through unpleasant and poisonous substances and wastes. Maker is the employee who intentionally builds parks and places which have plants, trees, and grass. A Green employee is a nature-lover or an eco-activist (Opatha and Arulrajah, 2014).

In the area of environmental affairs, HRM practices can aid in balancing corporate values, financial goals and environmental strategy and; in ensuring that employees implement this balanced strategy consistently across the organization (Cohen et al., 2012). The responsibility of the present generations, HR managers is to create awareness amongst the youngsters and among the people working for the organization about the GHRM (Shaikh, 2012). Through being an advocator; HR managers should initiate the environmental sustainability concept and employee's involvement in environmental-friendly activities in the organization, and guide line managers in terms of gaining full staff co-operation towards implementing environmental policies which means HR needs to nurture supporters and create networks of problem-solvers willing to act to change the current status quo (Mandip, 2012).

It's important to include greener activities in every step of HRM activities; once it becomes a daily activity then it will be treated as a culture. Similarly, Jabbour and Santos (2008b) also stated that superior EP outcome requires HRM practices that support the whole implementation and maintenance of EMS in the organizations, where supportive HRM

practices such as top management support, environmental training, empowerment, and rewards are likely to be critical to the successful implementation of policies and initiatives associated with an EMS (Daily and Huang, 2001; Govindarajulu and Daily, 2004). The development of products with lower environmental impact requires the support of HRM (Govindarajulu and Daily, 2004; Jabbour et al., 2008); many research support the idea that companies which pay attention to the greening of human factors may be more productive, thus gaining a competitive advantage (Jackson and Seo, 2010; Paille et al., 2013b), in contrast with other organization that is not using full range of GHRM will have potential limitation in the effectiveness of total environmental improvement (Renwick et al., 2012).

To build a green organization, the organization, and HRM must increase efficiencies in organizational hierarchies, perform more virtualized work or eliminate unnecessary time spent in the office and optimizing the use of company resources, including travel, etc. Also, companies that are supporting greener options include telecommuting, flexible work schedules (Sathyapriya et al., 2013); In GHRM, researchers have asserted the importance through all the functions of HRM ranging from of staffing, job analysis, environmental training and communication, participation, empowerment, recognition and compensation, the performance of EM programs, performance appraisal and use of technology (Paille et al., 2014; Kapil, 2015a; Renwick et al., 2008).

Against this backdrop, it can be assumed that GHRM is all about the holistic application of the concept of sustainability to the organization and its workforce. It involves green actions focused on increasing efficiency within processes, reducing and eliminating environmental waste, and revamping HR products, tools, and procedures resulting in greater efficiency and lower costs. The results included: electronic filing, ride sharing, job sharing, teleconferencing and virtual interviews, recycling, telecommuting, online training, and developing more energy-efficient office spaces (Sharmin, 2015). In fact, GHRM promotes various Green processes and practices in different HR functions. Some of the practices concerning Green management in which HR is actively involved have been described above. Specifically, the functional areas where HR can have a green approach and which can have a bearing on acquisition, development and retention of human capital could be the following

2.3.2 Greening the firm via HRM practices

GHRM consists of two essential elements: Environmentally-friendly HR practices and the preservation of knowledge capital (Mandip, 2012). In fact, GHRM policies focus on collective and individual capabilities to bring about green behavior. Such policies are aimed at developing an environmental corporate culture (Sharmin, 2015). The green performance, green behaviors, green attitude, and green competencies of human resources can be shaped and reshaped through adaptation of GHRM practices (Arulrajah et al., 2015). GHRM focuses on employees'

environmental behavior in the company, which in turn, could be carried on to consumption pattern in their private life (Muster and Schrader 2011). To implement GHRM in the organization, it is strategic to begin with the policies, procedures and ideas that make up the HR practices in order to assist the achievement of the going green management (Prasad, 2013).

Looking at the recent past in the area of GHRM, some research results are particularly relevant. There is a consensus that GHRM is established through the alignment of the HRM practices, with the aims of organizational EM (Jackson and Seo, 2010). Some recent papers illustrate the cross-fertilization between EM and HRM for the achievement of EP. Applying the link between HR practices and firm performance to the realm of EP, Daily and Huang (2001), Ferna´ndez et al., (2003), Madsen and Ulhoi (2001) and Jabbour and Santos (2008) emphasize the association between HR factors such as environmental training, employee empowerment, rewards, teamwork, and support of top management as essential in achieving sustainability and in implementing successful EMS. The table below (Table 2-1) summarizes the HRM practices related to green management and identified in different studies.

In this research the term GHRM best practices involves the human/organizational aspects relevant to EM, the following were used in this study:

- Green (environmental) recruitment and selection.

- Green (environmental) training, to provide the capacity to address EM situations.
- Green (environmental) performance evaluation, which measures employee contributions to the advancement of EP.
- Green (environmental) reward systems for EP, which value employees who contribute the most to environmental sustainability.
- Green (environmental) empowerment, providing employees with the autonomy to make environmental decisions.
- Green (environmental) Organizational culture management; support from top management for environmental initiatives. The environmental issue is dealt with as a value of a company's organizational culture.

These more traditional GHRM practices are more tangible and may guarantee that green issues will be considered in organizational routines (Jabbour, 2015). These practices will be discussed in details below to see how companies can transform HRM practices in green ones and their utility in contributing to and supporting the EM.

Table (2.1): Studies on GHRM

No.	Authors	Summary
1	Daily and Huang, (2001)	The authors identify HR factors such as top management support, environmental training, employee empowerment, teamwork, and rewards systems fundamental for implementing an EMS
2	Ramus (2000)	An investigation into companies of 12 countries concluded that an organization's ability to produce environmental innovation depends on the organizational support and the HRM that employees notice.
3	Ramus (2002)	A survey, involving employees from companies of 12 countries, shows the importance of HRM dimensions, such as reward systems, performance evaluation, and organizational culture management, to create environmental innovation.
4	Rothenberg (2003)	The main instruments and organizational mechanisms which favor employees' participation in projects related to the improvement of EP in automobile assembly plants are analyzed.
5	Daily et al.(2007)	Authors conclude that the employees did not view environmental training as having a direct impact on EP. However, training was positively related to teamwork. This mediator variable had a positive influence on EP. Thus, environmental training empowered the environmental teams.
6	Brı´o et al. (2007)	Authors conclude that the top management's involvement, the strategic integration of environmental dimension and employees' motivation and participation have a great influence on companies' EP.
7	Brío et al. (2008)	Authors identified the key factors related to organizational culture and the management of HRM (such as selection, environmental training, teamwork, employee involvement) that drive EP.
8	Jabbour and Santos (2008)	Consider HRM may contribute to EM in companies if they: (a) green recruitment and selection (b) green training and green performance evaluation (c) green rewarding for individual and collective EP; (d) stimulate continuous education in EM; (e) treat environmental aspects as values of

		a corporate culture; and (f) promote interaction between teams in order to deal with environmental problems and strive for continuous improvement of EM activities.
9	Jabbour et al. (2010)	State that HRM had a decisive role in the evolution of EM in organizations and that HRM practices, such as performance evaluation and rewards, are critical to achieving more proactive EM.
10	Sudin (2011)	Researcher discussed that employees must be motivated, empowered and environmentally aware of greening in order to carry out green management initiatives; using top management support, employee relations, rigorous recruitment, and selection of employees, performance-based appraisal system, the introduction of training programs and reward system to address green movement. Also discussed the positive effects of the types of green intellectual capital on corporate environment citizenship, leading to the competitive advantage of firms.
11	Jackson, et al. (2011)	Mention that Green responsibilities can be used by environmentally responsible employers to attract talent that fits and contributes to achieving the organization's environmental goals, using HRM functions (Recruitment, Performance measurement, Training, development, and learning, Compensation and rewards and Greening the organizational culture)
12	Jabbour, 2011	The manner in which HRM can be greened is often observed and studied in terms of a continuum surpassing all HRM practices – recruitment and selection of talent; compensation and rewards; performance and appraisal; training and development; employment relations and organizational existence
13	Mandip (2012)	Discussed in detail how entry-to-exit processes in HRM (from recruitment to exit) translate GHRM policy into practices.
14	Daily et al., (2012)	Authors analyzed the influence of environmental empowerment and environmental training (independent variables) on employee-perceived EP

		(dependent variable). They found that environmental training influenced EP to a greater extent than did environmental empowerment. Environmental teams among the employees were the mediators in this relationship.
15	Dutta (2012)	Explains organization can maintain its green objectives all throughout the HRM process of recruiting, hiring, training and compensating, developing and advancing the firm's human capital.
16	Margaretha and Saragih (2013)	There are seven levers to a green culture which are talent development for the greening of the organization, designing of green jobs, top manager following green modeling, information sharing techniques and empowerment, measurement of green performance and green recruitment and retention. The levers ensure bringing in changes in the desired green behavior of employees.
17	Renwick et al., (2012)	Find the implementation of rigorous recruitment and selection of employees, performance-based appraisal system, training programs aimed at green management initiatives have a basic importance for fostering environmental innovations and associated with superior EP.
18	Opatha and Arulrajah (2014)	Listed the main HR activities that should be focused when going green, namely job analysis, recruitment, selection, induction, training, performance evaluation, rewards management and discipline management.
19	Jabbar and Abid (2014)	The findings of the paper suggest that how HRM practices (Rewards, Assessment, Supervisory Behavior, Management Commitment and environmental Training) influence employee motivation to become involved in the organizational EP.

2.3.2.1 Greening the firm via recruitment and selection practices

The main goal for recruitment and selection is to attract potential applicants and hire them as employees for a given organization (Jabbour and Santos, 2008a). To fill an existing and projected job openings, the

recruitment process aims to locate and motivate potential candidates to apply; therefore, the recruitment process influences the quantity and diversity of candidates for a specific vacancy (Jabbour et al., 2008; Fayyazi, 2015); in fact, attracting high-quality employee is crucial for the firms that want to obtain certain performance. The selection process aims to choose the ideal candidate from potential candidates list for a position (Jabbour et al., 2010).

To build and maintain a green workplace the organization needs to select and hire an employee who supports and is interested in the environment (Renwick et al., 2012). Talent management is experiencing numerous pressures for change which has led many manufacturing organizations struggling to effectively manage next generation talent and fill the position with the right match (Muniandi and Nasruddin, 2015). Green job candidates, who comprise a large section of talented and knowledgeable manpower, use green criteria when applying for jobs, and, therefore, companies having green practices can attract good talent (Kapil, 2015b).

In order to improve their selection attractiveness for an increasingly environmentally aware younger generation (Ehnert, 2009), before the organization sets out with the process of recruitment, it is important that they brand themselves as being green. The image that organizations build in the market should primarily be inspired by the thought that these organizations are environment responsive (Kapil, 2015a). Job seekers often

consider several organizations when they apply for a job, according to Renwick et al. (2012), they prefer organizations that have a close fit between their and the organizations' values; which makes a recruiting organization's environmental reputation and images increasingly outstanding in recruitment efforts. Guerci (2015) surveyed a sample of 180 students attending the final year of a Master's in Business Administration at three universities in Northern Italy; based on their answers the results found that there is an impact of green reputation on attracting applicants but no impact of information on the recruitment website.

Recruitment practices can support effective green management by ensuring that new recruits understand an organization's green culture and share its environmental values (Jackson and Seo, 2010). As well as using interviews to draw out candidate's environmental knowledge, values and beliefs (Renwick et al., 2012). In general, when this activity includes the environmental dimension, the EP of the company is implemented as an element to absorb talents (Jabbour, 2011). The recruitment messages should include environmental criteria (Arulraja et al., 2015).

During job analysis, job description, and person specifications, HR managers should emphasize on environmental aspects, green accomplishments and what is expected out of future green employee (Mandip, 2012; Renwick et al., 2012). It should reflect the sustainability agenda and the company's website and other research tools available for candidate access clearly outline its greening attempt (Kapil, 2015a;

Arulrajah et al., 2015). These days, some companies have incorporated environmental and social tasks, duties and responsibilities as far as possible in each job in order to protect the environment (Arulrajah et al., 2015). This will help the employee in acknowledging that in the future he has to be a part of an environmentally sustainable organization. During shortlisting of candidates; employees' selection process should ensure granting higher chances of being selected for environmentally committed candidates who were involved in previous related green initiatives earlier than those who, on the other hand, were not involved in such initiatives in the past (Jabbour, 2011). When interviewing candidates or evaluating them for selection, environmental-related questions are asked by those companies (Renwick et al., 2012; Arulraja et al., 2015). Nowadays many companies have designed environmental concerned new jobs or positions in order to focus exclusively on EM aspects of the organizations (Opatha, 2013).

Going green in recruitment requires implementing technologies into HRM activities which is known as Electronic HRM (E-HRM) (Yusoff, 2015a); Green recruitment defined as a paperless process in which applications are invited through online tools (Audio/Video interview, Online test, SMS, emailing, apply through organizations website) to reduce the carbon footprint and cost of operations and minimize any travel related environmental impact (Muniandi and Nasruddin, 2015). The automation of HRM's systems has ability into promoting sustainability as it simultaneously helps in reducing environmental waste (e.g., paper, staples, files) and social waste (e.g., process' time for searching documents and

decision making), and economic waste (e.g., cost related to preparing documents, labours' salary due to extra time of working) of conducting HRM's task (Yusoff, 2015; Muniandi and Nasruddin, 2015).

Green organizations have emphasized the importance of green recruitment (Hussain, 2013). Although it is clear that the recruitment and selection of employees who are committed to the environment are important for greening organizations, studies show that these practices do not always incorporate environmental aspects (Jabbour and Santos, 2008). Little is known about the dynamics of inserting environmental issues in an organization recruitment process (Fayyazi, 2015). While there is a lack of systematic studies exploring 'green collar' recruitment practices (Renwick et al., 2012), a notable exception is Jabbour et al. (2010) who surveyed 94 Brazilian organizations and found recruiters selected candidates based on environmental knowledge and motivation.

2.3.2.2 Greening the firm via training

For Ivancevich (1995), training may be understood as a systematic process that leads the employees' behavior towards accomplishing the set of organizational objectives. As a consequence, it is considered as an essential component of successful companies. It is the preferred practice for changing the skills, knowledge and behavior of management and non-management employees (Patel, 2014).

Environmental training (ET) stands out as one of the primary methods through which HRM support EM (Daily et al., 2012; Jabbour,

2013; Brío et al., 2008, 2007). According to Teixeira et al. (2012), “green training is one of the most important tools to develop human resources and facilitate the transition to a more sustainable society”. It’s used to improve the capacity to address EM situations (Jabbour, 2013). ET can be understood as an important human or organizational factor to the recent literature on GHRM (Renwick et al., 2012; Jackson and Seo, 2010). Opatha and Arulrajah (2014) stated that the most significant impact towards environmental awareness among employee was through environmental training. It was also responsible for creating the culture to foster the green practice in organizations.

Employee training and development programs should include social and environmental issues at all levels, from technical health and safety considerations on the shop floor to strategic sustainability issues at executive management and board level (Mandip, 2012). The environmental maturity of companies tends to increase as environmental training improves and becomes more intense (Teixeira et al., 2012). In the same token, it was essential to identify the relevant and appropriate training for the respective employee (Margaretha & Saragih, 2013). According to Cherian and Jacob (2012), it was imperative to design Environmental training based on training needs in order to garner optimum benefits from the training. Training needs have to be detected in an integrated way, involving the staff responsible for the EM programs and other areas of a company (Ferna´ndez et al., 2003), and including top management as well (Jabbour and Santos, 2008a).

Employee is required to possess a sufficient amount of knowledge and skills in respect of greening and without this knowledge and skills (competencies) it is not possible for the employee to become a green employee (Daily and Huang, 2001; Ramus, 2002; Rothenberg, 2003; Sudin, 2011). Training, development and learning plans should include programs, workshops, and sessions to enable employees to develop and acquire knowledge in EM, green skills, and attitude (Prasad, 2013). This knowledge allows the employees to be able to achieve the objectives of EM programs (Jabbour, 2013).

ET is fundamental to any successful activity of EM, conservation, and recycling of resources (Jabbour, 2013). Renwick et al., (2008 and 2012) suggest certain green training and development practices such as training staff to produce green analysis of workspace, provision of specific training on EM aspects of safety, energy efficiency, waste management, and recycling, development of green personal skills, and re-training of staff losing jobs in relevant polluter industries, supporting flexible schedules and telecommuting, and reducing long-distance business travel (Jackson et al, 2011) and provide opportunity to engage employees in environmental problem solving (Zoogah, 2011) are very useful to reduce the negative environmental impacts of the organizations. Also, job rotation in green assignments should become an essential part of career development plans of talented green managers of the future; it provides a useful way to train green executives or future board members in EM and is seen as a crucial part of successful environmental programs (Wehrmeyer, 1996; Arulraja et

al., 2015; Prasad, 2013). Other specific types of training, such as participation in teams, brainstorming and construction of consensus may qualify employees to participate in EM programs (Govindarajulu and Daily, 2004)

More and more people are passionate about environmental stewardship and appreciate the opportunity to obtain training in this area. Employees should have access to workshops and conferences, ecologically-friendly (eco-friendly) topic (Liebowitz, 2010). Extensive use should be made of online and web-based training modules and interactive media as training tools for not only EM training but for other functional areas as well. Training managers should rely more on online course material and case studies rather than on printed handouts, thus further reducing the use of paper (Kapil, 2015b).

Organizations should ensure that new recruits understand their environmental responsibilities, become familiar with health and safety arrangements, appreciate the corporate environmental culture, adopt the company's environmental policy and practices, and know given relevant contact persons within the organization (Renwick et al., 2008; Renwick et al., 2012). Also, Mandip (2012) added that they should be exposed to the organization’s environmental policy. So from the very first day of work the new employee determines his own goal which aligns to the organization’s policy.

Wehrmeyer (1996) recommends seven key elements of a training program in EM:

(1) The environmental message has to be kept simple and relevant; (2) The training sessions have to be kept short, informal and for small groups; (3) Employees have to be involved in the open thematic sessions; (4) It is important to notice who the leaders of the environmental management are among the employees of a session; (5) The ecological dimension has to be treated as a new value of organizational culture; (6) The environmental results achieved by employees of other companies are important to be highlighted; (7) The effects of training in the employees' routine of work have to be evaluated.

Although the research on the relationship between human factors and environmental sustainability is slowly progressing, environmental training has attracted the most attention from researchers and practitioners (Jabbour, 2013). Daily et al. (2012) analyzed the influences of environmental empowerment and environmental training (independent variables) on employees' perceptions of EP (dependent variable). Those authors found that environmental training tended to influence EP more than environmental empowerment. Teixeira et al. (2012) presented case studies on the relationship between environmental training and EM based on Brazilian cases, suggesting that these two variables of contemporary organizational management have co-evolved. However, there remains a lack of research that integrates and systematizes the available knowledge

on organizational environmental training; more research is needed on environmental training, combining training and GHRM and defining/measuring the objectives of the environmental training actions. (Jabbour, 2013; Daily et al., 2012; Jackson et al., 2011; Jackson and Seo, 2010).

2.3.2.3 Greening the firm via Performance Management System

Performance Management System (PMS) is defined as a challenge of how to measure EP standards between different departments of a firm and gathering beneficial data about the EP of managers (Wehrmeyer, 1996). One of the parts of PMS is the performance appraisal which is defined by Ivancevich (1995) as the dimension of human resources that aims to improve employees' performance and productivity over time through analyzing and evaluating an employees' performance related to their responsibilities and comparing their goals and their result.

Performance management programs are essential to guarantee the effectiveness of green management work over time because they guide an employee's performance to the EP desired by an organization through measuring employees' contribution to the advancement of EP (Jabbour and Santos, 2008; Jackson et al., 2011). In order to sustain good EP, organizations must establish Environmental Management Information Systems (EMIS) and environmental audits (Arulrajah et al., 2015).

HR managers prevent harm to EM when they integrate EP into PMS by setting EM objectives, monitoring EM behaviors, and evaluating

achievement of environmental objectives by using green work rating as the key indicators of job performance (Sharmin, 2015; Kapil, 2015b). Without this practice, any organization cannot ensure the realistic EP (firm level) in long term basis (Arulraja et al., 2015). Evaluation of green performance of employee must be done separately or at least as a part of the performance evaluation system of the organization. It could be done by adopting corporate-wide metrics for assessing resource acquisition, usage, and waste; implementing information systems to track resource flows; and conducting field audits to provide employees opportunities to identify problems while gaining information and feedback about the green performance of the firm (Jackson and Seo, 2008).

Incorporating EM objectives and targets with the performance evaluation system of the organization, or using green performance indicator and appraisals only is not enough. Green schemes, performance indicators, and standards should be clear to all levels of staff through performance evaluation system and establish a firm-wide dialogue on green matters (Renwick et al., 2008; Renwick et al., 2012). Green targets, goals, and responsibilities for Managers and employees should be created and included in their appraisals (Prasad, 2013; Renwick et al., 2012). Also, supervisors and managers of those companies should provide a regular feedback to the employees or teams to achieve environmental goals or improve their EP (Arulraja et al., 2015; Jackson et al., 2011); this practice will help the employees to enhance their knowledge, skills and ability. Organizations may provide an online system that allows employees to track

their own carbon emissions and provide an opportunity for employees to participate and suggest practical ways to make the organization greener (Kapil, 2015b).

There are not only good rewards for people who have good EP, but there might be negative consequences, such as suspensions, criticisms and warnings, in performance management systems to get employees to make environmental improvements (Renwick et al., 2008).

2.3.2.4 Greening the firm via Pay and Reward System

The main goal of reward and compensation policies is to attract, retain and motivate the best employees to foster the development of new knowledge, and abilities, which lead to the achievement of organizational goals (Teixeira et al., 2012). The reward and compensation systems could contribute to EM in an organization if it focuses on avoidance of negative behaviors and encourage the eco-friendly behavior.

Ferna´ndez et al. (2003) conducted several studies which proved that paying for EM performance is really effective. Rewards motivate and increase commitment from workers to be environmentally responsible and get involved in eco-initiatives (Renwick et al, 2012; Daily &Huang, 2001). It values employees who contribute the most to environmental sustainability (Renwick et al., 2012); through recognizing and rewarding employees who dedicate to environmental goals by helping in waste reduction and those in the middle management who encourage their

subordinates to adopt green practices, motivate managers and non-managerial employees on corporate EM initiatives (Kapil, 2015a; Arulraja et al., 2015; Jabbour and Santos, 2008). It sensitizes employees to environmental consciousness; and discourage undesired behaviors while reinforcing preferred ones (Sharmin, 2015); and doing so needs effective employment of both incentives and disincentives (Renwick et al., 2008).The core success of recognition rewards is making them available at different levels within the organization (Arulraja et al., 2015).

There are many green reward management practices that can be used to gain green stewardship/citizenship; such as linking suggestion green scheme with rewards system, linking participation in green initiatives with promotion/career gains (managers advance through supporting staff in EM), or by providing incentives to encourage recycling and waste management, supporting flexible schedules and telecommuting, and reducing long-distance business travel, can include the use of nature-friendly workplace and lifestyle benefits, which may include carbon credit offsets, free bicycles and pollution-free vehicles (Jackson et al, 2011; Renwick et al., 2012; Jabbar and Abid, 2014; Prasad, 2013). Also, managers can use rewards to encourage some green creativity and innovation among the workforce by asking employees to bring innovative green ideas pertaining to their individual jobs (Shoeb, 2015).

There are several types of reward practices to reward green skills acquisition, it can be done using monetary-based EM rewards (bonuses,

cash, premiums), use of non-monetary based EM rewards (sabbaticals, leave, gifts), use of recognition-based EM rewards (awards, dinners, publicity, external roles, daily praise), positive rewards in EM (feedback) (Renwick et al, 2013; Opatha, 2013).

Developing effective monetary incentives could be a challenge for HR managers because of the difficulty of accurately and fairly evaluating environmental behaviors and performance (Fernández et al, 2003). Hussain (2013) suggests that the amount of reward depends on a measure of the environmental behavior of the single employee but without significant results in the EP of the company. However, more researchers needed to determine how can HR manager design and implement green compensation practices that may lead to the achievement of the corporate environmental goal (Shoeb.2015).

2.3.2.5 Greening the firm via supportive organizational culture

Organizational culture could be defined as the set of basic assumptions that a certain group came up with, discovered or developed in its process of learning in order to deal with problems of either external adaptation or internal integration (Jabbour et al., 2008). From an environmental aspect, Harris and Crane (2002) define the organization environmental culture as the set of assumptions, values, symbols, and organizational artifacts that reflect the desire or necessity of being an environmentally correct organization.

According to Ferna´ndez et al. (2003), organizational culture and HRM are closely linked and critical for the achievement of superior environmental patterns: in fact, organizations, that have solid mechanisms of EM supported by an organizational culture which values environment, tends to attract more motivated and competent workers, therefore, to be more powerful when a company has a group of collaborators who are environmentally aware. Govindarajulu and Daily (2004) consider organizational culture as a factor of either promotion or inhibition to employee's motivation and willingness to adopt responsible environmental behaviors, and employee's participation in improvement projects for the EM in companies (Rothenberg, 2003; Ones and Dilchert, 2012; Paillé et al., 2013a; Ramus and Steger, 2000; Paillé and Raineri, 2015). Based on that both a weak organizational culture and inefficiencies in HRM are considered as major barriers to the implementation of environmental action processes (Brío et al., 2008).

Johnson and Walck (2004) stated that company could integrate environmental dimension in the set of values that form an organizational culture effectively using five steps as follows:

(1) Top management recognizes and spreads the environmental dimension as a new value of a company; (2) Top management recognizes and spreads how environmental practices can influence the routines of a company; (3) Top management shows how the environmental values have to support the various phases of EMS; (4) There are systems for training,

performance appraisals, and rewards focused on employees' EP; (5) Employees incorporate the ecological dimension as a new organizational value.

Many researchers support that top management and supervisor's support is a key component to successful organizational performance and implementation of organization-wide EM programs; they are crucial for motivating employee towards EM. (Daily and Huang, 2001; Ramus and Steger, 2000). Researchers have suggested that when supervisors adopt the democratic style of decision making towards EP and show that management is strongly committed, employees so participate more willingly (Ramus، 2002; Govindarajulu and Daily, 2004). Also, Ramus (2001) proved by an empirical study that one of the most significant factors that increase employees' environmental initiatives is supervisors who incorporated daily appreciation in their organizations.

All level of employees should understand the environmental values in the organization; if top management didn't clarify environmental goals and environmental responsibilities employee participation in environmental work will be decreased, as a result, top management should broadcast environmental programs, initiatives, and goals again and again to all employees (Ramus, 2001; Daily and Huang, 2001; Daily et al., 2007; Govindarajulu and Daily, 2004). Also, top management has to provide employees with a feedback of EP in order to maintain correct values, and should reinforce them through education and training (Ferna´ndez et al.,

2003). On the other hand, top management should define penalties for environmental regulations and rules violation, so disciplinary actions (warning, fining, suspension, warnings, suspensions for lapses etc.) are taken against an employee who violates environmental rules (Renwick et al., 2008; Renwick et al., 2012; Mandip; 2012).

Top management in an environmentally proactive organization that provides strong culture that gives employee time for experimentation towards EP and making environmental improvements without excessive management intervention which would ultimately increase their motivation towards EM to (Daily and Huang 2001; Daily, et al., 2007; Govindarajulu and Daily, 2004) and promote innovation and risk taking (Govindarajulu and Daily, 2004; Ramus, 2001; Ramus and Steger, 2000).

Paillé and Mejía Morelos (2014) contend that "if employees are aware that becoming greener is an important objective of their employer, and the employer demonstrates its interest in creating, developing and maintaining high-quality relationships in the long term, individuals might be more prone to reciprocate by performing pro-environmental behaviors on the job".

From this standpoint, organizational culture is the most important and most relevant human factor in the greening of organizations (Harris and Crane, 2002), based on top management support (Govindarajulu and Daily, 2004), values, and principles for supporting EM in companies (Jabbour et al., 2010).

2.3.2.6 Greening the firm via Employee empowerment and participation

Even though top management commitment to EM provides the underpinning framework for EM, without wider employee engagement the success of EM may be limited (Renwick et al., 2012). HR managers have to encourage the employee to participate and initiate the green and eco-friendly ideas of the organization. The traditional organization (top-down management) hinders the independence of workers, in contrast with the flat and horizontal organization which motivates the empowerment of workers (Govindarajulu and Daily, 2004). Therefore, HR staff can highlight the necessity to create a participative work environment to top management; where employees can disagree with management and offer different ideas to address important issues (Liebowitz, 2010).

Employee participation creates an environment where the employee has an influence on decisions and actions that affect their jobs. It also leads to acceptance of the organizational objectives and targets by the employee (Patel, 2014) beside enhancing and facilitating motivation and morale of the employees (Patel, 2014; Daily & Huang, 2001); in green initiatives it increases the chances of better green management as it aligns employees' goals, capabilities, motivations, and perceptions with green management practices and systems (Shoeb, 2015; Sharmin, 2015). Encouraging employee participation creates entrepreneurs within the organization who are socially or ecologically oriented; to achieve that employee should get

involved in formulating an environmental strategy which will enable them to create and expand the requested knowledge to market green products (Margaretha and Saragih, 2013).

Employee participation enhances a tacit knowledge inside people; which has great influence in identifying pollution sources, managing emergency circumstances and expanding preventive solutions (Boiral, 2012). The enhanced tacit knowledge will improve EP as employees possess knowledge and skills that managers lack Rothenberg (2003).

Mandip (2012) suggests that the workers can participate on environmental projects in two ways:

- Gather the specialist staff (who are more involved in project initiation) with line level workers (who are more likely to participate in project implementation) in a suggestion programs and problem-solving circles.

- Encourage employees to seek green habits like allowing flexible work weeks, establishing a carpool program, offering free or discounted free transportation passes, adding car sharing as an employee benefit and setting up transportation savings account

The role of empowerment in organizational environmental issues has received significant attention in recent years (Daily et al., 2007; Daily and Huang, 2001; Ferna´ndez et al., 2003; Govindarajulu and Daily, 2004; Ramus, 2002). Many researchers support that individual empowerment

positively influences productivity and performance, and facilitates self-control, individual thinking, and problem-solving skills, which should be developed at all hierarchical levels of an organization, including the operational level (Daily et al., 2007; Renwick et al., 2008). Empowerment is defined in a way that reflects the sharing of power with employees. Therefore, environmental empowerment is defined as a process through which authority shares its power with employees to address environmental issues (Daily et al., 2011) which offer the independence for employees to generate creative solutions to solve problems and to invest the best of their abilities.

In EM practices, empowered employees are more susceptible to be involved in the improvement of the environment (Govindarajulu and Daily, 2004). Researchers support that best idea for environmental initiative are originated by all employees who work in that particular area (Liebowitz, 2010; Fernández et al., 2003) It's more convenient in many cases for managers to set the environmental goals for employees (such as reduce hazardous wastes by 10%); but, frequently, it will be much better if employees are in the position to participate in determining how to achieve that goal (Liebowitz, 2010).

The majority of environmental problems cannot be related to individual projects only; the complexity of these problems requires teamwork of a conglomeration of various types of individual competencies who share respect for the environment to implement EMS effective more

than individual contributions (Daily et al., 2007; Rothenberg, 2003;Neto and Jabbour, 2010),

Beside effective implementation of EM teamwork is essential in demonstrating the value of HR; also, it foster EM practices and tacit knowledge particularly when environmental problems are group-oriented within organizations (Daily & Hung, 2001; Daily et al., 2007).

2.4 Drivers, barriers and excepted benefits of GHRM

Based on the literature, this section aims to provide a brief explanation of factors that could drive or hinder an organization from implementing GHRM, as well as its associated benefits and challenges.

2.4.1 Drivers

Companies now realize that they have to develop a powerful social conscience and green sense of responsibility where corporate responsibility is not just a brand building tool to have, but it is an essential factor for business development (Sathyapriya et al., 2013). Traditionally, a majority of companies around the world has used the compliance approach in their environmental or green management initiatives driven by laws and regulations (Sudin, 2011). Few researchers have been done to define the drivers of applying GHRM in organizations.

In 2011, SHRM conducted a survey “Advancing Sustainability: HR’s Role is “to collect more information on what companies are doing to balance financial performance with contributions to the quality of life of

their employees, the society at large and environmentally sensitive initiatives. HR professionals Firms were asked to identify the main driver for their organization's investment in sustainability. The key drivers were: 1) contribution to society, 2) competitive financial advantage, 3) Environmental considerations 4) Economic consideration and 5) health and safety considerations. Less frequently cited drivers included employee activism, market share improvement, public/media relations strategy, consumer pressure, local/federal regulations, internal activism, local/ federal incentives and recent corporate scandals.

Jafri (2012) conducted a study to identify the drivers behind GHRM practices in certain automobile manufacturing organizations in India. Based on data analysis it was found that the main driver of GHRM practices is its contribution to society and health and safety considerations followed by environmental considerations, Economic considerations, Public relations strategy, Competitive advantage, finally Market share improvement.

In 2008 SHRM Green Workplace survey to examine environmentally responsible practices from the perspective of HRM professionals; they were asked to select their top three drivers of environmentally responsible programs for organizations. The results indicate that the top driver of GHRM practices is a contribution to society followed by environmental considerations, economic considerations, health and safety considerations, and employee activism.

Yusoff et al. (2015b) interviewed HRM managers in four Malaysian certified ISO 14001 firms located in Penang and Kedah, Malaysia. Based on interview analysis they draw five motivational factors to the implementation of GHRM and its success are centered on (a) sustainable policies (such as ISO 14001, OHSAS 18000, and DOA); organizations which apply these policies choose to implement GHRM practices. It has been noticed that organizations will follow sustainable policies set because of government pressure, (b) top management support; organizations depend on top management support before adopting any green initiatives in HRM, because it enables changes to take place easier, (c) benchmarking; these organizations agree that benchmarking best practices from other organizations is one of the factors they practice GHRM. (d) leadership meetings, consultation, and seminar; HRM gets the orders to transform or change its practices from leadership meetings, consultation, and seminar, and (e)employees' awareness, participation and receptivity; the HRM professionals stated that employees' awareness, participation, and receptivity are very important to help them successfully implement GHRM.

2.4.2 Barriers

It is not so easy making sustainable firm and especially greening HRM; there are lots of barriers that the progress requires overcoming. This section will briefly present some of barriers found in the existing literature:

Aggarwal and Sharma (2014) demonstrate few challenges or limitations of implementing GHRM are such as: difficulty of changing

employee's behavior in a short span of time, the differences between employees motivation to participate in the promotion of GHRM practices in the organization, developing GHRM as the new corporate-wide culture is a heavy process, recruitment and induction of green employees with quality talents is a challenging task, difficulty of measuring the effectiveness of GHRM practices in employees' behavior, HRM professionals are faced with being expected to provide the essential green structures, green processes, green tools, and green thinking to make the best selection and develop the future green leaders of the organization.

Jafri (2012) conducted a study to identify the barriers to the implementation of GHRM practices; the main barriers are the cost of implementing green programs and cost of maintaining green programs, followed by cost of maintaining the program, lack of support by management, lack of support by employees.

Another study done by Fayyazi et al. (2015) to investigate the barriers of the GHRM practices implementation in the oil industry. They found 13 factors that hinder the implementation of GHRM. The top five barriers were a lack of a comprehensive plan to implement GHRM and ambiguous of green values, followed by lack of GHRM infrastructures, The Lack of understanding of green policies, The unavailability of HR system structure, lack of organizational leadership support. Furthermore, staff resistance had the lowest importance.

In another study, Yusoff et al. (2015c) determined the challenges of GHRM into the technical issues, demographic barriers and receptivity, persuasion skills, attitude or receptivity toward change, funds, difficulty to measure and feel, mental change difficulty, perceived low attachment to sustainability;, and difficulty to ensure employees practice sustainability in their private life.

2.4.3 Excepted benefits of GHRM practices

Many researchers discussed what organization could benefit from using GHRM. Margaretha and Saragih (2013) has highlighted that organizations focus on environmentally sustainable business practices by initiating greener corporate culture resulting in greater efficiencies, lower costs and creating an atmosphere of better employee engagement. Firdaus and Udin (2014) stated that many firms may use GHRM, have benefited from their implementation, their employees have a better morale and green organizations have better financial performance.

Also, the increasing understanding of the companies as to how the green initiatives not only benefit the environment but also help in attraction and retention of the scarce talent pool makes GHRM today an important field of business management (Patel,2014).

Equally, the GHRM practices are likely to improve employee well-being in the workplace, not just through improving the working environment and satisfying the needs of an increasingly environmentally

aware workforce, but also to contribute positively to both employee well-being and organizational performance (Renwick et al., 2012).

Aggarwal and Sharma (2014) mentioned many advantages or benefits of GHRM in achieving broader objectives such as: cost saving, corporate social responsibility, talent acquisition, and management and gaining an advantage over the competition. It further has the following benefits: It helps in building green employer image to attract green talents, enhance brand image of the company in the market, could be used as a marketing strategy, Also, it can be a part of enhancing the quality of the overall organization both internal and external and improving relationship with the company with its stakeholders- customers, suppliers, vendors, shareholders, government agencies, employees and the media.

2.5 Environmental management in Palestine

The developing countries have a great diversity in economic, cultural, and environmental issues interest and concerns. There is a drastic difference in environmental concerns among the Euro-Mediterranean countries and the Arab countries in the Middle East and North Africa (MENA) region, due to a variety of reasons including trade relationships, geographic proximity, and Tran's boundary pollution issues. Distant or neighboring developed countries and trade partners play the main role by pressuring to improve EP; also, import restrictions are commonly used to force these countries to abide by environmental laws or improve EP and curb environmental damages (Djoundourian, 2012).

Regarding the Palestinian situation, the Ministry of Environmental Affairs (MEnA) was created by the Palestinian National Authority in Dec 1996. MEnA, now called The Palestinian Environmental Authority (PEnA), is responsible for developing regulations, strategies, management plans and monitoring programs, which aim sound use and conservation of the environment in Palestine by developing human resources and capacity building, promoting environmental awareness programs and activities. MEnA is acting as the central representative authoritative body responsible for all environmental issues in the Palestinian Territories. Also, its stated policy is to actively involve other ministries, institutions, Non-Governmental Organizations (NGOs) and the private sector in the decision-making process (MEnA, 2015).

One of the main sectors under MEnA supervision is the Industrial sector. The industry is a main pillar of the economy and the establishment of a future Palestinian state (MEnA, 2015). The industrial sector is considered to be a source of various forms of environment pollution in Palestine; such as producing hazardous chemical pollutants and solid, liquid and gaseous waste. Its situation needs to be assessed, monitored and rectified (Environmental Quality Authority, 2010).

Industries with long-term cumulative pollution problems, including such high-pollution industries as the oil industry, chemical industry and steel industry are more willing to take the initiative to disclose environmental information than lower-pollution industries such as service

industries (Shih et al., 2006). The fact that the industries are major consumer of natural resources like air, water, land minerals, plants and animals made its impact so great. Therefore, it affects the environment and become the basic cause of for pollution and ecological imbalances. The table below indicates the industries effecting natural resources (Shaikh, 2012):

Table (2.2): Food, chemical, and pharma industries effect on natural resources

No.	***Industry***	***Natural Resources used***	***Products***	***Impact /Effects***
1	Pharma	Plants and animals	Medicines	Flora and fauna Bio-diversity
2	Paper	Plants & Trees	Paper	Forest
3	Automobiles	Petroleum Products	Cars & trucks	Air pollution
4	Food Product	Plants & animals, water	Human consumption product	Air, water pollution
5	Chemicals	Soil, ores, minerals	Agricultural products, Industrial products	Pollutes environment air, water

Palestine has many industrial zones and industrial activities. Some industries emit smoke and hazardous and toxic gases in huge quantities. Thus, the level of greenhouse gases in the atmosphere has increased (European Environment Agency, 2014). EQA & PlanBleu (2015) have done a first estimation for emissions from 600 industries across Palestine to the air, water and land. Based on their results, it has been found that there is significant uncertainty in these estimates primarily due to the fact that there

has been no source and/or ambient monitoring of industries in any of the three emission areas.

In the first stages of this study, a meeting with a committee from EQA was conducted to decide which industries to target in this research. They recommended to cover three industries (chemical, food and pharmaceuticals industries) due to their direct effect on human health and environment. Therefore, the targeted sample will cover companies from these three industries.

2.6 Food, chemical and Pharmaceutical Industries in Palestine

Statistical Yearbook of Palestine 2015 (PCBS, 2015) shows that 17,047 enterprises engaged in the industrial sector, with more than 782243 employed persons in this sector in Palestine for the year 2014. The majority of the industrial enterprises are private, family-owned small enterprises employing fewer than 10 workers. The number of large industrial enterprises in Palestine is still very limited, with only about 100 of the manufacturing, mining and construction enterprises having a workforce of more than 100 employees (USAID and PFI, 2009). The value of the output of enterprises in industrial activities was $ 410,217 million; intermediate consumption totaled $2,390.8 million; and the value added was $171,214 million in 2013 (PCBS, 2015).

The industrial sector is represented by the Palestinian Federation of Industries (PFI); a private national institution. It includes food and

beverages, construction, stone and marble, pharmaceuticals, chemicals, metals and engineering, textiles, garments and leather, paper, printing and packaging, handicrafts, plastic and rubber, and furniture (USAID and PFI, 2009). Table 2-3 shows some general information about the three selected sectors (USAID and PFI, 2009).

Table (2.3): General information about selected sectors

	No. of firms	**Total investment (million)**	**GDP %**	**No. of employees**	**Market share %**	**Employee productivity ($)**
Pharmaceuticals	6	90	<1	1,200	55	**44,000**
Food and Beverage	224	480	4.8	8,000	50	**28,000**
Detergents and Cosmetic	55	NK	NK	825	35	**NK**

The pharmaceutical industry in Palestine is considered unique in terms of innovation and development. This industry was developed after the border closure with the rest of the Arab world as a result of 1967 events. It started with small laboratories to manufacture by nine pharmacists in the WB to manufacture simple syrups for local consumption. Twenty-five years later, annual sales for the six largest manufacturers, in the West Bank, amount to more than $25 million total annual value of Pharmaceutical supply in the Palestinian market (Paltrade, 2015). Statistics in 2010 shows that domestic manufacturers cover 50 % of the market share by the value produced. There are 4 manufacturers that are Good Manufacturing Practice (GMP) certified (Palestinian National Authority, 2011).

The fastest growing sector of the Palestinian economy is the food and beverage sector. Because the Investment Encouragement Law facilitated restrictions on new businesses in 1998, this sector became very attractive for investment. This sector includes; Processed Meat and Olive Oil، Dairy Products, Nuts, Spices, Beverages, Desserts, Food Industry. Latest statistics shows that this sector has more than 224 manufacturing firms, excluding bakeries, 152 of them are active members of the Food Industries Association. This sector includes the large-scale milk cow farms (>50 cows) while a large number of female cooperatives working in the food processing sector and traditional sweets and confectionary makers are not included (Paltrade, 2015).

The last sector is chemical industry, statistics estimate the number of regulated companies working in this industry is 60,divided into three major categories; five in producing cosmetics, five in the production of paints and inks and the remaining are working in the detergents production. Some factories produce both detergents and cosmetics. Also, there is a growing tendency has been noticed in developing traditional industries that include traditional olive oil soap products.

It is estimated that detergents production covers at 40% of the local market share, whereas paints cover 35%. On the other hand, while Cosmetics are the most exported products of the industry, there are no approximate figures of the share of cosmetics in the local market. The local sales in the West Bank reach up to 74% of the total sales (Paltrade, 2015).

Industrial sector suffers from a number of obstacles and challenges; the Israeli occupation has a great effect on this industry through political instability and restrictions on movement. Israeli occupation forces control land and water crossings, use repressive tactics that harmfully prevent any development of the industrial sector and pursued a policy of closing the border crossings, and external ports which control the entry of raw materials. Israeli occupation imposes heavy taxes on Palestinian products such as production tax as well as customs duties on raw materials resulting in higher Production costs and low profits. Lastly, there is a lack of competition with the Israeli products, especially in light of openness of the global economy (PBF, 2014).

The emergence of the Palestinian family character of the industry and the small size industrial enterprises weakens their ability to cope with local and regional changes. Where that 87% of Palestinian industrial enterprises are individual institutions, and 90% of them employing fewer than five workers (Mass, 2005).

Industry faced mainly a lot of problems as a result of the absence of a banking system capable of financing the establishment of new industries or development-based industries through the years of occupation and thus deprived the industrial sector of an important source and a key to its development. Therefore, resulted in the industrializing of our facilities is relied on self-financing where the self-financing more than 90 % of the existing industrial installations resulting in a lack of volume of investments

in the industrial sector and small industrial facilities size that have been established (Abu Zarifa, 2006).

It is clear that the selected industries suffer from the difficult local market. This has forced the incompatible illegal products to leave the market or encouraged small companies to merge with others or form a strategic relationship with them to enhance their competitiveness in the market (Paltrade, 2010).

2.7 Human Resource Management in Palestine

HRM is an important faction of management that deals with the most valuable assets of an organization which is human resources (Shoeb, 2015).

Many aspects affect the implementation of HRM practices including cultural, economic, legal, gender and many other aspects (Al-Jabari, 2012). Different studies show that several HRM practices at small and medium enterprises are influenced by organizational contextual variables including ownership, age, and size of firms, even though the level of formality of HR practices at these firms is low. Using data from micro, small, and medium firms in Australia leads to the fact that HRM practices increase with increasing firm size (Zheng and Morrison, 2009).

While most studies prove that organization size has a positive substantial influence on HRM practices, other studies show that organizational size has a limited effect on HR practices (Ding et al., 2006).

In the Palestinian situation, Al-Jabari found that larger firms apply more formalized HR practices than smaller firms do. Also, he noticed that NGOs sector implement HRM practices better than private and public establishments regardless of their size, i.e., their number of employees (Al-Jabari, 2012).

In 2011 Al-Jabari explored the nature of HRM practices at family businesses within Palestinian context. Findings show that family firms are far away from applying HRM practices and some family firms apply it partially and sporadically. The study leads to a better understanding of family firms in Palestine (Al-Jabari, 2011).

Although there are few studies about HRM still little is known of HRM processes within the Palestinian territories and how modernization has shaped and is shaping, management philosophies and practices. Regarding the GHRM concept, previous studies in Palestine were not found.

2.8 Research Hypotheses

The main aim of this research is to assess to what extent GHRM practices are being practiced in Palestinian manufacturing companies from three industrial sectors (Food, Chemical and Pharma industries) in WB, thereafter to suggest the best GHRM practices that are suitable for these companies to increase their EP. After a deep literature review, GHRM practices have been categorized into 6 groups to be examined in this

research. The six groups are (1) Management of organizational culture, (2) Recruitment and selection, (3) Training and development, (4) Performance management and appraisal, (5) Reward and compensation and (6) Employee empowerment and participation.

This research is based on the assumption that if an organization aspire to improve their environmental practices it should adopt similar practices. To represent this assumption, the following hypothesis was formulated:

"*GHRM practices have a positive impact on EP in Palestinian manufacturing organizations.*"

Based on the assumption that using GHRM will improve EP, the following research sub-hypotheses have been used:

- H1: Green Recruitment and selection effects EP positively in Palestinian manufacturing organizations.
- H2: Green Training and development effects EP positively in Palestinian manufacturing organizations.
- H3: Green Performance management and appraisal effects EP positively in Palestinian manufacturing organizations.
- H4: Green Reward and compensation effects EP positively in Palestinian manufacturing organizations.

- H5: Green Employee empowerment and participation effects EP positively in Palestinian manufacturing organizations.
- H6: Green Management of organizational culture affects EP positively in Palestinian manufacturing organizations.
- H7: The component of GHRM practices are interrelated and a strong relation is available between them in Palestinian manufacturing organizations.

Chapter Three

Research Methodology

Chapter Three
Research Methodology

3.1 Chapter Scope

A comprehensive plan for data collection in an empirical research project aims to answer specific research questions or test specific hypotheses, is called research design. It is a "blueprint" for empirical research, and must specify at least three processes: the data collection process, the instrument development process, and the sampling process (Bhattacherjee, 2012). This chapter will describe the research design; data collection process used, the population targeted sampling process, and the instrument development for data collection. Last section will determine data analysis approach.

3.2 Research Type

Research is defined as "an organized, systematic, data-based, critical, objective, scientific inquiry or investigation into a specific problem, undertaken with the purpose of finding answers or solutions to it." (Sekaran, 2003). Depending on the purpose of research, researcher can choose out of three types of researches (Bhattacherjee, 2012)：

- Exploratory research: is particularly useful when the precise nature of the problem is not clear. Researchers try to clarify their understanding of a problem by finding out 'what is happening; to seek new insights; to ask questions and to assess phenomena in a new light' (Saunders et al., 2009; Robson 2002).

- Descriptive research: is undertaken in order to describe an accurate profile of persons, events or situations. It is necessary to clarify the picture of the phenomena you are interested in before data collection process. This kind of research could be an extension, or a forerunner to, a part of exploratory research or, more often, a piece of explanatory research (Saunders et al., 2009; Robson 2002).

- Explanatory research Studies: emphasis on studying a situation or a problem in order to explain the relationships between variables (Saunders et al., 2009).

This research aims to investigate the impact of the integration between human resources management and environmental activities (such as environmental training programs or the use of environmental performance indicators) on the environmental performance of a firm. As shown in the literature chapter, it is evident that this theme is still not well explored among the scholars. Therefore, this research will provide a model intended to give an explanation about the implementation of best practices of GHRM and to help firms in understanding how they can improve their environmental performance working through human resource functions. In order to identify and analyze best practices related to GHRM, an exploratory research inquiry has been used in this research.

3.3 Research Approach

The plans and procedure for research that describe the steps from assumptions to detailed methods of data collection, analysis and

interpretation are called research approaches. This plan encompasses many decisions; these comprehensive decision encompasses the approach should that be used to study a topic (Creswell, 2014). Researchers chooses either the quantitative or qualitative research approach depending on the nature of the research problem and the questions (Creswell, 2012). Quantitative and qualitative procedures are not isolated from each other (Saunders et al., 2009).

The quantitative approach seeks to investigate the correlations among variables which represent an attribute or characteristic of the targeted population (Creswell, 2012), and generates or use numerical data (Sanders et al., 2009). Qualitative approach seeks to explore and understand the circumstances of targeted phenomenon in the research problem (Creswell, 2012), and generates or use non-numerical data (Saunders et al., 2009).

In this research, mixed method approach has been used by collecting both qualitative and quantitative data, to provide a better understanding of research problem than using just one approach (Creswell, 2014). Semi-structured interview and questionnaire have been used as data collection tools.

3.4 Research Methodology Flow Chart

Figure (3.1) represents the methodology flow chart of the research that consists of (5) phases. The first phase of the research was defining the

purpose, objectives and the scope of the study with supervisor, and then a deep review of literature was done to review the concept of GHRM, and formulate research questions and hypothesis.

Then second phase was data collection which started by choosing the representative sample then collecting relevant data through questionnaire and semi-structured interviews with experts to enrich the research.

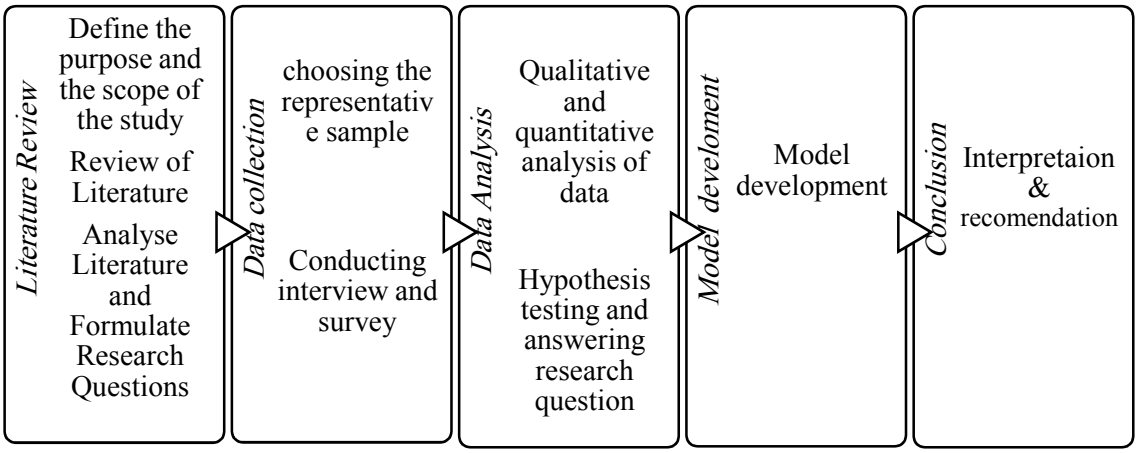

Figure (3.1): Research Methodology Flow Chart

To achieve the objectives outlined earlier in the first phase, the third phase came as data analysis and discussion where the hypotheses have been tested and it answered research questions and thereby commented on the overall impact of GHRM practices. Fourth phase was based on data analysis, a model has been developed to be a guide for companies in applying GHRM. Finally, the fifth phase included conclusions and recommendations.

3.5 Research population and sample size

The study population consists of manufacturing companies in three industrial sectors (Food, Chemical, pharmaceuticals industries) in West Bank in the years 2015/2016. The Palestinian Federation of each industry was contacted to get the names and number of valid registered manufacturing companies in their federation. Based on the data provided the targeted population includes (110) registered active companies, as shown in Table 3-1.

Table (3.1): Distribution of participant by industrial sector

No.	Industrial Sector	Population
1	Food industry	64
2	Chemical	42
3	Pharmaceuticals	4
	Total	**110**
	Requested sample	**86**

It is necessary to determine the required minimum sample size in surveys' situation and other statistical methods, to generalize the results on the population (Saunders et al., 2009). To obtain statistically representative sample size of population, 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, 110.

d = the percentage error (0.05)

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

z = z value is the upper $\alpha/2$ of the normal distribution (1.96 for 95% confidence level).

According to the results of sample size equation above, 86 responses was requested to complete the survey. More than 130 electronic questionnaires have been distributed to the top managers, HR managers and quality managers of the targeted companies, selected by random stratified method. However, the total number useable returned answers were only 90 questionnaires. This represented a response rate of 69.2%.

3.6 Data collection

In data collection phase, a combination of primary and secondary data has been used to enrich this research. Semi-structured interviews and questionnaires were the source of the primary data, while literature review through books, internet, international journals and PFI & PCBS publications were the source of the secondary data. The secondary form of data was used to support and provide additional information to the primary data (Creswell, 2012).

3.6.1 Semi-structured interview

Interviewing participants is one of the methods used to collect data and obtain more information about the issues of interest (Sekaran &

Bougie, 2010). Creswell (2012) portrayed qualitative interviews by researcher exchanging views with one or more participants, through asking them general open or ended questions and then recording their answers; it can be done face-to-face, via telephone, or online (Sekaran & Bougie, 2010). Compared to questionnaire, interviews are more personalized form of data collection method and more convenient to cover a bigger part research topic through collecting in-depth information.

Interviews have both advantages and disadvantages. The main advantage it offers interviewer an opportunity to clarify any issues raised by the respondent or ask probing or follow-up questions; and permit participants to describe detailed personal information. The main disadvantages of interviews are that they are time consuming, expensive and they provide information that can be difficult to analyze (Bhattacherjee, 2012; Creswell, 2012).

Saunders et al. (2009) categorized Interviews into three main types:

- Structured interviews: where interviewer ask clear, predetermined and standardized or identical set of questions.
- Semi-structured interviews: where interviewer have a list of topics and questions to be covered. These interviews are non-standardized and they may vary from interview to interview. Interviewer may omit, change order or add additional questions to explore the research objectives.

- Unstructured interviews: also called ‘in-depth interviews’, they are informal. They have no predetermined list of questions, but interviewer should have a clear idea about aspect or aspects that they want to explore. They could be used to explore in depth a general area in issue of interest.

Based on the fact that this is an exploratory research, semi-structured interviews have been chosen to get more information about the GHRM practices in WB. So, face-to-face interviews were conducted with HR managers and senior managers in targeted manufacturing companies.

3.6.2 Questionnaire

A questionnaire is a set of written predetermined questions, which is given to respondents in order to record their answers and ideas within specific defined preferences (Sekaran & Bougie, 2010). The questionnaire is the most widely used data collection method for a large sample because of its simplicity and rapidity (Saunders et al., 2009) with less effort and time. It is effective in collecting data when the researcher knows what variables are needed and how to test variable of interest (Sekaran & Bougie, 2010). Questionnaires can be distributed either personally, mailed to the respondents, or electronically; where respondents answer the same set of questions as anonymous.

3.6.2.1 Questionnaire Design

Questionnaire was chosen to test the research's model which was formulated in chapter two. In this research, respondents were asked to

answer closed questions which facilitate quick decisions for respondents and easy information coding for Researcher (Creswell, 2012). A five-point Likert scale questionnaire was used to evaluate the presence of certain practices in the targeted organizations; the Likert Scale is an ordered, one-dimensional scale from which respondents choose one option that best aligns with their view. The survey design was informed by reviewing previous surveys, academic literature and together with revision and modifications by local experts. The questionnaire contained four sections:

- First section: (10 Items) general information about the company and the respondent. This section is designed to collect data that describe both the firm and the respondent such as the participants' gender, organization's sector, number of employee, years of experience in the organization, respondents' position and company's geographic location.

- Second section: (28 Items) current GHRM practices were adopted by the company. This section used to measure to what extent organizations use HRM practices to encourage pro-environmental behavior. Respondents were asked this question: '***To what extent does your organization use the following methods to encourage staff to behave in a pro-environmental way?***' response options grouped into six categories as follows: (1) Management of organizational culture, (2) Recruitment and selection, (3) Training and development, (4) Performance management and appraisal, (5) Reward and compensation, and (6) Employee empowerment and participation. Each item was rated on a five-point Likert scale of 1 (not at all) to 5 (very great extent).

- Third section: (8 Items) environmental performance of the company. This section used self-report affirmative outcomes to measure impact of environmental commitment on firm's environmental performance. Respondents were asked this question: '***Please evaluate how commitment to environmental sustainability has allowed the company to date, to obtain the following results***'. Each item was rated on a five-point Likert scale of 1 (Much worse) to 5 (Much better).

- Fourth section: (17 Items) this section was used to collect information about the (1) drivers, (2) barriers and (3) expected benefits of adopting GHRM practices from respondent viewpoint. Respondents were asked "***From you point of view and experience can you please rank the drivers, barriers, barriers and expected benefits of GHRM"***. Each item was rated on a five-point Likert scale of 1 (strongly disagree) to 5 (strongly agree).

The survey has been revised with a group of experts in the area to judge on its validity and to make sure it would fulfill the main goals of the research. All of the notes regarding the length, language and the number of sentences have been considered and modification were made. The last edition of the survey was written in English (See Appendix A) but based on the fact that the mother language in Palestine is Arabic, it was translated to Arabic (See Appendix B).

The next step was survey distribution, which can be done either by online surveys, personal, or mail surveys. There are many advantages of

online surveys over other formats if conducted properly (Evans, 2005). Online surveys have many advantages such as simplicity of usage for both the creator of the survey and the respondent, as well as global reach (Scholl et al., 2002), flexibility, low Cost (Jackson, 2003), faster response, easy to follow-up, and question diversity. However, they have few points of weakness such as being considered as junk mail (Bannan, 2003), weak online experience/expertise of possible respondents (Evans, 2005). The questionnaire has been distributed through an online questionnaire designed by Google Drive forms which allows users to create their own surveys using question format templates.

Three-month period was given to data collection. Survey invitations sent through an email consisted of emailing a cover introduction and a link to an HTML form that is the survey questionnaire (See Appendix B) to the appropriate executive of each corporation. When respondents reply, their answers are stored as anonymous in a database that makes simple to analyze the responses. Non-respondents were sent a reminder including another copy of email with a link to the online questionnaire.

3.6.2.2 Questionnaire Pilot study

Pilot testing is an extremely important part of the research process even though some researchers overlook this test (Bhattacherjee, 2012). Saunders et al., (2009) discussed how the pilot test aims to detect potential problems that respondent could face in answering the questionnaire, to ensure that the collected data will answer research questions, and to enable

researcher to obtain some assessment of the validity and suitability of the questions (Saunders et al., 2009; Bhattacherjee, 2012).

Before distributing the questionnaire, a pilot test was conducted by a group of eight experts and arbitrators (Refer to Table 1 in Appendix C) to make sure that questionnaire is valid and easy to answer.

3.6.2.3 Questionnaire Reliability

Reliability test is done to make sure that scores resulted from an instrument are stable and consistent. That means if researcher conducted the instrument several times in several conditions it will give nearly the same result. Moreover, data needs to be more consistent. That means individual answers for closely related questions should be consistent in a same way (Saunders et al., 2009; Sekaran & Bougie, 2010). To examine the reliability of the five-point Likert scale questionnaire used in this research, based on Creswell (2012) suggestion, the Cronbach alpha method has been used. This method tests the internal consistency by measuring the correlation between each item and others in the questionnaire.

To examine the reliability of the tool, the reliability coefficient was found out by Cronbach alpha equation. Based on the result of the Cronbach's Alpha test of the questionnaire, the reliability of all elements of the survey are above 70%, as well the total reliability of the questionnaire is above 97% which is considered as excellent (refer to table 4-3).

3.6.2.4 Questionnaire Validity

One of the key indicators to measure the quality of a developed instrument is validity (Kimberlin & Winterstein, 2008). Validity test is mainly about whether the developed instrument is really about the issue of interest or not (Saunders et al., 2009; Sekaran & Bougie, 2010). This means that validity test is important to measure whether the finding will satisfy the research purpose and answer the research questions.

For verifying the validity of the tool and knowing if the questionnaire with its sections really measure what they were designed to, the following steps were followed:

At the beginning, the questionnaire was designed based on literature, where validity and reliability already have been tested and trusted in the previous empirical studies about GHRM. Then, a pilot study has been done by a group of seven experts and arbitrators (Refer to Table 1 in Appendix C) who commented on any issues would affect the quality of the results.

The final step was based on the fact that validity test requires that an instrument is reliable, but an instrument can't be reliable without being valid (Kimberlin & Winterstein, 2008), a reliability test was done to make sure that questionnaire is consistent and can achieve research goals.

3.7 Data analysis approach

Based on the fact this is a mixed method research, analyzing the data was done using mixed analysis method. This method involves using both

quantitative and qualitative data analysis techniques within the same study (Onwuegbuzie and Combs, 2011). This section summarizes techniques used to analyze qualitative data collected from interviews and quantitative data collected from questionnaire.

3.7.1 Interview analysis

17 semi-structured interviews were done to gather more information about GHRM from viewpoint of Palestinian manufacturing companies. Qualitative data resulted from the transcribed interviews have been analyzed by the 'thematic analysis' approach. Braun and Clarke (2006) described thematic analysis as flexible and simple technique which enables researcher to create new ideas by identifying, analyzing, and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail (Braun and Clarke, 2006). In thematic analysis, it is possible either to explore all themes emerging from data or to restrict the identification of themes to those which are related to specific research interests (Ball 2011). In this research, thematic approach limits themes to those related to specific research interests.

According to Braun and Clarke (2006) thematic analysis has six phases:

- Getting more familiar with data through reading it several times and noting initial data.

- During reading, observing the occurrence of patterns and in a systematic fashion code the interesting features of data across the entire data set, then collating data relevant to each code.
- Gathering codes in themes that describe the data accurately.
- Reviewing themes to make sure they support the study.
- Defining and naming themes.
- Validating the chosen themes by building a valid argument.

These stages were followed in this study, started by reading the texts of interviews several times to become familiar with them, then generating the codes, then collecting the similar codes into issues, then combining the similar issues into themes, and finally defining the themes.

3.7.2 Questionnaire analysis

Quantitative data resulted from the research questionnaire has been analyzed by software program "Statistical Package for the Social Sciences (SPSS)", version 23; to examine the various collected data and explore the relationship between questionnaire elements.

To achieve research objectives, descriptive statistical analysis methods were used to access a lot of information that describes the study sample; At 95% confidence interval, p values less than or equal to 0.05 were considered significant. For comparative study SPSS was used as mentioned below:

- Cronbach alpha test was done to test reliability of the questionnaire.
- Frequencies test, percentages, Mean and standard deviation have been done to analyze the answers of the study sample regarding the respondent data profile.
- One-way ANOVA and Pearson correlation to test hypothesis.
- Percentages, Mean and standard deviation were used to rank GHRM practices, drivers, barriers and expected benefits.

Chapter Four

Data analysis and results

Chapter Four
Data analysis and results

4.1 Chapter overview

This chapter analyzes and presents the results of the qualitative and quantitative data collected from interviews and questionnaires. The first section explores the GHRM practices from the viewpoint of specialists in this area who were interviewed. Thereafter, this chapter presents the results of descriptive statistics and hypotheses testing derived from the Statistical Package for the Social Sciences (SPSS) software, by which this study determines the current situation of GHRM practices in Palestinian manufacturing organizations.

4.2 Interview analysis

To collect data and obtain more information about the research problem, semi-structured interviews have been conducted. The first step was contacting top management of 10 companies from three industrial sectors to request face-to-face meetings with few members to discuss the issue of interest. As soon as requests approval was acknowledged by a company manager, interview appointments were arranged.

17 semi-structured interviews were done with experts working in 10 companies (summarized in Table 4-1). Four Quality managers, two environmental managers, and one chief executive officer were interviewed to cover aspects related to sustainability policies and strategies in the company, as well as, practices and responsibility for environmental issues

and ‘green’ performances. Also, the expected contribution from the HRM department into environmental management and possible sources of tensions.

Table (4.1): Characteristics of the companies and role of the interviewee

No	Company sector	Company	Interviewee Job role	Experience (years)
1	Pharmaceutical	Company J	HR manager	8
2			Environmental manager	12
3	Chemical	Company G	HR manager	7
4			Environmental manager	3
5		Company H	HR manager	5
6		Company I	HR manager	6
7			Quality manager	9
8	Food	Company A	HR manager	8
9			Quality manager	3
10		Company B	HR manager	9
11		Company C	HR manager	7
12			Quality manager	4
13		Company D	HR manager	9
14			Quality manager	4
15		Company E	HR manager	7
16			Chief Executive Officer	12
17		Company F	HR manager	6

On the other hand, ten HR managers were interviewed to collect information about HRM department contribution in achieving environmental goals through GHRM practices. Interviews were recorded on audio tapes with interviewees’ permission. Recording interviews offer researcher an accurate record of the conversation (Creswell, 2012) making analysis much easier and unbiased. Also, interviewees were confirmed that

interview information is confidential and will be used for scientific research purpose only. Subsequently, interviews were transcribed to analyze them.

Analysis procedure of transcribed interviews was done based on the guidelines for applied thematic analysis as indicated by Braun and Clarke (2006). It was mainly interested in detecting themes that demonstrate the current situation of green initiatives of the company and explain any problems in these initiatives. Also, it was interested in the assessment of HRM practices related to the environment. The results from semi-structured interviews were classified into six central themes. Table 4-2 provides a summary of all used codes, issues discussed and the identified central themes.

Table (4.2): Summary of identified codes, basic themes, and central themes

Codes	Issues discussed	Initial/ Central Themes
Technology	Recycling	Environmental Practices
Needs	Waste water management	
Complains	Reduce chemical effect	
Gov. support	Car sharing	
	Paperless policy	
System	Apply 14001	Environmental Management Practices
Proactive	Part of 22000	
Assessment	Environmental Impact Assessment	
Benefits	Importance and Benefits of EIA	
Gov. regulation	Environmental responsibility	
Communications	Support new culture	HRM Importance
Benefits	Track Employee Development	
Personal Development	Connection between divisions	
Motivations	Training	HRM Involvement in EM
Awareness	Appraisal	
Info sharing	Rewards	
Knowledge development		
Comfort Zone	Employee resistance	Challenges
Financial Situation	Cost	
Priority	Lack of top management Support	
Interest		
Team support	Employee Commitment	Success factors
Interest	Top management interest and support	
Clear plan	Clear goals and plans for the environment	
Good orientation		

The six themes emerged from the semi-structured interviews are presented below:

4.2.1 Theme 1: Environmental Practices

This theme is aimed at identifying the major environmental practices done by Palestinian organizations. Most of the interviewees confirmed that their organizations apply some environmental practices such as recycling, waste water management, reducing the chemical effect, car sharing and paperless policy.

The top practice was recycling; were they developed plans to dispose paper or plastic waste either by selling to other specialized companies who reuse them, or sending them to special places provided by municipality - if available in their city- to manage them, or developing a special department to recycle the waste inside the organization if the budget allows.

The paperless policy was encouraged by most of the interviewees even though they believe it cannot be applied 100%. But because of the availability of the internet, sharing information online became a better environmental option than using paper.

4.2.2 Theme 2: Environmental Management Practices

The majority of interviewees insisted that if an organization want to guarantee the success of their environmental plan, they should have a detailed environmental management system. All of them confirmed that their organizations have done an Environmental Impact Assessment (EIA) in the early stages of the establishment as a response to governmental regulation, and how this assessment benefited the organization by

evaluating their expected impact and suggesting procedures to create solutions to solve predicted problems.

However, few of them have a specialized environmental management system such as ISO 14001 in their organization. Some of the interviewees consider this as an expensive option so they settle managing environment with EIA or as a part of ISO 22000 (in the food industry).

4.2.3 Theme 3: HRM Importance

All of the interviewees recognized the important role of HRM in the organization. As a connection between divisions; it eases the communication between teams and make sure they are aware of their roles and relationship. HRM benefits the organization through tracking and evaluating employee development which will guarantee a better performance because of the continuous monitoring.

Also, they agreed on HRM important participation in supporting and spreading new culture or practices among employees.

4.2.4 Theme 4: HRM Involvement in EM

All of the interviewees believe that human factor has a major role in affecting the environment. They recognize the important role of HRM in creating a better environmental performance; through spreading and supporting the green culture and maintaining a green performance.

All of them agree on three main functions of HRM as the best practices to develop the environmental performance. Training is the first choice of all interviewees, they emphasize the importance of knowledge and education. Clarifying the possible negative effects of the organization's environmental impact and how to stop them. Better knowledge may increase employees' concern and interest in the environmental behavior of their organization. As a result, this increases their motivation and commitment to behave in an environmentally-friendly way.

Also, they discuss how the collaboration between performance appraisal and rewards play a main role in motivating and increasing employees' commitment toward environmental friendly policies and behavior. On the other hand, regarding recruitment and selection process and environmental performance appraisal, all of the interviewees agree it's not used in their company and they don't include environmental criteria in candidate selection or job design or performance appraisal unless the job requirements request specific knowledge or skills in this field.

4.2.5 Theme 5: Challenges

There are many variables that could affect and hinder the implementation of GHRM. All of the interviewees identified the cost of implementing green programs as the main reason to hinder the implementation of GHRM.

They also concentrated on the lack of top management support, which will affect the ability to generate new rules and requesting budget, as

a result, this will hinder the implementation of GHRM. Also, interviewees emphasized that employee resistance will increase toward any new culture that would affect their comfort zone.

4.2.6 Theme 6: Success factors

All of the interviewees agreed on main three factors that support the success of applying GHRM. From the viewpoint of all interviewees, the main success factor is the top management interest and support. If top management did not support and encourage the new culture most employees will not commit to it.

Clear goals and plans for the environmental management have a great effect on the success of GHRM. Clear goals will inform employee about the expected performance and keep them motivated to be part of the bigger plan. Also, will help HR managers in evaluating the current performance and plan to improve it.

The last factor was employee commitment, were all of the interviewees agreed on the effect of employee attitude in the success of GHRM practices.

4.3 Questionnaire analysis

Questionnaires were used to collect quantitative data in order to test the research hypotheses (was formulated in section 2.8). Questionnaires were designed by using online forms, then distributed by email to the appropriate executive of each company.

All respondents' replies were stored as anonymous in a database; which makes analyzing the responses easier. Then its variables were coded and defined into the (SPSS v23) program. The first test using SPSS was done through questionnaire design phase to test the reliability of the questionnaire; were Cronbach alpha method was used to test the internal consistency of the questionnaire. Table 4-3 below shows the quantity of Cronbach alpha for all elements. Then many statistical analysis tools such as frequency, means, percentages, Pearson correlation, and ANOVA test, were used to investigate the relations between questionnaire elements.

Table (4.3): Cronbach's Alpha

Item	No. of Items	Cronbach's Alpha
Management of organizational culture	5	0.867
Recruitment and selection	5	0.917
Training and development	5	0.913
Performance management and appraisal	5	0.945
Reward and compensation	3	0.944
Employee empowerment and participation	5	0.920
Environmental performance	8	0.928
Drivers of Green HRM	5	0.848
Barriers of Green HRM	5	0.791
Expected benefits of Green HRM	6	0.884
Total	52	0.976

4.3.1 Study population

This section describes the study population using the results of frequency tests.

4.3.1.1 Gender

Figure (4-1) represents the gender of respondents; 79% of the respondents from the targeted manufacturing companies are male while 21% only are female.

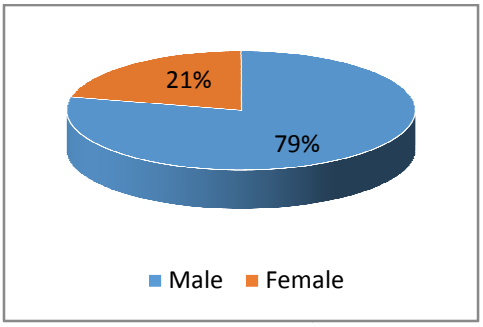

Figure (4.1): Gender Distribution

4.3.1.2 Number of employees in the organization

Figure (4-2) represents the division of companies based on the No. of employees, about 26% of respondents work in companies have from 20 to 49 employees, 23% from 50 to 99, and 17% from 10 to 19. 14% of respondents work in organizations that hire less than 9, 13% from 100 to 249 while only 7% work in organizations that hire more than 250 employees.

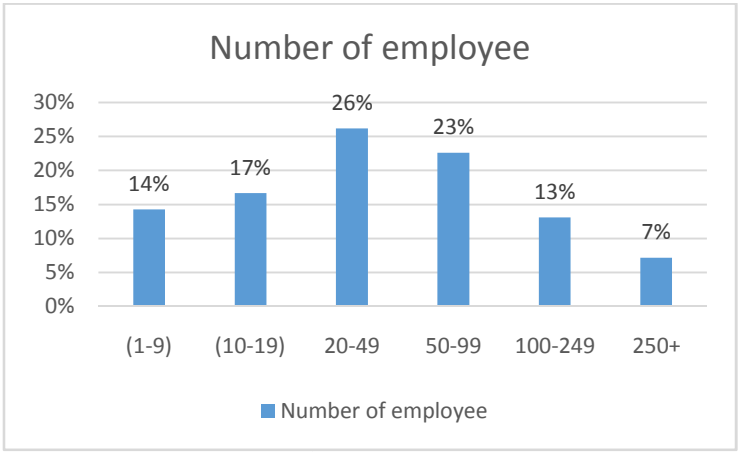

Figure (4.2): Distribution of companies by Number of Employees

Surveyed organizations were divided into three groups of size either small, medium or large. As seen in figure 4-3 the three groups differ according to two definitions. Based on the Organization for Economic Co-operation and Development (OECD) standards the majority of organizations are small (OECD, 2005). On the other hand, Palestinian Ministry of National Economy classification considers the majority as large.

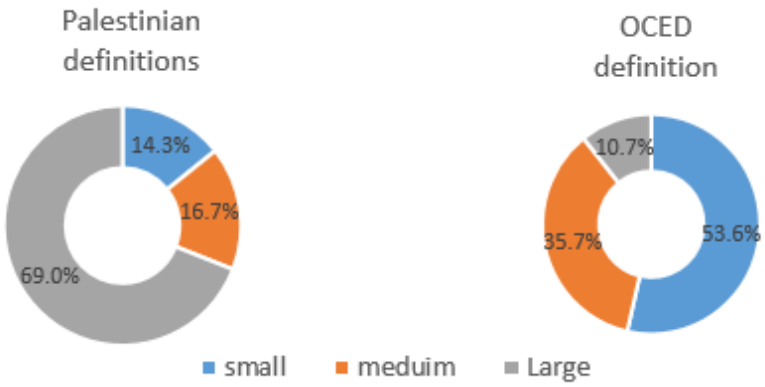

Figure (4.3): Distribution of companies by size

Note: pie charts represent the distribution for the surveyed organizations based on two definitions. The Palestinian company size definition originates from the Palestinian Ministry of National Economy classification, which defines companies with one-to-nine employees as small, with 10–19 employees as medium-sized and those with 20 employees or more as large. The OECD definition originates from the EU/OECD classification, which defines as small those with 1–49 employees, as medium-sized those with 50–249 employees and as large those with 250 employees or more.

4.3.1.3 Location

Figure (4-4) represents the distribution of respondents' companies based on location, most of the companies 36% are located in Ramallah city. It also shows that 16% of the companies are located in Nablus, 13% of the companies are located in Tulkarm and 2% of the companies are located in Jenin.

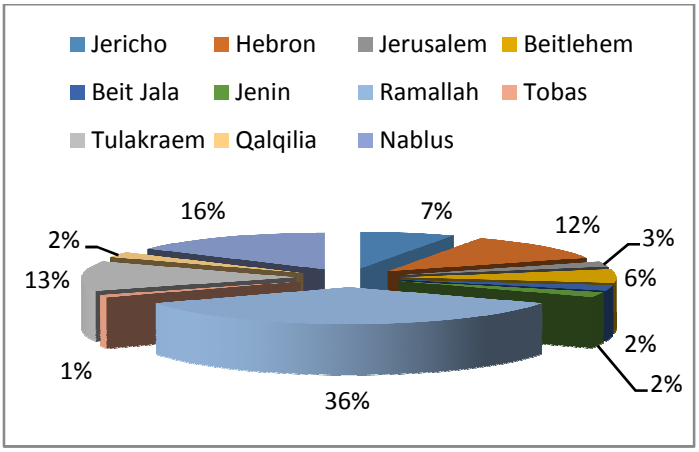

Figure (4.4): Company location

Also, 12% of the companies are located in Hebron, 7% of the companies are located in Jericho and 6% of the companies are located in Bethlehem. 1% of the companies are located in Tobas while only 3% of the companies are located in Jerusalem, BeitJala, and Qalqilia.

4.3.1.4 Industrial sector

Figure 4-5 clarifies the distribution of the sample participants by industrial sector as follows: 59% of participant works in food industry, 36% are in chemical industry and 5% in pharmaceutical industry.

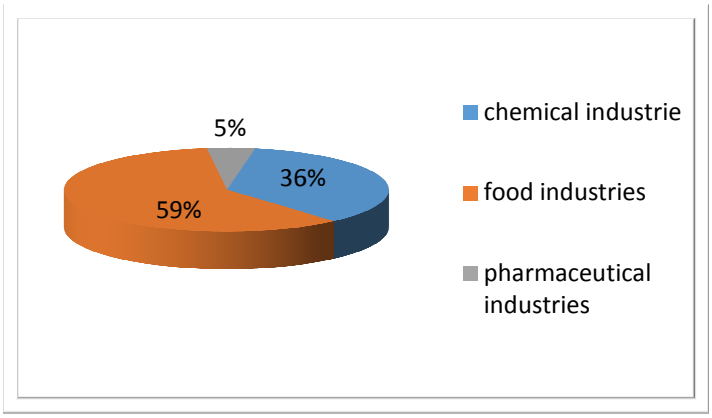

Figure (4.5): Sample distribution percentage by industrial sector

4.3.1.5 Respondent's position in the organization

Figure (4-6) shows the respondent's position, 42% of respondents were HRM, 31% quality manager while 19% were general manager/CEO, and 8% from other departments.

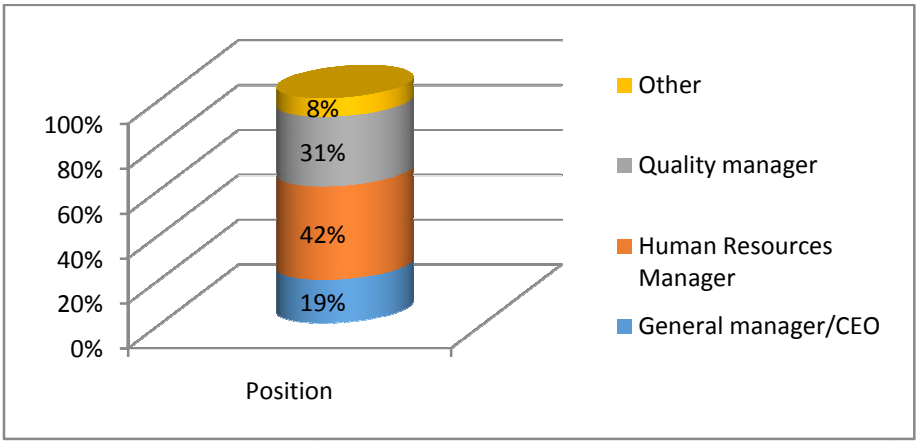

Figure (4.6): Respondent position

4.3.1.6 Respondent's educational level

Figure (4-7) represents the educational degree of respondents; 75% of respondents have a bachelor degree, 17% master degree or higher, and 8% diploma or below.

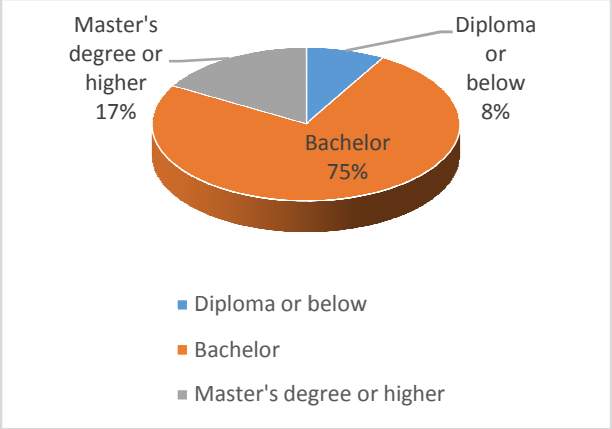

Figure (4.7): Respondent's educational degree

4.3.1.7 Respondent's experience

Figure (4-8) shows that 37% of the respondents have from 6 to less than 11 years of experience, 27% have from 2 to less than 6 years of experience and 11% have from 11 to less than 15 years of experience.

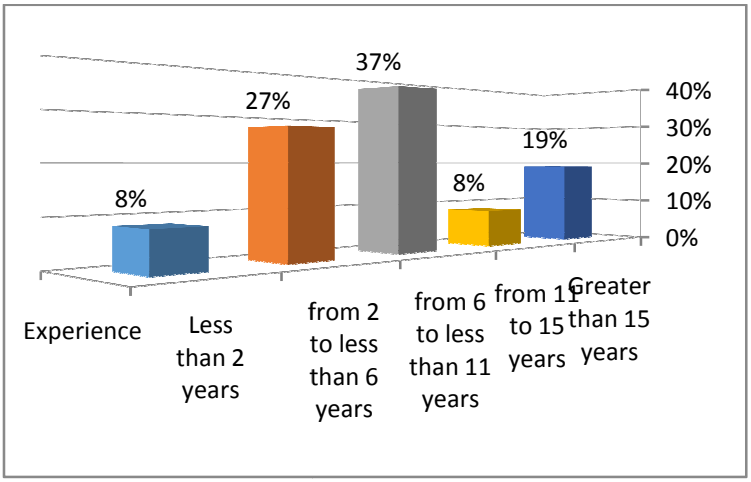

Figure (4.8): Respondents experience

While 19% of the respondents have more than 15 years of experience and only 8% of the respondents has less than 2 years of experience.

4.3.1.8 Environmental management

To measure the current environmental management status in the targeted companies, the researcher asked the respondents if they consider

environmental management in their daily business operation, and if they have a formal plan to do that (such as ISO 14001).

Figure (4-9) shows that 42% of companies incorporated environmental management in their business operation while 8% only have a formal plan to do that. In contrast, 30% of companies have no plans to incorporate environmental management into operation business, and 56% have no plans to use formal environmental management system either.

14% of companies plan to incorporate environmental management system within 12 months, 8% unsure, and 6% plan to implement in more than 12 months. Regarding the formal plan, 18% of the companies plan to implement within 12 months, 13.1% plan to implement in more than 12 months and 4.8% unsure.

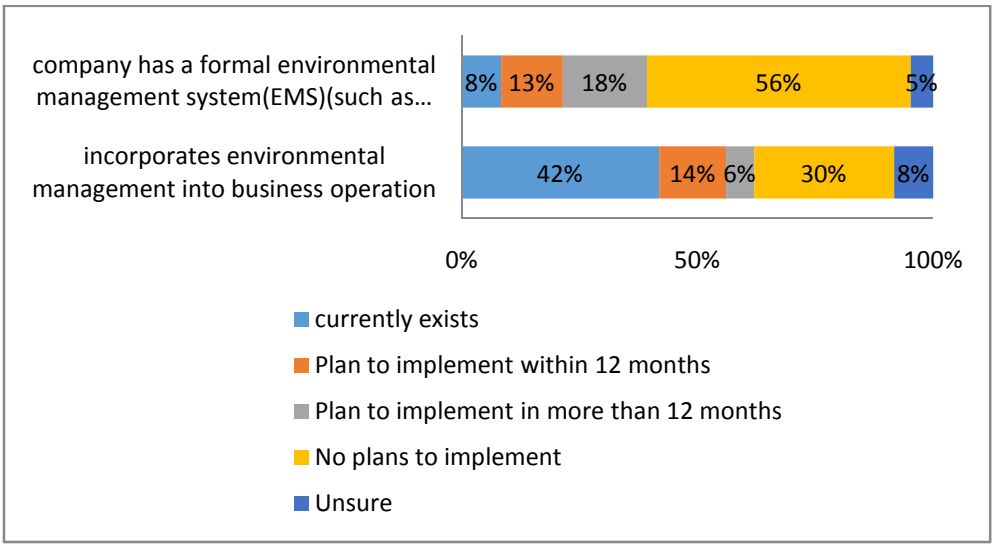

Figure (4.9): Environmental managemen

4.3.1.9 HRM involvement in EM

Based on data analysis it is worth to mention that, as shown in figure (4-10), 89% of respondents believe that HRM has a direct involvement and

effect in green culture and environmental management in the company while only 11% disagree.

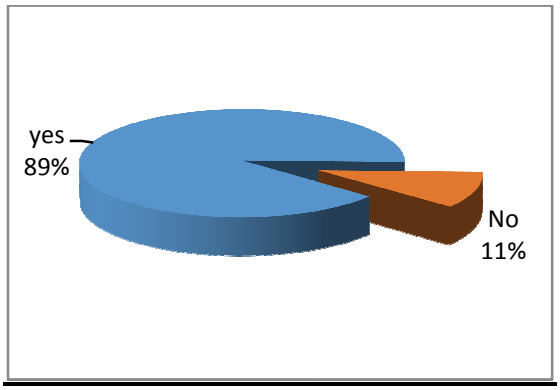

Figure (4.10): HRM involvement in EM

4.3.2 GHRM practices assessment

To assess GHRM practices in manufacturing companies in West Bank respondents were asked to rate potential practices on a five-point scale, with 5 being applied "to a very great extent" and 1 being "not at all", according to the degree of their agreement about to what extent do their company implement GHRM. To identify the degree of each practice, responses were classified into five degrees. Table (4-4) shows the intervals and their represented scaling degrees used in the research.

Table (4.4): Scaling Degrees

Interval	Degree
Less than 20%	Very low
> %20 - %40	Low
> %40 - %60	Moderate
> %60 - %80	High
80% and more	Very High

The implementation of GHRM in Palestinian manufacturing organizations was analyzed by using descriptive analysis. As shown in

Table (4.5) mean, standard deviation and percentage were used to identify the application degree for each practice.

Table (4.5): Application Degree for Best GHRM Practices

Rank	Innovation practices	Std. Deviation	Pct. %	Application Degree
1	Green management of organizational culture	.85035	64.3%	High
2	Green performance management and appraisal	1.03365	55.4%	moderate
3	Green recruitment and selection	.98266	54.3%	moderate
4	Green training and development	.93866	53.6%	moderate
5	Green employee empowerment and participation	.99118	50.3%	moderate
6	Reward and compensation	1.12983	47.5%	moderate
	Total	.89091	54.9%	moderate

Based on the results above, the total implementation of GHRM is 54.9% which is considered as a moderate level. This table demonstrates the applied GHRM practices in descending order.

These practices were selected in order to measure the extent to which organizations use different HRM practices to encourage pro-environmental behavior in employees. Table 1 in Appendix C outlines the descriptive analysis of all GHRM practices under their related groups.

Based on Table 1 in Appendix C, it can be found that the top four most prevalent GHRM practices used in Palestinian manufacturing organizations to encourage pro-environmental behavior in organizations

focus on manager involvement belong to “Green management of organizational culture” group. On the other side, the least prevalent five practices have been applied in Palestinian manufacturing organizations are these practices from the weakest groups “Green employee empowerment and participation” and “Reward and compensation”.

4.3.3 Drivers, Barriers, Excepted benefits of GHRM

There are many factors that could affect the implementation of GHRM practices either by support or hinder. Therefore, the second objective of this research aims to provide a clear picture of variables helping or stopping GHRM implementation from the viewpoint of Palestinian manufacturing organizations.

4.3.3.1 Drivers of GHRM

Respondents were asked to rate potential variables on a five-point scale, with 5 being “Strongly Agree” and 1 being “Strongly Disagree” according to the degree of their agreement about its effect on Palestinian manufacturing organizations motivation to implement GHRM practices. Table 4-6 presents the mean ratings of potential drivers to GHRM Practices in a descending order.

Based on the responses, all drivers have a mean rating greater than 3 on the five-point scale, but it is worth to notice that the mean rating is very close. “Environmental considerations” was ranked first as the most important factor with a percentage of 81.4%. Followed closely in order by

"Contribution to society" with a percentage of 81.2%. "Competitive Advantage" in third place with a percentage of 80.7%, in the time "Economic considerations" took fourth place with the percentage of 77.6%. The last two places were for "Legal pressure" with the percentage of 75.2%, followed by "Community pressure" with the percentage of 71.2%.

Table (4.6): Drivers of GHRM

Drivers of Green HRM	Std. Deviation	Pct. %	Rank
Environmental considerations	.69689	81.4%	1
Contribution to society	.85507	81.2%	2
Competitive advantage	.75707	80.7%	3
Economic considerations	.84175	77.6%	4
Legal pressure	.87287	75.2%	5
Community pressure on companies	1.09646	71.2%	6

4.3.3.2 Barriers of GHRM

Respondents were asked to rate potential variables on a five-point scale, with 5 being "Strongly Agree" and 1 being "Strongly Disagree" according to the degree of their agreement about its effect on the implantation of GHRM practices in Palestinian manufacturing organizations. Table (4-7) presents the mean ratings and the ranking of potential barriers to the implementation of GHRM Practices in a descending order.

Based on data analysis, it can be observed that respondents perceived the key factor that contributed most to prevent GHRM practices is "cost of implementing GHRM programs" as top impediment with the percentage of 79.8%. The second barrier was "complexity and difficulty of adoption of

green technology" with the percentage of 78.3%, followed by "lack of understanding of green policies" with the percentage of 76.2% in third place. As shown in the table (4-7), in fourth place "Lack of top management support" with the percentage of 75.7%. Also, "Staff resistance" was the lowest mean rating in fifth place with a percentage of 74.3%.

Table (4.7): Barriers of GHRM

Barriers of Green HRM	Std. Deviation	Pct. %	Rank
Cost of implementing program	.81395	79.8%	1
Complexity and difficulty of adoption of green technology	.74782	78.3%	2
The Lack of understanding of green policies	.98506	76.2%	3
Lack of support by management	.98264	75.7%	4
Staff resistance	.88592	74.3%	5

4.3.3.3 Benefits of GHRM

Respondents were asked to rate potential variables on a five-point scale, with 5 being "Strongly Agree" and 1 being "Strongly Disagree" according to the degree of their agreement about its effect on the implantation of GHRM practices in Palestinian manufacturing organizations. Table (4-8) presents the mean ratings and the ranking of potential positive outcomes of implementing GHRM Practices in a descending order.

Table (4.8): Benefits of GHRM

Benefits of GHRM	Std. Deviation	Pct. %	Rank
Promote social responsibility toward environment	.71818	82.4%	1
better environmental performance of the organization	.65158	81.9%	2
Creating a competitive advantage	.87779	80.5%	3
Increased employee loyalty and retention	.83353	76.7%	4
Attract and retain green top talent	.90292	76.7%	5
Increase profitability and reduce cost	.89004	75.0%	6

As shown in Table (4-8), respondents indicated that "Promote social responsibility toward environment" (82.4%) was the top benefits for their organizations' environmentally responsible program. Closely followed by "better environmental performance of the organization" with the percentage of 81.9%. Nevertheless, it is interesting to note that the others are close behind. In third place "Creating a competitive advantage" (80.5%) followed by "Increased employee loyalty and retention".

As shown in Table (4-8), "Attract and retain green top talent" was in fifth place with a percentage of (76.7%) followed finally by "Increase profitability and reduce cost" with the percentage of (75.0%).

4.3.4 Environmental performance

The Environmental Performance (EP) "is related to affirmative outcomes for organizations in regards to the natural environment" (Daily et al., 2012). To measure current status of organization's environmental performance respondents were asked to rate the developing of 8 environmental performance affirmative outcomes, based on their

commitment to the environmental sustainability, on a five-point scale, with 5 being “Much better” and 1 being “Much worse”. Table (4-9) presents the mean ratings and the ranking of potential environmental performance outcomes to the implementation of GHRM Practices in a descending order.

Table (4.9): Environmental performance

Environmental performance	Std. Deviation	Pct. %	Rank
Improvement of corporate reputation	.75012	81.2%	1
Reduce emissions of toxic chemicals in air and water	.72770	79.5%	2
improved product quality	.70028	78.8%	3
Reduced waste and recycling of the materials during the production process	.76075	77.9%	4
Improved plant performance	.60406	77.1%	5
Reductions in the consumption of electric energy	.71937	75.2%	6
Helped our company design/develop better products	.66981	75.2%	7
Increased use of renewable energy and sustainable fuels	.60406	71.4%	8

Based on data analysis in Table (4-9), overall respondents chose “Improvement of corporate reputation” as top environmental performance affirmative outcome of commitment to the environmental sustainability with the percentage of 81.2%. Followed by “Reduce emissions of toxic chemicals in air and water”, “Resulted in improved product quality”, “Reduced waste and recycling of the materials during the production process”, “Improved plant performance”, “Reductions in the consumption of electric energy”, “Helped our company design/develop better products”. Finally, the lowest environmental performance affirmative outcomes were

“Increased use of renewable energy and sustainable fuels” with percentage of 71.4%.

4.4 Hypothesis testing

In this study, Pearson's correlation coefficient test was used to test the research hypotheses that were formulated in section 2.8 to assess the correlations between EM and 6 groups of GHRM practices. This test is based on assuming the null hypothesis (Ho) of the existence of no significant relationship between the different groups. The null hypothesis (Ho) is rejected if significance is less than $\propto = 0.05$.

As shown in figure 4-11, the correlation between EM and 6 groups of GHRM practices represented by hypothesis H1 to H6 (in solid line), while correlations among 6 groups of GHRM practices by H7 (in dotted line).

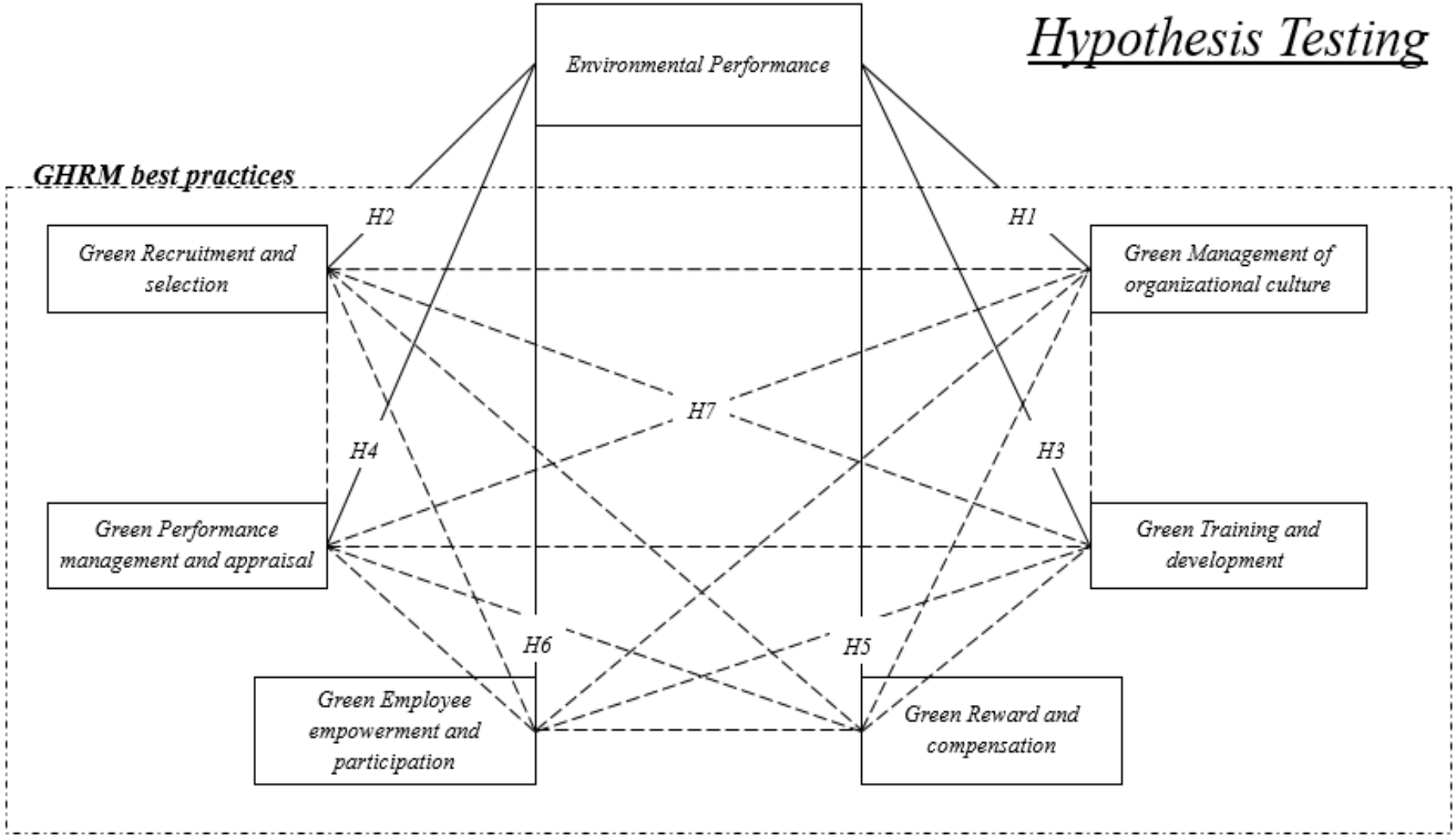

Figure (4.11): Hypothesis testing

4.4.1 Testing Correlation between GHRM Practices and environmental performance

In this section, Pearson correlation was used to test if there is any statistically significant correlation, in the significance level ≤ 0.05, between GHRM Practices and EM. The following table (Table 4-10) shows the correlations between EM and 6 groups of GHRM practices testing results.

The results of Pearson's correlation coefficient test of hypotheses show that environmental performance is jointly affected by Green Management of organizational culture, Green Recruitment and selection, Green Training and development, Green Performance management and appraisal, Green Reward and compensation and Green Employee empowerment and participation since all of the P-values are below $\propto = 0.05$.

These practices correlates with environmental performance positively in descending order: Green Recruitment and selection (ρ=0.637), Green Performance management and appraisal (ρ=0.620), Green Management of organizational culture (ρ=0.605), Green Employee empowerment and participation (ρ=0.595), Green Reward and compensation (ρ=0.574) and Green Training and development (ρ=0.486).

Table (4.10): Correlation coefficient between GHRM practices and EM

GHRM Practices	Pearson's Correlation	Environmental performance	Type of Correlation
Green Recruitment and selection	Correlation Coefficient	.637**	Positive
	P-value (Sig.)	.000	
Green Management of organizational culture	Correlation Coefficient	.620**	Positive
	P-value (Sig.)	.000	
Green Performance management and appraisal	Correlation Coefficient	.605**	Positive
	P-value (Sig.)	.000	
Green Employee empowerment and participation	Correlation Coefficient	.595**	Positive
	P-value (Sig.)	.000	
Green Reward and compensation	Correlation Coefficient	.574**	Positive
	P-value (Sig.)	.000	
Green Training and development	Correlation Coefficient	.486**	Positive
	P-value (Sig.)	.000	

***Pearson's Correlation is significant at the 0.05 level**

4.4.2 Testing Correlation among the GHRM Practices

To describe the correlations among 6 groups of GHRM practices, the Pearson's correlation test was used.

The following table (Table 4- 11) shows the test results which represent the correlation among six GHRM practices: (1) Management of organizational culture, (2) Recruitment and selection, (3) external Training and development, (4) Performance management and appraisal, (5) Reward and compensation and (6) Employee empowerment and participation.

The results of Pearson's correlation coefficient test of the hypotheses show that GHRM practices have a significant correlation with each other

since all of the P-values are below$\propto = 0.05$. These correlations can be described as positively strong since all of the Pearson correlation coefficients is above ρ=0.5. The strongest relation is between Green Recruitment and selection and Green Training and development were (ρ=0.897), on the other side, the weakest correlation is between Green Reward and compensation and Management of organizational culture where (ρ=0.700).

In general, the correlation coefficients reported for sets of correlations indicate the significance of GHRM practices and environmental performance. The correlation coefficients are summarized in Figure (4.12).

Table (4.11): Correlation coefficient among GHRM practices

GHRM Practices	Pearson's Correlation	Management of organizational culture	Recruitment and selection	Training and development	Performance management and appraisal	Reward and compensation
Green Recruitment and selection	Correlation Coefficient	**.771****				
	P-value (Sig.)	.000				
Green Training and development	Correlation Coefficient	**.710****	**.897****			
	P-value (Sig.)	.000	.000			
Green Performance management and appraisal	Correlation Coefficient	**.784****	**.867****	**.886****		
	P-value (Sig.)	.000	.000	.000		
Green Reward and compensation	Correlation Coefficient	**.700****	**.803****	**.754****	**.767****	
	P-value (Sig.)	.000	.000	.000	.000	
Green Employee empowerment and participation	Correlation Coefficient	**.707****	**.794****	**.786****	**.798****	**.840****
	P-value (Sig.)	.000	.000	.000	.000	.000

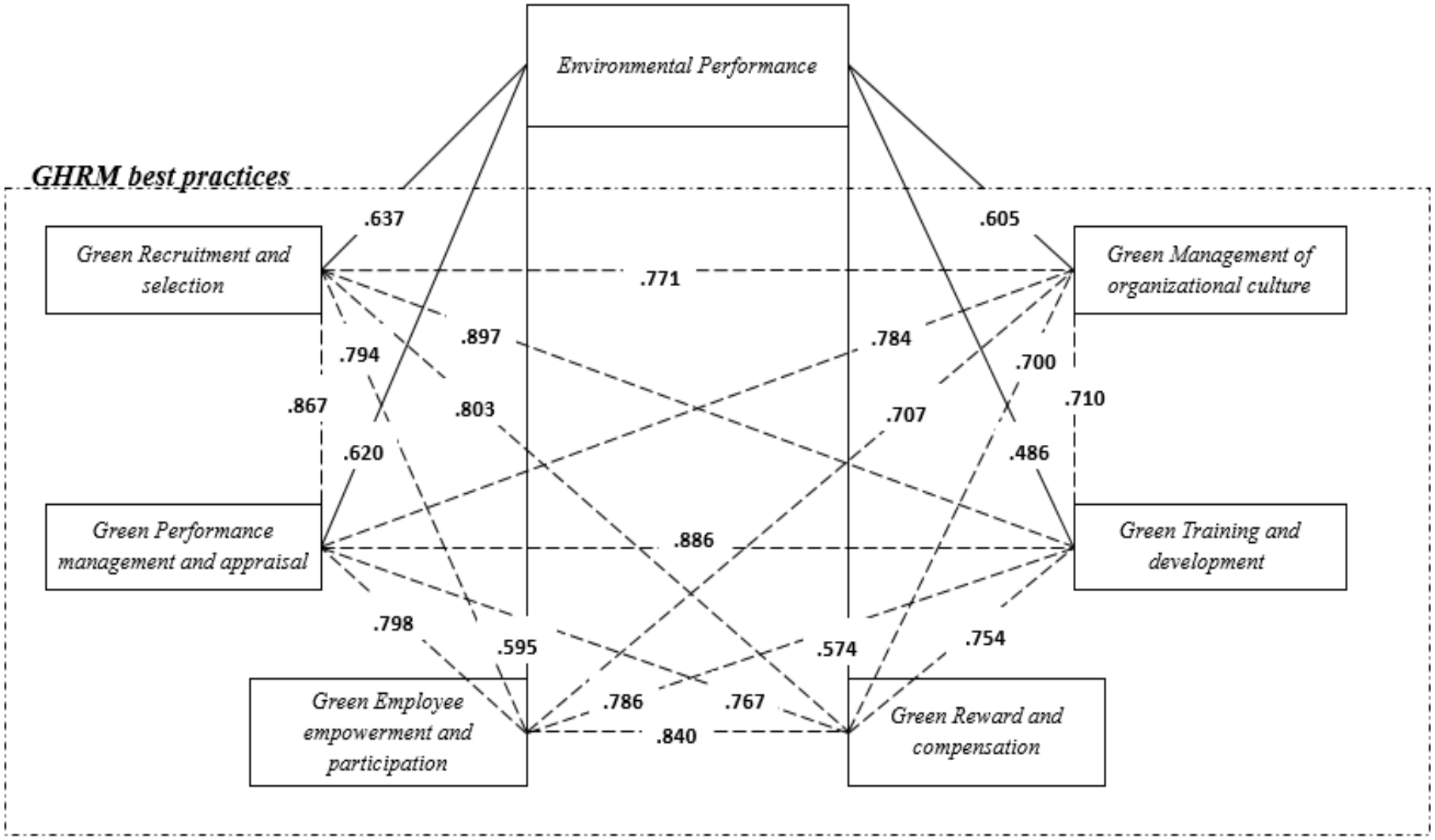

Figure (4.12): Hypothesis Testing

4.5 Bivariate Analysis

This section explores any possible significant differences in the variables (GHRM practices, environmental performance, drivers, barriers and benefits of GHRM) that can be attributed to the control variables (industrial sector, respondent's position, No. of employee, EMS, educational degree, the experience of respondent). The analysis of the relationship between the variables and control variables (bivariate analysis) was developed through using one-way ANOVA test; which allows the comparison of more than two independent groups.

4.5.1 Statistical differences of GHRM practices

The statistical differences of GHRM practices assessment were examined according to five control variables (industrial sector, No. of employee, EMS, educational degree, experience of respondent)

Respondents' answers were divided into three groups according to size (measured by the number of employees) based on OECD standards and classification. Based on one-way ANOVA results, as shown in Table 4-12, it has been found that there is no statistical proof for significant differences in the degree of applying Green Employee empowerment and participation, Green Recruitment and selection and compensation and Green Performance management and appraisal where (P-value > 0.05) for all. While there are statistical differences between three sizes of organizations in the degree of applying green management of

organizational culture, green reward, and compensation and green training and development practices were (P-value < 0.05). The results from the one-way ANOVA test does not indicate which of the three groups (Food, Chemical, and pharmaceutical industry) differ from one another. To understand the differences, a post hoc test was conducted to test variation between the groups (Refer to Appendix D).

According to the existence of EMS, the following Table 4-12 shows that there is a statistical difference in the degree of applying GHRM practices were (P-value < 0.05) for all. The results from the one-way ANOVA test does not indicate which of groups differ from one another. To understand the differences, a post hoc test was conducted to test variation between the groups (Refer to Appendix D).

According to the industrial sector, the following Table 4-12 shows that there are no statistical differences between three industrial sectors of organizations in degree of applying Green Management of organizational culture, Green Employee empowerment and participation, Green Recruitment and selection, Green Reward and compensation and Green Performance management and appraisal where (P-value > 0.05) for all. However, statistical differences only appear in Green Training and development where (P-value < 0.05). The results from the one-way ANOVA test does not indicate which of the three groups (Food, Chemical, and pharmaceutical industry) differ from one another. To understand the

differences, a post hoc test was conducted to test variation between the groups (Refer to Appendix D).

According to the educational degree: the following Table 4-12 shows that there are no statistical differences between three educational degree groups in the degree of applying GHRM practices where (P-value > 0.05) for all. According to the experience of respondents the following Table 4-12 shows that there are no statistical differences between different experience level groups in the degree of applying GHRM practices were (P-value > 0.05) for all.

Table (4.12): Summarized ANOVA Test for differences among GHRM practices according to (No. of employees, EMS, Industrial Sector)

ANOVA – Between Groups	No. of employees		EMS		Industrial sector		Experience		Educational degree	
Factor	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**
Green Management of organizational culture	6.349	.003*	4.840	.002*	.344	.710	.606	.660	.469	.627
Green Employee empowerment and participation	2.058	.134	3.028	.022*	1.329	.270	.335	.853	.727	.486
Green Recruitment and selection	2.675	.075	3.632	.009*	1.543	.220	.296	.880	.077	.926
Green Reward and compensation	5.330	.007*	2.836	.030*	.797	.454	.268	.897	.062	.940
Green Performance management and appraisal	1.606	.207	4.628	.002*	.888	.415	.252	.908	.009	.991
Green Training and development	5.766	.049*	2.719	.035*	3.381	.039*	.192	.942	.012	.988

*** Significant level at the 0.05**

4.5.2 Drivers, Barriers, Benefits of GHRM

The statistical differences of drivers, barriers, and benefits of GHRM practices was examined according to two control variables: respondents' position and industrial sector.

According to the respondents' position: it was questioned if the different positions will have a different point of view regarding the drivers, barriers, and benefits of GHRM practices. The results of one-way ANOVA show there are no statistical differences between the different position in the importance of drivers, barriers, and benefits of GHRM practices were (P-value > 0.05) for all.

According to the industrial sector: as shown in Table (4-13), one-way ANOVA test shows that there are no statistically significant differences in the importance of the key drivers and benefits of GHRM practices, where (P-value > 0.05) for dependent variables, according to the industrial sector of respondent’s organization. However, there is a statistically significant difference in the importance of the key barrier of GHRM practices, where (Sig. < 0.05) for dependent variables, according to the industrial sector of respondent’s organization. The results from the one-way ANOVA test does not indicate which of the three groups (Food, Chemical, and pharmaceutical industry) differ from one another. To understand the differences, a post hoc test was conducted to test variation between the groups (Refer to Appendix D).

Table (4.13): Summarized ANOVA Test for differences among drivers, barriers and benefits of GHRM according to (Position of respondent, Industrial Sector)

ANOVA – Between Groups	Position of respondent		Industrial sector	
Factor	**F**	**Sig.**	**F**	**Sig.**
Drivers of Green HRM	.638	.593	1.006	.370
Barriers of Green HRM	1.926	.132	4.388	.016*
Positive Outcomes of GHRM	2.140	.102	1.175	.314

*** Significant level at the 0.05**

4.5.3 Environmental performance

To explore whether the environmental performance of the organizations differs significantly according to its industrial sector one-way ANOVA test was done. Based on the results of one-way ANOVA test in table 4-14, it can be concluded that there are no statistically significant differences in environmental performance of the organizations according to its industrial sector of the organization. Since the level of significance for all items of the environmental performance is bigger than 0.05.

Table (4.14): Summarized ANOVA Test for differences in the environmental performance according to Industrial Sector

ANOVA – Between Groups	Industrial sector	
Environmental performance indicator	F	Sig.
Improvement of corporate reputation	.399	.672
Reduce emissions of toxic chemicals in air and water	.528	.592
Resulted in improved product quality	.489	.615
Reduced waste and recycling of the materials during the production process	1.567	.215
Improved plant performance	.277	.759
Reductions in the consumption of electric energy	.319	.727
Helped our company design/develop better products	.386	.681
Increased use of renewable energy and sustainable fuels	1.348	.266

This chapter has presented the analysis of the qualitative and quantitative data. It has been found that the most prevalent GHRM practice is “Green management of organizational culture”. In addition, this research has approved the existence of a positive relationship between GHRM and EP. As well, the most effective practice was “Green Recruitment and selection”. At the end, the top driver was noted as the “Environmental considerations”, top barrier “cost of implementing GHRM programs” and the most expected benefit was “Promote social responsibility toward environment”.

Chapter Five

Discussion and model development

Chapter Five
Discussion and model development

5.1 Chapter overview

This chapter presents the discussion of the research results and findings of analysis for the data collected via questionnaire and interview. The first section discusses GHRM practices, its drivers, barriers and expected benefits based on the results of descriptive statistics, hypotheses testing and results of interviews. The second section discusses the model developed based on the results of the analysis.

5.2 Discussion

The field of GHRM research is in early stages (Jabbour et al., 2012; Jackson et al., 2011; Jackson and Seo, 2010), and theoretical research is prevalent (Renwick et al., 2012; Govindarajulu and Daily, 2004; Daily and Huang, 2001). Nonetheless, some studies point out that there is a potentially positive correlation between the GHRM practices and the EP of the companies (Daily et al., 2012; Renwick et al., 2013). The next sections will discuss to what extent GHRM practices are applied in WB, the factors affecting the implementation of GHRM practices. Also, the potential correlation between GHRM practices and the EP of the companies will be discussed.

5.2.1 Discussion of GHRM practices

This research examined to what extent Palestinian organizations apply GHRM practice to promote environmental behavior among employees. Findings illustrate that organizations appear to use GHRM practices at a moderate level to encourage pro-environmental behavior of their employees. Therefore, it can be noticed that Palestinian manufacturing organizations still did not take the full advantage of GHRM practices.

The analysis demonstrates that the preferable practice which increased employee commitment and awareness toward the environment is the "Green management of organizational culture". This group focuses on top management involvement and support of the environment, and the clarification of information and values of EM throughout the organization. The result advocates that top management is a facilitator of pro-environmental behaviors through clarifying the green framework of the organization to motivate their staff which support previous studies that highlight leading role of top management in encouraging employees to engage in environmental initiatives (e.g. Govindarajulu & Daily, 2004; Ramus & Steger, 2000; Ramus, 2002; Robertson & Barling, 2013). Also, Daily and Huang (2001) emphasize the important role of top management in helping the organization transition to be more smoothly and comprehensively through serving as a champion of change. Top management impact could be considered pivotal because of the scope, visibility and power they have which will enable them to ensure that the

same pro-environmental messages reach a large number of employees (Zibarras and Coan, 2015). Mainly, top management involvement appears through broadcasting environmental programs, initiatives, and goals to all employees constantly (Ramus, 2001; Daily and Huang, 2001; Daily, et al. 2003, 2007; Govindarajulu and Daily, 2004). Also, providing employees with a feedback of EP to maintain correct values, and reinforcing them through education and training (Fernandez et al., 2003).

In the second place, the group of "Green performance management and appraisal", where respondents agree on the existence of an individual green assessment, the recording of its results, and predetermination of green targets, goals, and responsibilities for employees. Such a result has been considered as rare in the literature since it is present only in companies with high level of EP (Fernandez et al., 2003). Also, major studies on this topic reveal the lack of systematic practices within this practice in organizations (Fernandez et al., 2003; Govindarajulu and Daily, 2004).

Third place was for "Green recruitment and selection" group belying the results of interviews. Although their companies take environmental responsibility into account, interviewees considered green recruitment the weakest applied GHRM practice. Based on interviews, it seems that this factor has not been included in the recruitment and internal and external job posting processes unless the job requires specific environmental skills and experience. However, questionnaires demonstrate that green recruitment is

applied in Palestinian companies. It can be explained based on the fact that most of the questionnaire respondents were HR managers. Moreover, they have a better interaction with the recruitment process than top management. Although there are very few examples of companies that have been implementing environmental criteria in their recruitment processes in the literature (Jabbour, 2011).

The fourth applied practice was “Green training and development” group which relates to education and training via internal awareness-raising campaigns. According to Teixeira et al. (2012), “green training is one of the most important tools to develop human resources and facilitate the transition to a more sustainable society”. Questionnaires results demonstrate that “Green training and development” was not one of the most prevalent practices, although interviewees considered it as one of the most important GHRM practices. This can be elucidated practically; probably from Palestinian companies' viewpoint focusing on employing already qualified environmental competencies as being more important, more efficient and less costly than it is to organize formal training courses, leadership and management training on environmental issues.

Based on the literature, employees who were informed and educated about environmental changes and policies are more likely to engage willingly in pro-environmental behaviors (Ramus, 2002). Therefore, even though the potential costs are expected, organizations need to include employees in formal education programs aimed at developing and

encouraging pro-environmental behavior; it is only through providing education and training that employees can learn how to enact environmental changes and become aware of the organization's efforts toward sustainability.

Although the need for active engagement of employees in green management is highlighted in the literature (Aragon-Correa et al., 2013; Boiral, 2009; Ramus & Steger, 2000; Renwick et al., 2013), this research shows that it was not used to a great extent. The fifth group was "Green employee empowerment and participation". This group includes employee involvement in many forms such as through teamwork or workshops. Many researchers emphasized the importance of using green teams to involve the workforce in green management practices (Jabbour, 2013b; Jabbour, 2011), however, green teamwork is the least used practice in this group. Based on the fact that these methods would require more resources and more cost to be implemented efficiently, it is predicted that Palestinian companies do not involve employees in such activities. After all, empowered employees are more motivated for environmental pursuits (Renwick, 2013; Sudin, 2011). That is because green employee empowerment provides such opportunities to the employees in different ways. It allows them to get involved in the problem-solving stream, be a part in decision-making, and design their individual schedules and timelines. Furthermore, upon employees' need they can get consultation and support from supervisors, suggest for improvement, and communicate with ease and have an option

of information sharing. Therefore, HR managers should prioritize employee involvement in decision-making for environmental issues.

Unfortunately, the weakest group was “Green Reward and Compensation”, which contrasts the results of interviews. Interview results manifest that “Reward and Compensation “as one of the best practices to increase employee commitment and awareness toward the environment. It is noteworthy that findings suggest rewards are not used extensively within organizations to encourage pro-environmental behavior in staff. Despite the fact that the literature suggests that rewards can be useful for implementing GHRM (Daily & Huang, 2001; Govindarajulu & Daily, 2004; Jackson et al., 2011). Fernandez et al. (2013) note that it can be difficult to implement successfully a reward system that works for all employees. That's because individuals are motivated in different ways. Consequently, this poses a problem for organizations concerning the resources necessary to connect rewards to individual motivation. In light of this, it is perhaps not surprising that rewards are not used to the extent as other methods such as manager involvement and awareness-raising, especially in organizations with large numbers of employees.

This research questioned whether the application degree of GHRM practices differs according to five control variables (industrial sector, number of employee, EMS, educational level, the experience of respondents). In recognition of organizational size effect, Elsayed (2006) found that size of a firm determines its capability to apply appropriate

environmental initiatives and its EP. This research examined whether the organization size affects the extent to which organizations implement GHRM practices. Findings indicate that organization size significantly influenced the extent to which certain HRM practices were used to change environmental behavior. Based on these results, it has been found that green management of organizational culture, green reward, and compensation and green training and development practices are more prevalent among large organizations than small and medium organizations. This result supports the assumption that large organizations have better resources to influence environmental change (Ronnenberg et al., 2011).

Findings demonstrate that industrial sector has a significant effect on the extent of implementing green training and development only. Implying that chemical industries tend to perform better than food and pharmaceutical industries, it can be explained that chemical industries are considered as greater pollutants, correspondingly, they are more interested in understanding environmental issues.

Also, it was questioned whether implementing formal EMS will affect the extent to which organizations apply GHRM practices. Findings demonstrate that companies which currently have a formal EMS or have a plan for EMS (informal implementation) tend to perform better in using GHRM practices. This result supports the result of Massoud et al. (2011) who surveyed 220 manufacturing companies in Mexico. Their study aimed to examine if a formal EMS, informal EMS, or non-existent EMS impact

the adoption of environmental training and other human factors. Their results suggest that there are differences among the systems, where a more formal EMS is associated with a greater probability of adopting human factors in a company, followed by informal EMS facilities being second and facilities with no EMS being lowest.

This research examined if there are significant differences in the degree of applying GHRM that can be attributed to Educational degree or experience of the respondent. It can be assumed that educated people have more access to environmental knowledge and awareness, which may result in better performance and more interests and commitment toward the environment. However, results show there are no statistical differences between three educational level groups in the degree of applying GHRM practices. This finding can be explained because of technological revolution, access to information became easier and less depending on formal education. Regarding the experience, it has been found that there are no statistical differences between different experiences level groups in the degree of applying GHRM practices.

5.2.2 Discussion of drivers, barriers, and benefits of GHRM

To achieve the second objective of this research, this section discusses the variables that have been found affecting the implementation of GHRM practices either by support or hinder.

It was questioned what variables could motivate organizations to include green initiatives in HR. The results show that “Environmental

Considerations" was the top driver closely followed by "Contribution to Society". In contrary with SHRM Survey (2007) and Jafri (2012) where both found that "Contribution to society" was the top driver while "Environmental Considerations" was the second. It can be explained that Palestinian organizations are more interested in controlling their environmental effect as a precaution before contributing to society.

It is interesting to note that respondents choose "Competitive Advantage" as a more important driver than "Economic Considerations". This result contrasts the result of SHRM Survey (2007) who found that "Competitive Advantage" took the ninth place with 15% percent while "Economic considerations" was in the third place with 46%. Also, it contrasts the result of Jafri (2012) who found that "Competitive Advantage" scored the lowest mean with 42.2% percent and in the same survey "Economic Considerations" took third place with a percentage of 60%.

The result illustrates that legal pressure and community pressure have the lowest effect on motivating organizations to apply GHRM. This finding can be explained based on the current political and economic situation in Palestine where priorities for the community is different from safe and stable community.

In many cases, implementation of new things may be deterred due to several issues. Therefore, it was questioned what variables that could hinder organizations from applying green initiatives in HR. The results of

questionnaires show that “Cost of implementing GHRM programs” is the top barrier; which was consistent with interviews results. Although literature demonstrates the benefits of using GHRM practices, many companies still face cost problems of implementing and maintaining these practices. In pursuance of the smooth adoption of GHRM practices, it is necessary first to ensure that proper awareness should be spread among employees about the benefits of adopting such programs. SHRM survey (2007), SHRM survey (2011) and the study was done by Jafri (2012), also showed the cost of implementing green programs as top barrier.

The second barrier was “complexity and difficulty of adoption of green technology” followed by “lack of understanding of green policies”. This, however, was contrary to the findings of Fayyazi et al. (2015) who surveyed 31 oil's top experts and HR managers. They found that “The Lack of understanding of green policies” had a greater effect on the adoption of GHRM practices with a percentage of 78.9% in third place among 13 factor. Furthermore, “Complexity and difficulty of adoption of green technology” had lower effect with a rate of 42.7% in seventh place.

The finding of this research is consistent with Jackson and Seo (2010) conclusion that lack of interest and complexity were barriers of green HRM. Therefore, to ease adoption of GHRM practices organizations should clarify green policies and values for employees to increase awareness and commitment toward the environment, and also ease adopting and practicing green programs.

Interviewees choose lack of top management support and staff resistance as major challenges that could hinder the implementation of GHRM. This result, however, was contrary to the findings of questionnaires which show that “Lack of top management support” and “Staff resistance” were the weakest barriers. This result is justified, as most of the questionnaire respondents were HR managers more than interviews; HR managers have a better idea about managing culture and relations among employees. To overcome employees' resistance to new concept and changes and guarantee top management support, it’s important to clarify and explain green policies which will result in acceptance and more interest in new culture.

Literature demonstrates that there are several benefits of GHRM such as the competitive advantage of firms, positive organizational reputation; higher or sustained employee engagement and eliminating waste or reducing their impact on the environment (Renwick et al., 2013; Margaretha and Saragih,2013; Patel, 2014). From the Palestinian viewpoint, respondents believe that GHRM promotes social responsibility toward environment among employees which will result in the better EP of the organization. Also, applying GHRM practices can improve the EP of the organization, create a competitive advantage, increase employees' loyalty and retention, attract and retain green top talent. The least expected benefits were increasing profitability and reducing costs. That was inconsistent with SHRM Survey (2007). According to their results

improving employee morale was the top positive outcome followed by the strong public image.

It was interesting to examine if the importance of drivers, barriers, and benefits of GHRM practices will differ according to the industrial sector and position of the respondent.

Based on the result of analysis, it has been found that different positions of respondents have similar viewpoint of the importance of drivers, barriers, and benefits of GHRM practices. However, there is no statistically significant difference in the importance of the key drivers, barriers, and benefits of GHRM practices that can be attributed to the position of the respondent.

With respect to the industrial sector, the results show that there is no statistically significant difference in the importance of the key drivers and positive outcomes of GHRM practices according to the industrial sector of respondent's organization. However, there is a statistically significant difference in the importance of the key barrier of GHRM practices between three sectors. It has been found that food industries face barriers more than chemical and pharmaceutical industries.

5.2.3 Hypothesis testing discussion

Based on the assumption that there is a potentially positive correlation between the GHRM practices and the EP of the companies (Daily et al., 2012; Renwick et al., 2013), a general hypothesis was formulated to examine if EP could be improved by GHRM practices.

Based on section 2.6 where all the hypotheses are listed and according to figure (5-1) H1 to H6 that proposed direct relationships between 6 GHRM factors (Management of organizational culture, Recruitment and selection, Training and development, Performance management and appraisal, Reward and Compensation, Employee empowerment and participation) and EP. The 7th hypothesis studied the correlation among 6 GHRM factors to determine how they are interrelated and the relationship between them.

Based on the results of Pearson's correlation analysis for the hypothesis H1 to H6, the finding analysis approved that there is a statistically significant positive correlation between all of GHRM practices and EP which is consistent with the result of Jabbour et al. (2008). They investigated the interactions between HRM practices and EM. They conclude that the interactions are not only theoretically, but also practically scarce in the organizational context.

Similar to the result of Jabbour et al. (2012), it verified that HRM practices positively relate to the adoption of EM practice at companies in Brazil's automotive sector. Also, Jabbour et al. (2010) found that HRM establishes distinct contributions to EM throughout its evolution. According to their study, it was verified that the most evolved characteristics of EM tend to be associated to almost all of the functional and competitive dimensions of HRM.

It is worth to notice that the weakest correlation was between green training and development with EP which brings the notion that training may have become a less important priority in Palestine. This is despite the fact that a recent empirical study done by Jabbour (2013b) links environmental training positively and significantly to the level of maturity in environmental management in companies. Therefore, based on these results HRM practices should play a better role in spreading environmental education and training through involving with and prioritizing sustainability issues.

Regarding the 7th hypothesis and considering the result analysis, it has been approved that there is a statistically significant correlation among 6 GHRM factors (Management of organizational culture, Green Recruitment and selection, Training and development, Performance management and appraisal, Reward and Compensation, Employee empowerment and participation). Also, these correlations can be described as positively strong since all of the Pearson correlation coefficients is above ρ=0.5. Based on this result, managers can understand that focusing on any practices of GHRM practices will help leverage the others which will result in a better EP.

Undoubtedly, companies may suffer costly waste cleanups, or risky conditions for employees and the community, as well as legal fines if they had low EP (Daily et al., 2012). Thus, those companies which plan to remain competitive have to make sure that GHRM practices are their

priorities. They may have to consider applying them if they do not nowadays.

Based on data analysis, it has been found that all of the sub-hypotheses are supported, as shown in Figure (5-1). As a result, the findings of this research effectively, again, propose that organizations can benefit from superior usage of GHRM practice to support and motivate commitment toward pro-environmental behavior and support the policies and initiatives generated from EM.

Based on the above, the main research hypothesis is accepted: ***"****GHRM practices have a positive impact on EP in Palestinian manufacturing organizations.****"***

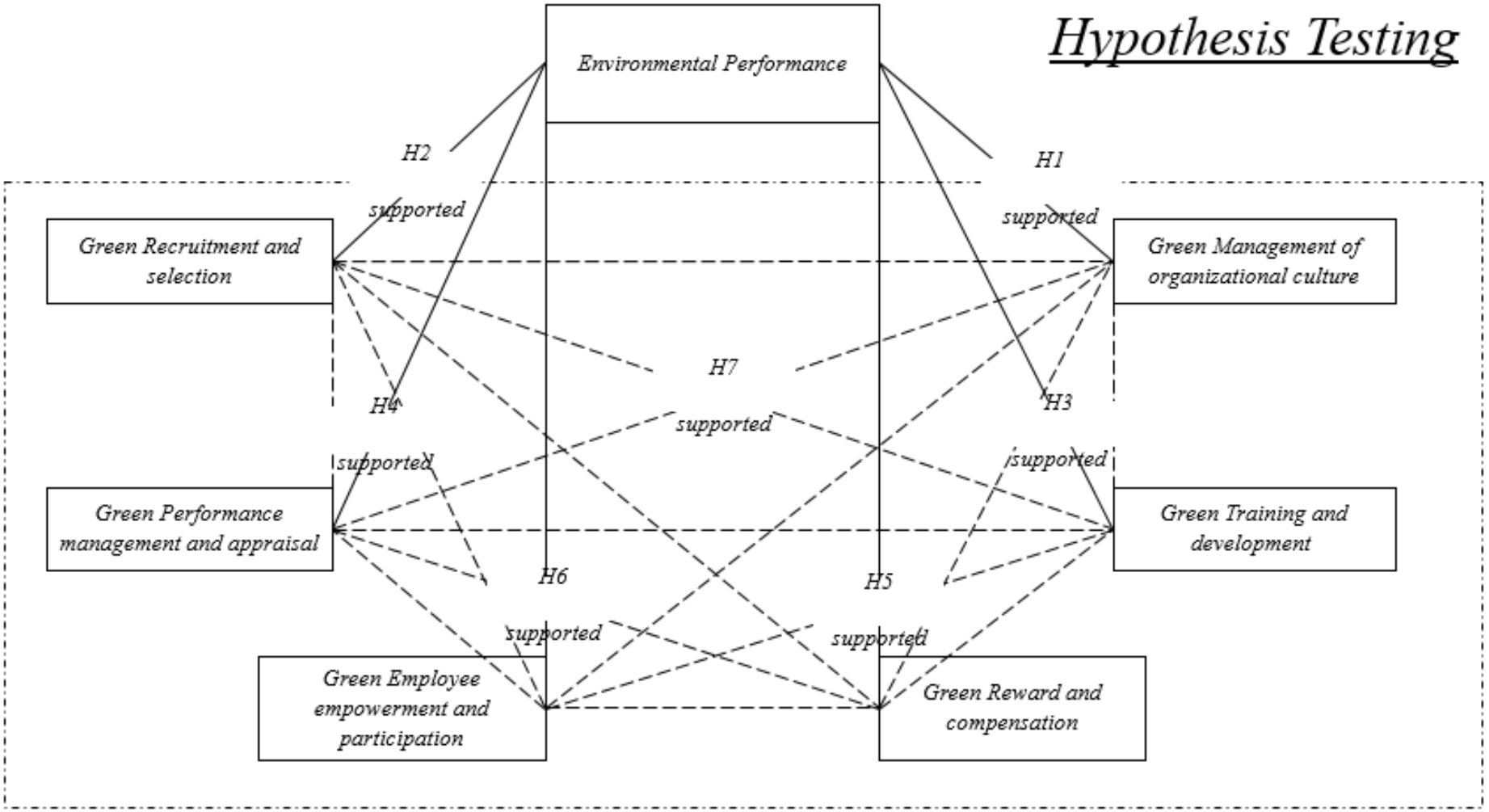

Figure (5.1): Hypothesis status

5.3 Model development

Semi-structured interviews show that companies are concerned and interested in monitoring their EP. Furthermore, they believe that human factors have a major role in affecting the environment, although none of them confirmed the recognition of the concept of GHRM. Because of this, a clear guide for applying GHRM is needed to lead top management in achieving EM goals by using employees. It has been shared with a group of experts in the area to judge on its realism and flexibility. The group had one executive manager and 2 HR managers from 3 different companies. All of their notes have been considered and some modifications were made.

Based on literature reviews and findings of this research, a conceptual model has been developed that illustrates some potentially productive GHRM practices for green organizations. The model is intended to be a guide to help managers to apply GHRM in order to improve EP. Consequently, and as shown in Figure 5-2, the model includes 6 GHRM practices arranged in four stages, the first one is “Green management of organizational culture” followed by “Green recruitment and selection” then in the third stage “Green training and development” and “Green performance management and appraisal”. Finally, “Green employee empowerment and participation” and “Reward and Compensation” in the fourth stage.

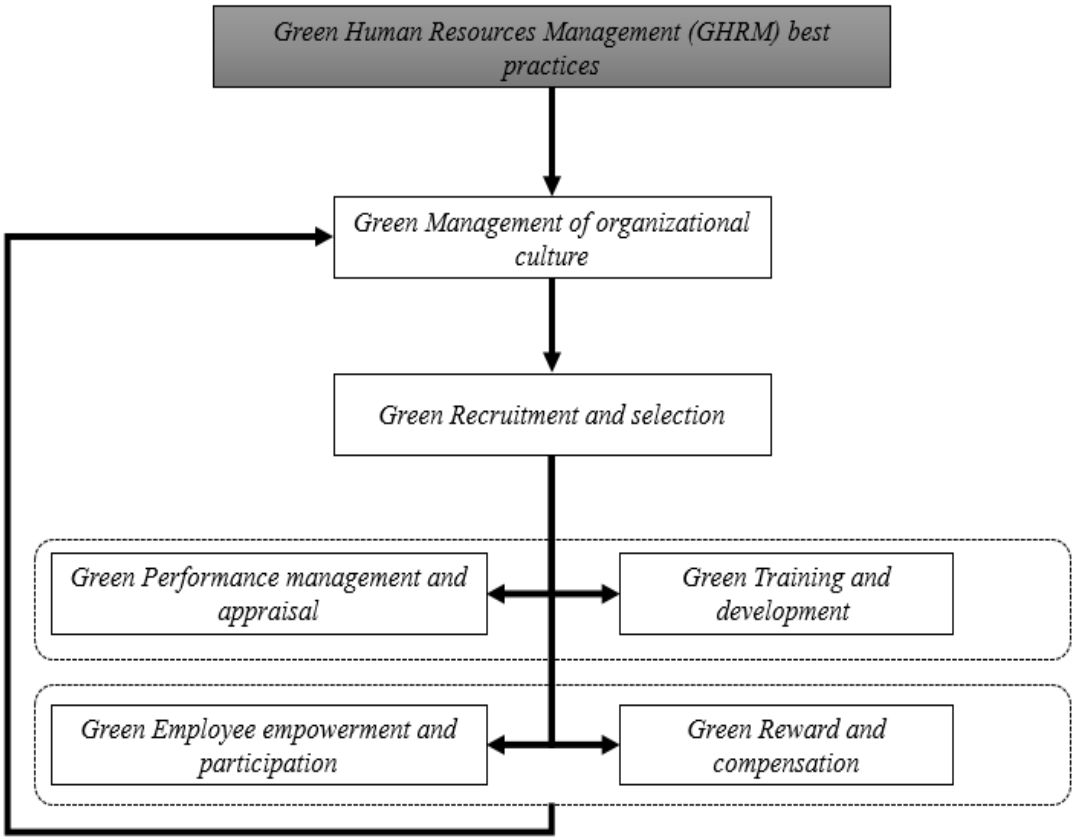

Figure (5.2): Conceptual model for GHRM best practices

The first stage is developing a supportive organizational culture. In order to guarantee a superior environmental awareness and commitment among employees, it is important to maintain a supportive and encouraging atmosphere. This could be achieved by adding an environmental concerns to visions and missions of the companies. To this could be added ensuring top management support, interest and commitment toward the environment as well as encouraging top managers to play a role model and adopt the democratic style of decision making towards EP. Moreover, managers could clarify information and values of EM throughout the organization, and they could show that management is strongly committed. This will encourage employees to participate more willingly.

The next step is to build and maintain a green workplace. Therefore, the organization needs to select and hire employees who support the environment and who are interested in it. At first, the organization should consider building a green reputation for the company to attract highly qualified employees. Also, it should set out with the process of recruitment, in the job design phase includes environmental concerns in the job description specifications. It could also include environmental behavior and commitment criteria in recruitment messages. At the same time, it has to make sure that it selects applicants who are sufficiently aware of greening to fill job vacancies. Still, it could consider designing jobs positions to focus exclusively on environmental management aspects of the organizations.

After choosing the qualified community and developing the requested culture, it is important to increase employees' skills and qualification via providing environmental training to the members of the organization and continuously tracking their performance. The third stage integrates green training and development with green performance appraisal practice. Regarding environmental training and development for new employees, HRM should provide induction programs that emphasize environmental issues, concerns and green culture in the company. With respect to current employees, the organization should take into account the needs of environmental issues when analyzing training requirements. Additionally, it has to make sure that environmental trainings are considered as a priority when compared to other types of company training.

At the same time, it should continue appraising the current performances, skills and knowledge of employees to predict the needs and provide the requested training and solutions. It could also set specific green targets, goals and responsibilities to be achieved and include their assessment in performance appraisal and record them. Besides, it could provide regular feedback to the employees or teams to achieve environmental goals or improve their EP. Finally, it could incorporate environmental management objectives and targets with the performance evaluation system of the organization.

The final stage includes integration between “Reward and Compensation” and “Green employee empowerment and participation”. It is important to motivate employees and increase their interest in environmental issues. This can be done through using link suggestion schemes into reward system by introducing rewards for innovative environmental initiative and performance, offer a monetary and non-monetary rewards based on the environmental achievements (vacation, leave, gifts, bonuses, cash, premiums, promotion) and recognize EP publicly (awards, dinner, and publicity). Another way to increase employees' interest in environmental issues is giving them the opportunity to contribute to environmental management through employee empowerment and participation. This may include involving employees in formulating environmental strategy, using teamwork to successfully manage and produce awareness of the environmental issues of the company, providing opportunities to the employees to be involved and

participate in green suggestion schemes and Joint consultations for environmental issues problem-solving.

These practices are not discrete. All of them are related and affect each other. Organizations that want to have a competitive advantage through using GHRM practices should keep in mind that this is a continuous work.

Chapter Six

Conclusions & Recommendations

Chapter Six
Conclusions & Recommendations

6.1 Chapter overview

This chapter abstracts the thesis results through conclusions. Also, discusses the contribution of the thesis, limitations it faced, suggests recommendations, and includes the suggestions for future studies.

6.2 Conclusions

The main aim of this research is to assess GHRM best practices in Palestinian manufacturing companies. This has been done by firstly, exploring to what extent Palestinian manufacturing companies of GHRM practices are using, secondly, by testing the correlations between GHRM practices and EP, and finding what are the best GHRM practices to enhance environmental performance.

The second issue the research focused on, is identifying variables that could affect implementation of GHRM practices either by support or hinder and exploring the expected benefits of GHRM practices from the viewpoint of these companies.

To conclude the results, it has been found that organizations appear to use GHRM practices at a moderate level to encourage pro-environmental behavior in their employees. The finding of analysis demonstrates that the preferable practice which has been done to increase employee commitment and awareness toward environment is the “Green management of

organizational culture". Followed by "Green performance management and appraisal", "Green recruitment and selection", "Green training and development", "Green employee empowerment and participation". While the least used practice was "Green Reward and compensation".

It was found that there is a positive correlation between 6 GHRM practices and EP. The most influential practice was "Green Recruitment and selection". While the weakest was "Green Training and development". This result supports the suggestion that there is a potentially positive correlation between the GHRM practices and the environmental performance of the companies.

Based on the literature review and the local situation in Palestine, this research assumes (6) drivers, (5) barriers and (6) benefits of GHRM practices. After the analysis, it has been fund that these variables affecting the implementation of GHRM practices either by support or hinder. Where the results of the analysis show that:

- ✓ The top diver was "Environmental considerations" Followed closely in order by "Contribution to society". Then "Competitive Advantage" in third place followed by "Economic considerations". The last two places were for "Legal pressure", followed by "Community pressure".
- ✓ The main barrier for implementing GHRM practices was "cost of implementing GHRM programs" followed by "complexity and difficulty of adoption of green technology", "lack of understanding of

green policies", "Lack of top management support". Finally, "Staff resistance".

- ✓ It has been found that the most expected benefits from the viewpoint of Palestinian organizations was "Promote social responsibility toward environment". Closely followed by "better environmental performance of the organization". Then "Creating a competitive advantage" followed by "Increased employee loyalty and retention", "Attract and retain green top talent", and "Increase profitability and reduce cost".

6.3 Research contribution

This research contributes to the literature by assessing and discussing GHRM practices in a developing country context. Research result assists companies in understanding their current level of GHRM to help them clarify their strengths and weakness, thereafter, to enhance their environmental performance.

This study is one of the recent studies that investigates and focuses on the relationship between GHRM main factors with an environmental performance. This investigation has been done through testing a model which represents these relations in WB manufacturing organizations context. The research provides a conceptual GHRM best practices model intended to give an explanation about the implementation of best practices of GHRM and to help firms in understanding how they can improve their

environmental performance through human resource functions. This research, also, contributed theoretically through highlighting the main barriers, drivers, and also benefits of GHRM in a developing country context. Which are applicable in other developing countries.

6.4 Recommendations

Research is persistently showing that organizations can benefit by superior using of HRM practice to support and motivate commitment toward pro-environmental behavior and support the policies and initiatives generated from EM which will result in a better environmental performance. Thus, the study proposes a set of recommendations to the WB manufacturing organizations to improve their environmental performance:

- Develop environmental assessment strategy; to make tangible improvements, organizations have to include environmental thinking deep into business strategy such as clarifying environmental concerns into vision & mission, include environment in long and short term goals, and apply internal and external audit for environmental work.

- Build an eco-advantage culture; which includes more than simply comply with environmental policies and pressures, but going beyond the basics of cutting waste and operating efficiently. Organizations have to enclose environmental considerations into all aspects of their operations, through defining: green values, practices, initiatives, and rules. Also, track environmental performance by either developing

their own EMS or – if budget allows - adopting a formal EMS such as ISO 14001.

- Ensure top managers support for GHRM; through clarifying the benefits of GHRM. Top managers are recommended to be aware about the benefits of GHRM and actively participate in its implementation rather than resist it.
- Employ green talents; recruitment and selection system should include environmental criteria.
- Increase employee awareness and knowledge about the environment; through using environmental training and development.
- Keep track of employees' green performance; through using environmental criteria in performance appraisal system.
- Motivate employees through rewards and compensations.
- Empower employees and involve them in decision-making process, this will result in more commitment and dedication to the new culture.
- Finally, the conceptual model for GHRM best practices is recommended in any kind of business to ensure HR commitment toward environment irrespective of sector or countries context.

6.5 Limitations

Researches may face limitations, as well as the current one. The main limitation of this study were the unfamiliarity among experts about

GHRM concept, lack of green culture, lack of cooperation and limitation of time.

The inability to involve Gaza strip or other developing countries was the second limitation faced this research inquiry. This research was carried out in the developing country of Palestine where a number of Palestinian manufacturing companies were studied. It would be necessary to replicate this study in other developing to compare the results and find similarities.

6.6 Future research

Because of the scarcity of the empirical researches that address HR factors in the environmental management literatures (Daily et al., 2007), more researches are needed to investigate the relations between the GHRM practices and EP. Future research needs to work on improving the used scales through adding and modifying items continuously, based on the feedback that has been obtained from experts and from testing the scales in various samples.

Regarding the measurements of GHRM practices in this research it's intended to assess to what extent companies implement these practices, but other measures could be used such as the intensity of sophistication or the coverage and the perceived quality. The other measures ask not only if a practice is already implemented but also if it works well. Actually, poor implementation of HRM practices may cause more problems than not implementing them at all.

This study opens up new research avenues in linking GHRM with green business activities irrespective of industrial type or country. Moreover, empirical studies can use and test the presented GHRM model to justify the theory of relating HRM, employee performance and innovation in EM efforts practically irrespective of sectors.

The results of this research represent a brief ‘snapshot’, in time being surveyed, describe the current situation of GHRM practices implementation from the viewpoint of managers. Considering that the effect of HRM on performance might require years, in fact, measuring HRM and performance at the same time-point is problematic (Boselie et al., 2005). It would be expected to find an interval between the introduction of a management practice and a subsequent change in environmental performance. To avoid this limitation in the future, it's suggested to use either case study or submit two questionnaires with an interval between them.

References

Abu Zarifa, Sami. (2006). **Problems facing the industrial sector "and the role of the Ministry of National Economy in the national product support."**

Aggarwal, S., & Sharma, B. (2014). ***GREEN HRM: NEED OF THE HOUR***. **International Journal of Management and Social Science Research Review,** *1*(8), 63–70.

Al-jabari, M. (2011). **Exploring the Nature of Human Resource Management Practices at Family Businesses in Palestine**. International Business and Management, 3(2), 30–39.

Al-Jabari, M. (2012). **Factors affecting human resource practices in a sample of diversified Palestinian organizations**. Book of Proceedings – Tourism and Management Studies International Conference Algarve. University of the Algarve, Portugal.

Aragón-Correa, J. a., Martin-Tapia, I., & Hurtado-Torres, N. E. (2013). **Proactive Environmental Strategies and Employee Inclusion: The Positive Effects of Information Sharing and Promoting Collaboration and the Influence of Uncertainty**. SAGE Publications, 26(2), 139–161.

Aragón-Correa, J.A., Sharma, S., (2003). **A Contingent resource-based view of proactive corporate environmental strategy**. Academy of Management Review 2, 71–88.

Arulrajah, A. A., Opatha, H. H. D. N. P., & Nawaratne, N. N. J. (2015). ***Green Human Resource Management Practices: A Review Literature Review on Green HRM Practices. Sri Lankan Journal of Human Resource Management***, 5(1), 1–16.

Bannan, K.J. (2003). **Companies save time, money with online surveys**, B to B, June 9, p. 1.

Bhattacherjee, A. (2012). **Social Science Research: Principles, Methods, and Practices**. Textbooks Collection. Book 3.

Boiral, O. (2009). ***Greening the Corporation through Organizational Citizenship Behaviors***. **Journal of Business Ethics**, 87, 2, 221–236

Boiral, O., & Paillé, P. (2012). ***Organizational Citizenship Behavior for the Environment: Measurement and Validation***. **Journal of Business Ethics,** *109*(4), 431–445.

Boselie, P., Paauwe, J. Jansen, P. (2001). ***Human resource management and performance: lessons from the Netherlands***. **International Journal of Human Resource Management.**

Brío, J.A., Fenández, E., Junquera, B., (2007). ***Management and employee involvement in achieving and environmental action-based competitive advantage: an empirical study***. **International Journal of Human Resource Management.** 18 (4), 491-522.

Brío, J.Á., Junquera, B. & Ordiz, M., (2008). ***Human resources in advanced environmental approaches–a case analysis***. **International Journal of Production Research,** 46(21), pp.6029–6053.

Chan, E.S.W., (2011). ***Implementing Environmental Management Systems in Small- and Medium-Sized Hotels: Obstacles***. **Journal of Hospitality & Tourism Research,** 35(1), pp.3–23.

Cherian, J. P., & Jacob, J. (2012). ***A Study of Green HR Practices and Its Effective Implementation in the Organization: A Review***. **International Journal of Business and Management**, *7*(21), 25–33.

Cohen, B. E., Taylor, S., Ph, D., & Muller-camen, M. (2012). **HR's Role in Corporate Social Use and Management of Downsizing Responsibility and Sustainability**. Society for Human Resource Management (SHRM).

Creswell, J. (2012). **Educational research: Planning, conducting, and evaluating quantitative and qualitative research**. Boston: Pearson Education, Inc.

Creswell, J. (2014). **Research Design: Qualitative, Quantitative, and mixed methods approaches- 4th ed**. Sage Publications. USA

Daily, B. F., Bishop, J. W., & Govindarajulu, N. (2009). **Conceptual model for organizational citizenship behavior directed toward the environment**. SAGE Publications, 48, 243–256.

Daily, B. F., Bishop, J. W., & Massoud, J. A. (2012). ***The role of training and empowerment in environmental performance: A study of the Mexican*. International Journal of Operations & Production Management,** 32(5), 631–647.

Daily, B. F., Bishop, J., & Steiner, R. (2007). ***The mediating role of EMS teamwork as it pertains to HR factors and perceived environmental performance.*** **Journal of Applied Business Research**, 23, 95–109

Daily, B., & Huang, S. (2001). ***Achieving sustainability through attention to human resource factors in environmental management***. **International Journal of Operations & Production Management**, 21, 1539–1552.

Daily, B.F., Massoud, J. a. & Bishop, J.W., (2011). **Perceptions of environmental management systems: An examination of the Mexican manufacturing sector.** Industrial Management & Data Systems, 111(1), pp.5–19.

Ding D., & Aktar S. (2006). ***Organizational differences in managerial compensation and benefits in Chinese firms***. **The International Journal of Human Resource Management,** 17, (4).

Djoundourian, S., (2012). **Environmental Performance of Developing Countries: A Comparative Study**. Topics in Middle Eastern and African Economies. 14(September), pp.265–277

Dutta, A., S. (2012). ***Greening people: a strategic dimension***. **International Journal of Business Economics & Management Research**. 2 (2):143-148.

Ehnert, I. (2009). **Sustainable Human Resource Management: A Conceptual and Exploratory Analysis from a Paradox Perspective**. Heidelberg: Springer.

Environmental Quality Authority. (2010). **Environment Sector Strategy**. Palestine, Ramallah.

EQA & PlanBleu, (2015). **Palestine Industrial Loads Assessment**., 1(June).

European Environment Agency. (2014). **Horizon 2020 Mediterranean report. Toward shared environmental information systems**.

Evans, J., & Mathur, A. (2005). **The value of online surveys**. Internet Research, *15*(2), 195–219.

Fayyazia, M., Shahbazmoradib, S., Afsharc, Z., & Shahbazmoradic, M.R. (2015). **Investigating the barriers of the green human resource management implementation in oil industry**, Management Science Letters, 5, 101–108.

Ferna´ndez, E., Junquera, B., & Ordiz, M. (2003). ***Organizational culture and human resources in the environmental issue: A review of the***

literature. **International Journal of Human Resource Management**, 14(4), 634–656.

Firdaus, M., Udin, Z.M., (2014). **GREEN HUMAN RESOURCE MANAGEMENT (GHRM) TOWARDS SME'S: A CONCEPTUAL VIEW**. The 4th International Conference on Technology and Operations Management, pp.135–140.

Govindarajulu, N., Daily, B. F. (2004). **Motivating employees for environmental improvement**. Industrial Management & Data Systems, 104, 364–372.

Guerci, M., Longoni, A. & Luzzini, D., (2015). ***Translating stakeholder pressures into environmental performance – the mediating role of green HRM practices***. **The International Journal of Human Resource Management,** (September), pp.1–28.

Haden, S. S. P., Oyler, J. D., & Humphrey, J. H. (2009). **Historical, practical, and theoretical perspectives on green management: An exploratory analysis**. Management Decision, 47(7), 1041-1055.

Harris, L. C., & Crane, A. (2002). ***The greening of organizational culture: Management views on the depth, degree and diffusion of change***. **Journal of Organizational Change Management**, *15*(3), 214–234.

Hussain, M. (2013). **Human resources practices related to environmental Sustainability**. Master thesis. Polo TERRITORIALE di Como.

Ivancevich JM (1995). **Human resource management**. Chicago: Irwin. (Eds.).

Jabbar, M. H., & Abid, M. (2014). **GHRM: Motivating Employees towards Organizational Environmental Performance**. MAGNT Research Report*, 2*(4), 267–278.

Jabbour, C. and Santos, F. (2006). **The evolution of environmental management within organizations: toward a common taxonomy**. Environmental Quality Management, Vol. 16 No. 2, pp. 43-59

Jabbour, C. C. (2013b). **Environmental training in organizations: From a literature review to a framework for future research**. Resources, Conservation and Recycling, 74, 144– 155.

Jabbour, C. J. C. (2011). **How green are HRM practices, organizational culture, learning and teamwork? A Brazilian study**. Industrial and Commercial Training.

Jabbour, C. J. C. (2013). ***Environmental training and environmental maturity of Brazilian companies with ISO14001: Empirical evidence.*** **Journal of Cleaner Production**, 43(2), 1–8.

Jabbour, C. J. C., and F. C. A. Santos. (2008b). ***The central role of human resource management in the search for sustainable organizations***. **The International Journal of Human Resource Management** 19 (12):2133- 2154.

Jabbour, C. J. C., et al. (2013a) ***Environmental management and operational performance in automotive companies in Brazil: The role of human resource management and lean manufacturing,*** **Journal of Cleaner Production**.

Jabbour, C. J. C., F. C. A. Santos, and M. S. Nagano. (2010). ***Contributions of HRM throughout the stages of environmental management: methodological triangulation applied to companies in Brazil***. **The International Journal of Human Resource Management** 21 (7):1049-1089.

Jabbour, C. J. e C., & Jabbour, A. B. L. de S. (2015***). Green human resource management and green supply chain management: Linking two emerging agendas***. **Journal of Cleaner Production**, 1–10.

Jabbour, C.J.C. & Santos, F.C. a, (2008a). ***Relationships between human resource dimensions and environmental management in companies: proposal of a model***. **Journal of Cleaner Production**, 16(1), pp.51–58.

Jabbour, C.J.C., Santos, F.C.A. & Nagano, M.S., (2008). ***Environmental management system and human resource practices: is there a link between them in four Brazilian companies?*** **Journal of Cleaner Production**, 16(17), pp.1922–1925.

Jackson, N.B. (2003). **Opinions to spare? Click here**. New York Times, July 3, p. G1.

Jackson, S. E., and Seo, J. (2010). ***The greening of strategic HRM scholarship***. **Organization Management Journal,** 7, 4, 278-290.

Jackson, S. E., D. W. S. Renwick, C. J. C. Jabbour, and M. Müller-Camen. (2011). **State-of-the-art and future directions for green human resource management: Introduction to the special issue**. Zeitschrift für Personalforschung, 25 (2):99-116.

Jafri, S. (2012). **Green HR practices: an empirical study of certain automobile organizations of India**. Human Resource Management, *42*, 6193–6198.

Johnson, D. and Walck, C. (2004). ***Certified success: integrating sustainability into corporate management systems*.** **Journal of Forestry**, July/August, pp. 32-9.

Kapil, K., (2015b). ***GREEN HRM: TRENDS & PROSPECTS GE-INTERNATIONAL JOURNAL OF MANAGEMENT RESEARCH***. **GE- International Research Journal of Management Research**. 1(January), pp.43–55.

Kapil, P., (2015a). ***Green HRM- Engaging Human Resource in reducing carbon footprint and enhancing environment sustainability: A case study based approach***. **International Journal of Engineering Technology Science and Research**, 2, pp.5–14.

Kaur, D. H. (2013). ***Today's Success Mantra-Going Green at Functional Areas of HRM***. **INTERNATIONAL JOURNAL OF MANAGEMENT & BUSINESS STUDIES**, *9519*, 96–99.

Kimberlin, C.L. & Winterstein, A.G., (2008). ***Validity and reliability of measurement instruments used in research***. **American Journal of Health-System Pharmacy,** 65(23), pp.2276–2284.

Lado, A. A., & Wilson, M. C. (1994). **Human resource systems and sustained competitive advantage: A competency-based perspective** The Academy of Management Review, *19*(4), 699–727.

Lee, K.-H., (2009). **Why and how to adopt green management into business organizations? The case study of Korean SMEs in manufacturing industry**. Management Decision, 47, pp.1101–1121.

Liebowitz, J. (2010). ***The Role of HR in Achieving a Sustainability Culture***. **Journal of Sustainable Development**, *3*(4), 50–57.

Madsen, H. and Ulhoi, J.P. (2001). **Greening of human resources: environmental awareness and training interests within the workforce**. Industrial Management and Data Systems, 101, pp. 57–63.

Mampra, M. (2013, January 6–9). **Green HRM: Does it help to build a competitive service sector? A study**. Tenth AIMS International Conference on Management (pp. 1273–1281).

Mandip, G. (2012). ***Green HRM: People Management Commitment to Environmental Sustainability***. **Research Journal of Recent Sciences** 1: 244-252

Margaretha, M., & Saragih, S. (2013). **Developing New Corporate Culture through Green Human Resource Practice**. International Conference on Business, Economics, and Accounting. Bangkok - Thailand.

MAS- Palestine Economic Policy Research Institute. (2005). **A Critical Review of the project of the General Union of Palestinian Industries Act.** Palestine, Jerusalem and Ramallah.

Massoud, J. a., Daily, B. F., & Bishop, J. W. (2011). **Perceptions of environmental management systems: An examination of the Mexican manufacturing sector**. Industrial Management & Data Systems, *111*(1), 5–19.

MEnA. (2015) About MEnA. [Online] Available from: http://www.mena.gov.ps/about/index.htm. [Accessed: 19th Dec 2015].

Müller-Camen, M., Renwick, D. W. S., Jabbour, C. J. C., Redman, T., & Wilkinson, A. (2012). ***Call for Papers***. ***The International Journal of Human Resource Management,*** *23*(16), 3498–3499.

Muniandi, T., Nasruddin, E., (2015). **Green Recruiting to attract and retain top talent: the significance of video interview for the**

manufacturing industry in Malaysia. Proceedings of the Conference on Green Human Resource Management.

Muster, V., & Schrader, U. (2011). **Green work-life balance: A new perspective for Green HRM**. Zeitschrift Fur Personalforschung, 25, 140–156.

Nagendra, A., & Kansal, S. (2014). **Reducing carbon foot prints through green HRM**. International Research Conference on Innovative Business Strategies.

Neto, A.S., Jabbour, C.J.C., (2010). ***Guidelines for improving the adoption of cleaner production in companies through attention to non-technical factors: A literature review***. **African Journal of Business Management.** 4(19), pp.4217–4229.

Ones, D.S., Dilchert, S., (2012). ***Environmental sustainability at work: a call to action***. **Industrial and Organizational Psychology**. 5 (4), 444e466.

Onwuegbuzie, A.J. & Combs, J.P., (2011). ***Data Analysis in Mixed Research: A Primer***. **International Journal of Education**, 3(1), pp.1–25.

Opatha, H.H.D.N.P. & Arulrajah, a. A., (2014). **Green Human Resource Management: Simplified General Reflections**. International Business Research, 7(8), pp.101–112.

Opatha, P. H. (2013). **Green Human Resource Management: A Simplified Introduction**, 01(01), 11–21.

Organization for Economic Co-operation and Development (OECD). (2005). SMALL AND MEDIUM-SIZED ENTERPRISES (SMES). [online] Available at: https://stats.oecd.org/glossary/detail.asp?ID=3123 [Accessed 13 Jan. 2016]

Paauwe, J. & Boselie, P. (2003). ***Challenging 'strategic HRM' and the relevance of the institutional setting***. **Human Resource Management Journal.** 13(3), 56 – 70.

Paauwe, J. & Boselie, P. (2005). ***HRM and performance: what next?*** **Human Resource Management Journal**, 15(4), 68-83.

Paillé, P., & Mejía Morelos, J. H. (2014). ***Antecedents of pro-environmental behaviors at work: The moderating influence of psychological contract breach***. **Journal of Environmental Psychology.** 38,124–131.

Paillé, P., & Raineri, N. (2015). ***Linking perceived corporate environmental policies and employees eco-initiatives: The influence of perceived organizational support and psychological contract breach***. **Journal of Business Research**.

Paillé, P., Boiral, O., & Chen, Y. (2013a). ***Linking environmental management practices and organizational citizenship behavior for***

the environment: a social exchange perspective. **International Journal of Human Resource Management**. 24(18), 3552–3575.

Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2013b). ***The impact of human resource management on environmental performance: An employee-level study***. **Journal of Business Ethics**, 121,451–466.

Palestinian National Authority. (2011). **Pharmaceutical Country Profile**. Published by the Palestinian Ministry of Health in collaboration with the World Health Organization, pp.1–38.

PalTrade- Palestine Trade Center. (2015). **Exporters Directory**. Palestine Ramallah.

Patel, N.P., (2014). ***Green HR: A Paradigm Shift in Human Resource Management Philosophy***. **Brazilian online journal**. 2, pp.10–15.

PBF - Palestinian Business Forum. (2014). **The reality of the industrial sector in Palestine.** Center for Studies and Research

PCBS. (2015). **Statistical Yearbook of Palestine 2015**. Palestinian Central Bureau of Statistics. No. 16. Ramallah – Palestine.

Prasad, R. S (2013). ***Green HRM- Partner in sustainable competitive Growth***. **Journal of Management Sciences and Technology**. 1: 15-18.

Prathima, M., Misra, S., (2013). **The Green Revolution in Human Resource Management**. 1(3), pp.227–238.

Preston, L. (2001). **Sustainability at Hewlett-Packard: from theory to practice**. California Management Review. 43(3):26e37

Ramus CA. (2001). **Organizational support for employees: encouraging creative ideas for environmental sustainability**. California Management Review. 43(3):85e105.

Ramus, C. A., & Steger, U. (2000). ***The roles of supervisory support behaviors and environmental policy in employee eco-initiatives at leading-edge European companies*.** **Academy of Management Journal.** 43,605–626.

Ramus, C.A., (2002). ***Encouraging innovative environmental actions: what companies and managers must do***. **Journal of World Business**. 37 (2), 151e164

Renwick, D. W. S., T. Redman, and S. Maguire. (2012). ***Green Human Resource Management: A Review and Research Agenda***. **International Journal of Management Reviews**. 15 (1):1-14.

Renwick, D., Redman, T., & Maquire, S. (2008). **Green HRM: A review, process model, and research agenda** (Discussion Paper Series). The University of Sheffield: University of Sheffield Management School.

Rimi N. N. and Yusoff, Y.M., (2015). **Green Human Resource Management in Service Organizations: A Proposed Model for Green Banking Performance.** Proceedings of the Conference on Green Human Resource Management,

Robertson, J. L., & Barling, J. (2013). **Greening organizations through leaders' influence on employees' pro-environmental behaviors**. **Journal of Organizational Behavior**, 34, 176–194.

Robson, C. (2002). **Real World Research** (2nd Ed.). Oxford: Blackwell.

Ronnenberg, S. K., Graham, M. E., & Mahmoodi, F. (2011*).* ***The important role of change management in environmental management system implementation***. **International Journal of Operations and Production Management**. 31, 631–647.

Rothenberg S (2003). **Knowledge content and worker participation in environmental management at NUMMI. J. Manage**. Stud., 40(7): 1783-1802

Sathyapriya, J., Kanimozhi, R., & Adhilakshmi, V. (2013). ***Green HRM - Delivering High Performance HR Systems***. **International Journal of Marketing and Human Resource Management**, 4, (2), 19-25

Saunders, M., Lewis, P. & Thornhill, A., (2009). **Research methods for business students. Fifth edition**. Pearson Education Limited. England.

Scholl, N., Mulders, S. and Drent, R. (2002), "**Online qualitative market research: interviewing the world at a fingertip**", *Qualitative Market Research*, Vol. 5 No. 3, pp. 210-23

Schuler, R., & E. Jackson, S. (2014). ***Human resource management and organizational effectiveness: Yesterday and today***. **Journal of Organizational Effectiveness: People and Performance.** 1(1), 35-55.

Sekaran, U. (2003). **Research Methods for Business: A Skill Building Approach**. 4th Edition. John Wiley and Sons,New York.

Sekaran, U., & Bougie, R. (2010). **Research Methods for Business: A Skill Building Approach. 5th Edition**. John Wiley & Sons, New York

Shaikh, M. (2012). ***Green HRM, A Requirement of 21st Century*. Journal of Research in Commerce and Management**, Vol.1, No.10, pp 122-127

Sharmin, S., (2015). **Green HRM: An Innovative Approach to Environmental Sustainability**. AIMS International.

Shih, K.-H., Chen, H.-J., Chen, J.C.H., (2006). **Assessment of sustainable development and knowledge of environmental management: internal auditors' perspectives**. Industrial Management & Data 106, 896e909.

Shoeb, A. (2015). **Green Human Resource Management: Policies and practices**. Cogent Business & Management. 2(1), p.1030817.

SHRM, Bsr, & Aurosoorya. (2011). Advancing sustainability: HR's role. Society for Human Resource Management (SHRM). Retrieved from http://www.shrm.org/research/surveyfindings/articles/documents/11-0066_advsustainhr_fnl_full.pdf

SHRM. (2008). **Green Workplace**. Society for Human Resource Management (SHRM), 6.

Staffelbach, B., Brugger, E.A., and Bäbler, S. (2012), '**The Role of Strategic Context in Environmental Sustainability Initiatives: Three Case Studies,**' in Managing human resources for environmental sustainability, eds. Susan E. Jackson, Deniz S. Ones and Stephan Dilchert, New Jersey: Jossey-Bass, pp. 36-60.

Sudin, S. (2011). **Strategic Green HRM: A proposed model that supports Corporate Environmental Citizenship**. International Conference on Sociality and Economics Development. Singapore.

Teixeira, A. A., Jabbour, C. J. C., & Jabbour, A. B. L. D. S. (2012). ***Relationship between green management and environmental training in companies located in Brazil: A theoretical framework and case studies.*** **International Journal of Production Economics**, 140(1), 318–329.

USAID & PFI. (2009). **The Current Status of Industrial Sector in Palestine**, Ramallah, Palestine: CARANA, USAID

Venkatesh, J., Ta, L. & Bhatt, V., (2014). ***Sustainable Development and the Role of HRM: An Empirical Study of the IT Sector in India***. **International Journal of Innovative Research in Science, Engineering and Technology**, 3(8), pp.15495–15500.

Wagner, M., (2013). **"*Green" Human Resource Benefits: Do they Matter as Determinants of Environmental Management System Implementation?* Journal of Business Ethics**, 114(3), pp.443–456.

Wagner, M., (2014). ***A European perspective on country moderation effects: Environmental management systems and sustainability-related human resource benefits***. **Journal of World Business**, 50(2), pp.379–388.

Wehrmeyer, W. (ed.) (1996). **Greening People. Human Resources and Environmental Management**. Sheffield: Greenleaf Publishing.

World Commission on Environment and Development. (1987). **Our common future.** Oxford, England: Oxford University Press

Yusoff, Y. M., Othman, N. Z., Fernando, Y., & Amran, A. (2015b). ***Conceptualization of Green Human Resource Management: An Exploratory Study from Malaysian-based Multinational Companies***. **International Journal of Business Management and Economic Research (IJBMER).** *6*(3), 158–166.

Yusoff, Y., OTHMAN, N., FERNANDO, Y., AMRAN, A., SURIENTY, L., RAMAYAH, T., (2015c). **Drivers, Benefits, and Challenges of**

GHRM practices: The way forward for industries. Proceedings of the Conference on Green Human Resource Management.

Yusoff, Y.M., Ramayah, T. & Othman, N., (2015a). ***Why Examining Adoption Factors, HR Role and Attitude towards Using E-HRM is the Start-Off in Determining the Successfulness of Green HRM?*** **Journal of Advanced Management Science**. 3(4), pp.337–343.

Zheng. G & Morrison. M. (2009). **Enhancing Chinese SME performance through innovative HR practices**. Personnel Review, 38 (2).

Zibarras, L. D., & Coan, P. (2015). ***HRM practices used to promote pro-environmental behaviour: A UK survey***. **International Journal of Human Resource Management,** 26(16), 2121–2142.

Zoogah, D. B. (2011). **The Dynamics of Green HRM Behaviors: A Cognitive Social Information Processing Approach**. Zeitschrift für Personal forschung. *25*(2), 117–139.

Appendixes

Appendix (A)

An-Najah National University

Faculty of Graduates studies

Engineering Management Program

Questionnaire about Assessing Green Human Resources Management in Palestinian organizations in West Bank

Dear Respondent,

Thank you for finding time for filling in this questionnaire. The main aim of this research is to assess the Green Human Resource Management (GHRM) practices in the Palestinian manufacturing companies in West Bank. This questionnaire is divided into two parts. The first part is intended to gather general information about the company, respondent and the current environmental management status in the company. The second part is to assess GHRM practices and current environmental performance, also its drivers, barriers and expected benefits. It should take around 10 minutes to complete the questionnaire.

Your participation in this survey by answering the following questionnaire is totally appreciated, please note that all the information in this survey will only be used for academic research, and all information provided will be treated as confidence.

Researcher: Hiba Masri
Master of Engineering management Student
Jenin, West Bank, Palestine
hibamasri@hotmail.com
00972595457520

Part One: General information

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

1. **Gender**

( ) Female ( ) Male

2. Your organization sector

( ) Food industry ( ) Chemical industry

( ) Pharmaceutical industry ( ) other_____

3. Number of employees in the organization

( ) 1-9 ( ) 10-19 ( ) 20-49

( ) 50-99 ( ) 100-249 ( ) +250

4. Location

( ) Jenin ( ) Nablus ( ) Tulkarm

( ) Ramallah ( ) Greater than 150

( ) Hebron ( ) Jerusalem ( ) Bethlehem

( ) Other_____

5. Your position in the organization

( ) General manager/CEO ( ) Human Resources Manager

( ) Quality manager ( ) other _____

6. Your education degree

( ) Diploma or below ( ) Bachelor

( ) Master's degree or higher

7. You have been working in this organization for

( ) Less than 2 years ( ) 2-5 years

( ) 6-10 years ( ) 11-15 years

( ) Greater than 15 years

8. **Does your company incorporate environmental management into business operation**:

( ) currently exists ( ) No plans to implement

( ) Plan to implement within 12 months

( ) Plan to implement in more than 12 months ( ) Unsure

9. Does your company have a formal environmental management system (EMS) (such as ISO 14001)

( ) currently exists ( ) No plans to implement

( ) Plan to implement within 12 months

( ) Plan to implement in more than 12 months ( ) Unsure

10. Do you think Human Resources Management has direct involvement in Green program

( ) Yes ( ) No

Part Two: Green Human Resource Management(GHRM) Practices:

Phase One: To assess Green Human Resource management practices in Palestinian manufacturing companies. For each item choose to what extent does your organization use the following methods to encourage staff to behave in a pro-environmental way.

Green Human Resource practices		Level				
		1	2	3	4	5
		Not at all	To a slight degree	To a moderate extent	To a great extent	To a very great extent
	Management of organizational culture					
1	Top management clarify information and values of Environmental Management throughout the organization					
2	Top management develop punishment system and penalties for noncompliance in environmental practices					
3	Top management actively support environmental practices					
4	Team/departmental budgets cover Environmental impact					
5	Organizational vision/mission statements include environmental concern					
	Recruitment and selection					
1	Job description specification includes environmental concerns					
2	Jobs positions designed to focus exclusively on environmental management aspects of the organizations					
3	Recruitment messages include environmental behavior/commitment criteria					

5	Selecting applicants who are sufficiently aware of greening to fill job vacancies					
	Training and development					
1	Take into account the needs of environmental issues when training requirement analyzed					
2	Environmental training is a priority when compared to other types of company training					
3	Following induction programs that emphasize environmental issues/ concerns					
4	Providing environmental training to the organizational members to increase environmental awareness					
5	All training materials are available online for employee to reduce paper cost					
	Performance management and appraisal					
1	Corporate incorporates environmental management objectives and targets with the performance evaluation system of the organization					
2	Employees know their specific green targets, goals and responsibilities					
3	Environmental behavior/targets and contributions to environmental management are assessed and include in performance indicators/appraisal and recorded					

4	Providing regular feedback to the employees or teams to achieve environmental goals or improve their environmental performance					
5	Roles of manages in achieving green outcomes included in appraisals					
	Reward and compensation					
1	Environmental performance is recognized publically (awards, dinner, publicity)					
2	The company offers a non-monetary and monetary rewards based on the environmental achievements (sabbatical, leave, gifts, bonuses, cash, premiums, promotion)					
3	Link suggestion schemes into reward system by introducing rewards for innovative environmental initiative/performance					
	Employee empowerment and participation					
1	Top managers use teamwork to successfully manage and produce awareness of the environmental issues of the company (green champions/task force/green team etc.)					
2	Involve employee in formulating environmental strategy					
3	Providing opportunities to the employee to involve and participate in green suggestion schemes and Joint consultations for environmental issues problem solving.					

4	Introducing green whistle-blowing and help-lines					
5	organization offers workshops or forums for staff to improve environmental behavior and exchange their tacit knowledge					

❖ **Phase Two:** To assess environmental performance in Palestinian manufacturing companies. For each item choose please evaluate how commitment to environmental sustainability has allowed the company to date, to obtain the following results. Please for each item mark in the scale of (1 to 5).

	➢ **Environmental performance**	**1**	**2**	**3**	**4**	**5**
	To what extent did your company's environmental performance has developed after commitment to environment?	**Much worse**	**Somewh at worse**	**Stayed the same**	**Somewh at better**	**Much better**
1	Improved plant performance					
2	Improved product quality					
3	Improvement of corporate reputation					
4	Reduce emissions of toxic chemicals in air and water					
5	Reduced waste and recycling of the materials during the production process					
6	Increased use of renewable energy and sustainable fuels					
7	Helped our company design/develop better products					
8	Reductions in the consumption of electric energy					

❖ **Phase three:** To identify the key drivers, positive outcome and barriers of GHRM practices in Palestinian manufacturing companies. ***From you point of view and experience can you please rank the drivers, barriers, barriers and positive outcome of GHRM*** Please for each item mark in the scale of (1 to 5).

	➢ **Drivers of Green HRM**	**1**	**2**	**3**	**4**	**5**
	To what extent do you agree that the following drivers encourage your organization to practice Green Human Resource practices?	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1	Community pressure on companies to care about the environment more					
2	Environmental considerations					
3	Economic considerations					
4	Legal pressure					
5	Competitive advantage					
6	Contribution to society					
	➢ **Barriers of Green HRM**	**1**	**2**	**3**	**4**	**5**
	From your point of view, to what extent do you agree that the following barriers limit practicing Green Human Resource practices in your organization?	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1	The Lack of understanding of green policies					
2	Lack of support by management					

3	Complexity and difficulty of adoption of green technology					
4	Staff resistance					
5	Cost of implementing program					
	➢ **positive outcome of Green HRM**	**1**	**2**	**3**	**4**	**5**
	From your point of view, to what extent do you agree your organization will gain the following positive outcome from practicing Green Human Resource practices?	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1	Increased employee loyalty and retention					
2	Competitive advantage					
3	Attract and retain green top talent					
4	Promote social responsibility toward environment					
5	Increase profitability and reduce cost					
6	better environmental performance of the organization					

Thank you

Appendix (B)

تقييم مستوى ممارسات الإدارة الخضراء للموارد البشرية

عزيزي القارئ/القارئة:

أشكرك على تخصيص جزء من وقتك لتعبئة هذا الاستبيان، الذي يهدف إلى تقييم مستوى تطبيق ممارسات الإدارة الخضراء للموارد البشرية (Green Human Resource Management -GHRM) في الشركات الصناعية في الضفة الغربية، وذلك استكمالا لمتطلبات الحصول على درجة الماجستير. حيث تعنى الادارة الخضراء للموارد البشرية باستخدام سياسات إدارة الموارد البشرية لزيادة وعي الموظفين والتزامهم اتجاه البيئة بما يحقق أفضل استخدام للموارد وتحقيق أهداف الإدارة البيئية في المؤسسة.

ينقسم هذا الاستبيان إلى قسمين:

القسم الأول: يهدف إلى جمع معلومات عامة عن القارئ / القارئة ووضع الإدارة البيئية حالياً في المؤسسة.

القسم الثاني: يهدف إلى تقييم مستوى تطبيق ممارسات الإدارة الخضراء للموارد البشرية (GHRM) والأداء البيئي في الشركات الصناعية المسجلة في اتحاد الصناعات، بالإضافة إلى معرفة أهم المحفزات والعوائق والآثار المترتبة عليها.

هذا التقييم سوف يستغرق منك حوالي 10 دقائق لإتمامه، الرجاء التفضل بقراءة جميع فقرات الاستبيان بدقة، ووضع الدرجة التي تراها مناسبة أمام كل فقرة بموضوعية وحياد. علماً بأن كافة المعلومات سوف تكون سرية ولن تستخدم إلا لأغراض البحث العلمي.

الباحثة هبة مصري

Required *

أولاً: معلومات عامة

يرجى التكرم بالإجابة على الأسئلة التالية بوضع إشارة (X) في مربع الإجابة التي تناسبك:

1. الجنس

( ) ذكر ( ) أنثى

2. تعمل المؤسسة في قطاع

( ) الصناعات الغذائية ( ) الصناعات الكيميائية

( ) الصناعات الدوائية ( ) أخرى .....

3. عدد العاملين في المؤسسة

( ) 1-9 ( ) 10-19 ( ) 20-49

( ) 50-99 ( ) 100-249 ( ) 250+

4. الموقع

( ) رام الله ( ) نابلس ( ) طولكرم

( ) جنين ( ) بيت لحم ( ) القدس

( ) الخليل ( ) أخرى .....

5. الموقع الوظيفي

( ) المدير العام / الرئيس التنفيذي للشركة ( ) مدير الموارد البشرية

( ) مدير الجودة ( ) أخرى .....

6. درجة التعليم الخاص

( ) دبلوم أو أقل درجة ( ) البكالوريوس

( ) الماجستير فأعلى

7. أنت تعمل في هذه المؤسسة منذ

( ) أقل من 2 سنة ( ) 2-5 سنوات

( ) 6-10 سنوات ( ) 11-15 سنة

( ) أكثر من 15 سنة

8. هل تدمج شركتك ممارسات الإدارة البيئية في أنشطتها وأعمالها اليومية

( ) موجودة حالياً ( ) لا توجد حالياً خطط للتنفيذ

( ) خطة للتنفيذ خلال 12 شهر ( ) خطة للتنفيذ في اكثر من 12 شهر

( ) غير متأكد

9. لدى شركتك برنامج رسمي للإدارة البيئية (مثل ISO 14001)

( ) موجودة حالياً ( ) لا توجد حالياً خطط للتنفيذ

( ) خطة للتنفيذ خلال 12 شهر ( ) خطة للتنفيذ في اكثر من 12 شهر

( ) غير متأكد

10. هل تعتقد أن إدارة الموارد البشرية تؤثر بشكل مباشر في البرنامج البيئي في المؤسسة

( ) نعم ( ) لا

ثانياً: درجة تطبيق ممارسات الإدارة الخضراء للموارد البشرية

إلى أي درجة تطبق الشركة ممارسات الإدارة الخضراء للموارد البشرية لتحسين الأداء البيئي للموظفين

11. إدارة ثقافة الشركة الخضراء

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
توضح الإدارة العليا المعلومات والقيم المتعلقة بالإدارة البيئية في جميع أنحاء المنظمة					
تطر والإدارة العليا نظام العقوبات وفرض غرامات لعدم الالتزام بالممارسات البيئية					
تدعم الإدارة العليا بنشاط الممارسات البيئية					
تغطي ميزانيات الفريق / الأقسام الأنشـــطة البيئية					
تشمل رؤية /رسالة المؤسسة الاهتمام البيئي					

12. التوظيف الأخضر

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
يعكس وصف ومتطلبات الوظيفية اهتمامات الشركة بالمعايير البيئية					
تم تصميم وظائف خاصة بـــإدارة الجوانـــب البيئية في المؤسسه					
تتضمن عملية استقطاب الموظفين في رسائل التوظيف معايير الالتزام البيئي المطلوبة					
يجذب الأداء البيئي للشركة الكفاءات					
يتم اختيار المتقدمين للوظيفة الذين هم علـــى دراية كافية بالبيئة لشغل الوظائف الشاغرة					

13. التدريب والتطوير الأخضر

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
تأخذ بعين الاعتبار احتياجات القضايا البيئية عند تحليل الاحتياج التدريبي					
يعتبر التدريب البيئي أولوية بالمقارنة مع أنواع أخرى من التدريب في الشركة					
تتبع الشركة برامج إدخال وتوجيه للموظفين الجدد تركز على القضايا البيئية					
توفر الشركة التدريب البيئي اللازم لزيادة الوعي البيئي					
تتاح جميع المواد التدريبية على الانترنت للموظفين للحد من تكلفة الورق					

14. إدارة الأداء والتقييم الأخضر

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
تقوم الشركة بدمج أهداف الإدارة البيئية في نموذج تقييم الأداء في المؤسسة					
يعرف الموظفين أهدافهم ومسؤولياتهم البيئية بوضوح					
تُقيم الإدارة سلوك ومساهمات الموظفين في الإدارة البيئية وتدرج في مؤشرات الأداء					
توفر الإدارة تغذية راجعة منتظمة للموظفين إما لتحقيق الأهداف البيئية أو تحسين أدائهم البيئي					
تدرج أدوار المدراء في تحقيق الاهداف البيئية في التقييم الوظيفي					

15. المكافآت الخضراء

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
يتم الاعتراف بالانجازات البيئية للموظفين علانية (الجوائز والاحتفالات ، والدعاية)					
تقدم الشركة مكافآت عينية وغيرها للموظفين بناء على الانجازات البيئية (إجازات ،مغادرات والهدايا مكافآت نقدية ،علاوة وترقية)					
يرتبط نظام الاقتراحات بالحوافز لتشجيع الممارسات والمبادرات البيئية المبدعة					

16. تمكين ومشاركة الموظف الخضراء

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
تستخدم الادارة العليا العمل الجماعي لإدارة وإنتاج الوعي بالقضايا البيئية للشركة بنجاح(مثل فريق مناصرون البيئة / الفريق الأخضر الخ)					
تقوم المؤسسة بإشراك الموظف في صياغة الاستراتيجية البيئية					
توفر الشركة فرص للموظف للإشتراك والمساهمة في مخططات الاقتراحات البيئية والمشاورات المشتركة لحل المشاكل المتعلقة القضايا البيئية					
توفر الشركة للموظفين خطوط مباشرة لطلب المساعدة من الادارة او تقديم الشكاوي فيما يتعلق بالقضايا البيئية					
تقدم الشركة ورش العمل وندوات للموظفين لتحسين السلوك البيئي وتبادل معرفتهم الضمنية					

ثالثاً: الأداء البيئي

إلى أي مدى تحسن الأداء البيئي بعد التزام الشركة بالممارسات الصديقة للبيئة

17. نتائج الالتزام البيئي

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
تحسين أداء المصنع وإنخفاض التكاليف					
أدى إلى تحسين جودة المنتج					
تحسين سمعة الشركة					
الحد من انبعاثات المواد الكيميائية السامة في الهواء والماء					
تقليل الفاقد وإعادة تدوير المواد أثناء عملية الإنتاج					
زيادة استخدام الطاقة المتجددة والوقود المستدامة					
تصميم و تطوير أفضل لمنتجات صديقة للبيئة					
تخفيض في استهلاك الطاقة الكهربائية					

رابعاً: جوانب الإدارة الخضراء للموارد البشرية

18. دوافع ممارسة الإدارة الخضراء للموارد البشرية GHRM *

إلى أي مدى هذه الدوافع تشجع وتحفز على دمج الممارسات البيئية في إدارة الموارد البشرية؟

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
ضغط المجتمع على الشركات لتهتم بالبيئة أكثر					
اهتمام الشركة بالبيئة					
اعتبارات اقتصادية (مثل تخفيض تكلفه التشغيل)					
ضغوط القوانين والمتطلبات البيئية للعمل في الشركات الصناعية					
تحقيق الميزة التنافسية					
المساهمة في المجتمع					

19. المعوقات التي تحد من ممارسة الإدارة الخضراء للموارد البشرية GHRM *

إلى أي مدى هذه العوامل تحقق وتمنع دمج الممارسات البيئية في إدارة الموارد البشرية؟

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
عدم فهم السياسات والاهتمامات البيئية في الشركة					
عدم وجود دعم من قبل الإدارة العليا					
تعقيد وصعوبة اعتماد تكنولوجيا صديقة للبيئة					
مقاومة الموظفين للتغيير					
تكلفة تنفيذ برنامج الإدارة الخضراء					

20. نتائج وآثار ممارسة الإدارة الخضراء للموارد البشرية GHRM

إلى أي مدى هذه الفوائد مرتبطة بممارسة الإدارة الخضراء للموارد البشرية GHRM؟

الفقرة	بدرجة كبيرة جداً	بدرجة كبيرة	بدرجة متوسطة	بدرجة قليلة	بدرجة قليلة جداً
زيادة ولاء الموظفين والاحتفاظ بهم					
الحصول على ميزة تنافسية في سوق العمل					
اجتذاب واستبقاء أفضل الكوادر					
تعزيز المسؤولية الاجتماعية تجاه البيئة					
زيادة الربحية وخفض تكلفة الانتاج					
تحسين الأداء البيئي للشركة					

Appendix (C)

Table: Experts and Arbitrators Who Reviewed the Questionnaire

Number	Position
5	Teaching Staff at An-Najah university
2	HR & GRI Trainer & Consultant at Green Business for excellence http://www.hrcsr.com/
1	Environmental Expert and National Advisor on Climate Change at GIZ

Descriptive analysis of the all GHRM practices under their related groups:

Table: Application Degree for GHRM practices

Management of organizational culture	*Mean*	*Standard Deviation*	*Pct. %*	*Recruitment and selection*	*mean*	*Standard Deviation*	*Pct. %*
top management actively support environmental practices	3.4762	.98759	69.5%	Job description specification includes environmental concerns	3.0000	1.17196	60.0%
organizational vision/mission statements include environmental concern	3.4167	1.12162	68.3%	Environmental performance of the company attracts highly qualified employees	2.9167	1.16379	58.3%
Top management clarify information and values of Environmental Management throughout the organization	3.3333	.96109	66.7%	Selecting applicants who are sufficiently aware of greening to fill job vacancies	2.7024	1.11701	54.0%
Top management develop punishment system and penalties for noncompliance in EM	3.0595	1.07939	61.2%	Recruitment messages include environmental behavior/commitment criteria	2.6310	1.07300	52.6%
team/departmental budgets cover Environmental impact	2.7976	1.10617	56.0%	jobs positions designed to focus exclusively on environmental management aspects of the organizations	2.5833	1.14290	51.7%
Providing environmental training to the organizational members to increase environmental awareness	2.8095	1.13516	56.2%	employees know their specific green targets, goals and responsibilities	3.0357	1.17654	60.7%

Training and development	mean	Std. Deviation	Pct. %	Performance management and appraisal	mean	Std. Deviation	Pct. %
Take into account the needs of environmental issues when training requirement analyzed	2.7500	1.00451	55.0%	environmental behavior/targets and Contributions to environmental management are assessed and include in Performance indicators/appraisal and recorded	2.7619	1.03690	55.2%
Following Induction programs that emphasize environmental issues concerns	2.7024	1.02710	54.0%	roles of manages in achieving green outcomes included in appraisals	2.7500	1.11803	55.0%
All training materials are available online for employee to reduce paper cost	2.5833	1.17410	51.7%	Providing regular feedback to the employees or teams to achieve environmental goals or improve their environmental performance	2.6548	1.15638	53.1%
environmental training is a priority when compared to other types of company training	2.5595	1.10149	51.2%	corporate Incorporates environmental management objectives and targets with the performance evaluation system of the organization	2.6429	1.20883	52.9%
link suggestion schemes into reward system by Introducing rewards for innovative environmental initiative/performance	2.5238	1.20717	50.5%	Introducing green whistle-blowing and help-lines	2.8810	1.15545	57.6%

Training and development	mean	Std. Deviation	Pct. %	Performance management and appraisal	mean	Std. Deviation	Pct. %
The company offers a non-monetary and monetary rewards based on the environmental achievements (sabbatical, leave, gifts, bonuses, cash, premiums, promotion)	2.3690	1.10617	47.4%	Providing opportunities to the employee to involve and participate in green suggestion schemes and Joint consultations for environmental issues problem solving.	2.6310	1.14891	52.6%
Environmental performance is recognized publically (awards, dinner, and publicity)	2.2381	1.25745	44.8%	organization offers workshops or forums for staff to improve environmental behavior and exchange their tacit knowledge	2.4524	1.19643	49.0%
				Involve employee in formulating environmental strategy	2.4048	1.12066	48.1%
				Top managers use teamwork to successfully manage and produce awareness of the environmental issues of the company	2.2024	1.07300	44.0%

Appendix (D)

Post hoc Test

Based on the result of the Bivariate Analysis, as shown in chapter 4, it has been found that there are significant differences between the groups as a whole. The tables below show which groups differ from each other.

It has been found that there are significant differences between the industrial sectors (Food, Chemical and pharmaceutical industry) regarding the importance of barriers of GHRM practices. To understand the differences, LSD Post Hoc Test was conducted to test variation between the groups as shown in Table D-1. The results indicate that there are statistically significant differences,at the significance level 0.05, in Barriers of GHRM practices according to industrial sector. When comparing between food industry and pharmaceutical industry there are differences in favor of food industry, while between chemical and pharmaceutical industry there are differences in favor of chemical industry. However, there is no difference between chemical and food industry.

Table: Post hoc Test (1)

Factors	**EMS**	**Chemical Industry**		**pharmaceutical industries**	
	(I)	(I-J)	Sig	(I-J)	Sig
Barriers of GHRM	Food Industry	-.05600	.682	.86400*	.006
	Chemical Industry			.92000*	.004
***. The mean difference is significant at the 0.05 level.**					

It has been found that there are significant differences between different organization size (Small, Medium, Large) regarding to what extent they implment some GHRM practices (Green management of

organizational culture, Green training and development, Reward and compensation). To understand the differences, LSD Post Hoc Test was conducted to test variation between the groups as shown in Table D-2. The results indicates that there are statistically significant differences, at the significance level 0.05, in implemnting three GHRM practices according to organization size. For the three GHRM practices when comparing between small and large, there are differences in favor of large, and meduim and large, there are differences in favor of large.However, there is no difference between small and meduim.

Table: Post hoc Test (2)

Factors	**Size**	**medium**		**large**	
	(I)	(I-J)	Sig	(I-J)	Sig
Green Management of organizational culture	small	-.06222	.742	-1.02667	.001*
	medium			-.96444	.002*
Green Training and development	small	-.26000	.234	-.76000	.026*
	medium			-.70000	.046*
Green Reward and compensation	small	.03704	.884	-1.22222	.003*
	medium			-1.25926	.003*
***. The mean difference is significant at the 0.05 level.**					

It has been found that there is a significant differences between the industrial sectors (Food, Chemical and pharmaceutical industry) regarding the implementation of Green training and development practices. To understand the differences, LSD Post Hoc Test was conducted to test variation between the groups as shown in Table D-4. The results indicate that there are statistically significant differences, at the significance level 0.05, in implemnting Green training and development practices according to industrial sector, only between food industry and chemical industry, there are differences in favor of chemical industry. On the other hand, there

are no differences between pharmaceutical industry and food industry, or between pharmaceutical industry and chemical industry.

Table: Post hoc Test (3)

Factors	EMS	Chemical Industry		pharmaceutical industries	
	(I)	(I-J)	Sig	(I-J)	Sig
Green Training and development	Food Industry	-.54800*	.011	.23800	.617
	Chemical Industry			-.31000	.525
***. The mean difference is significant at the 0.05 level.**					

It has been found that there is a significant differences between different implemntation of EMS (currently exists, Plan to implement within 12 months, Plan to implement in more than 12 months, No plans to implement, Unsure) regarding to what extent they implment all GHRM practices. To understand the differences, LSD Post Hoc Test was conducted to test variation between the groups as shown in Table 5. The results indicate that there are statistically significant differences, at the significance level 0.05, in implemnting GHRM according to EMS. For all GHRM practices when comparing between (currently exists, plan to implement within 12 months, plan to implement in more than 12 months) and (No plans to implement), there are differences in favor of the first group. This result illustrates that companies which already have EMS or have a plan to implement EMS (informal implementation) have better understanding for the usefulness of GHRM practices. However, there are no differences between (currently exists, Plan to implement within 12 months, Plan to implement in more than 12 months).

Table: Post hoc Test (4)

Factors	EMS	Plan to implement within 12 months		Plan to implement in more than 12 months		No plans to implement		Unsure	
	(I)	(I-J)	Sig	(I-J)	Sig	(I-J)	Sig	(I-J)	Sig
Green Management of organizational culture	currently exists	-.21818	.565	.10667	.766	.70638	.028*	-.05	.919
	Plan to implement within 12 months			.32485	.298	.92456	.001*	.16818	.713
	Plan to implement in more than 12 months					.59972	.011*	-.15667	.722
	No plans to implement							-.75638	.067
Green Recruitment and selection	currently exists	-.54026	.231	-.41905	.326	.25046	.506	-.98571	.093
	Plan to implement within 12 months			.12121	.742	.79072	.013*	-.44545	.412
	Plan to implement in more than 12 months					.66950	.017*	-.56667	.280
	No plans to implement							-1.2362	.052
Green Training and development	currently exists	-.25455	.561	-.21333	607	.39149	.287	-.6000	.292
	Plan to implement within 12 months			.04121	.909	.64603	.036*	-.34545	.514
	Plan to implement in more than 12 months					.60482	.027*	-.38667	.448
	No plans to implement							-.99149	.038

Factors	EMS	Plan to implement within 12 months		Plan to implement in more than 12 months		No plans to implement		Unsure	
	(I)	(I-J)	Sig	(I-J)	Sig	(I-J)	Sig	(I-J)	Sig
Green Performance management and appraisal	currently exists	-.60260	.195	-.56381	.200	.34286	.378	-.80714	.181
	Plan to implement within 12 months			.03879	.919	.94545	.004*	-.20455	.714
	Plan to implement in more than 12 months					.90667	.002*	-.24333	.651
	No plans to implement							-1.150	.023
Green Employee empowerment and participation	currently exists	-.50390	.274	-.51238	.240	.79301	.047*	-.13571	.820
	Plan to implement within 12 months			-.00848	.982	.79691	.014*	.36818	.507
	Plan to implement in more than 12 months					.80539	.005*	.37667	.481
	No plans to implement							-.42872	.387
Green Reward and compensation	currently exists	-.22511	.668	-.04127	.934	.78592	.022*	-.20238	.766
	Plan to implement within 12 months			.18384	.670	.91103	.014*	.02273	.971
	Plan to implement in more than 12 months					.72719	.026*	-.16111	.792
	No plans to implement							-.88830	.119
*. The mean difference is significant at the 0.05 level.									

جامعة النجاح الوطنية
كلية الدراسات العليا

تقييم ممارسات الإدارة الخضراء للموارد البشرية في الضفة الغربية: دراسة استكشافية

إعداد
هبة عوض مصري

إشراف
د. أيهم جعرون

قدمت هذه الأطروحة استكمالا لمتطلبات الحصول على درجة الماجستير في الإدارة الهندسية بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس، فلسطين.
2016م

تقييم ممارسات الإدارة الخضراء للموارد البشرية في الضفة الغربية: دراسة استكشافية

إعداد

هبة عوض مصري

إشراف

د. أيهم جعرون

الملخص

في السنوات القليلة الماضية، زادت المخاوف العالمية بشأن القضايا البيئية، وخاصة بعد توحيد الثورة الصناعية التي تسبب زيادة في تدهور البيئة. ولّدت هذه المخاوف المزيد من الضغوط وغرست في ذهن قطاع الأعمال والصناعة ضرورة تطوير واستخدام الإدارة الخضراء عن طريق تبني الممارسات والمنتجات الصديقة للبيئة. وقد أدرجت الإدارة البيئية (EM) في العديد من الإدارات مثل التسويق، سلاسل الإمداد والتمويل وغيرها. مؤخرا انضمت إدارة الموارد البشرية (HRM) إلى الحركة الخضراء. ويعرف الدمج بين الإدارة البيئية (EM) وإدارة الموارد البشرية(HRM) بالإدارة الخضراء للموارد البشرية (GHRM). حيث تهدف هذه الإدارة الجديدة إلى مساعدة المؤسسات على تحسين الأداء البيئي من خلال زيادة مشاركة العاملين ورفع التزامهم نحو البيئة.

يعد القطاع الصناعي مصدرا لأشكال مختلفة من التلوث البيئي والذي يحتاج إلى تقييم وتوعية وتصحيح. ولذلك، هذا القطاع يجب أن يضم جميع الموظفين في عملية تحقيق أهداف الإدارة البيئية لضمان تحقيق أداء بيئي أفضل. هذا البحث يهدف إلى كشف وتقييم مدى تطبيق ممارسات الإدارة الخضراء للموارد البشرية في الشركات الصناعية الفلسطينية من ثلاثة قطاعات صناعية (الصناعات الغذائية والدوائية والكيميائية) في الضفة الغربية. لتحقيق ذلك تم استخدام البحث الاستكشافي المكون من مقابلات واستبيانات.

يناقش هذا البحث الاتجاهات الحالية من ممارسات الإدارة الخضراء للموارد البشرية في هذه الشركات بناء على نتائج 17 مقابلة والاستبيانات المقدمة إلى 110 شركة. ونتيجة لهذا البحث يشير إلى أن ممارسات الإدارة الخضراء للموارد البشرية لا تستخدم إلى حد كبير لتشجيع

الموظفين على أن يصبحوا أكثر مناصرة للبيئة. بناء على نتائج هذا البحث وجد أن مستوى التطبيق الكلي لهذه الممارسات هو 54.9٪ والذي يعتبر مستوى متوسط. وقد وجد أن الممارسة المفضلة للشركات المستهدفة التي زادت التزام الموظفين و رفعت وعيهم تجاه البيئة هي "الإدارة الخضراء الثقافة التنظيمية". من ناحية أخرى، كانت أقل الممارسات المستخدمة هي "المكافأة الخضراء والتعويض."

كما تتناول هذه الدراسة دور إدارة الموارد البشرية في خلق الثقافة الخضراء وتحقيق أهداف EM. وتشير نتائج اختبار الفرضيات أن هناك علاقة ذات دلالة إحصائية بين الممارسات GHRMو الأداء البيئي. و تقدم هذه الدراسة نموذجاً يمثل أفضل الممارسات من GHRM لتحسين الأداء البيئي (EP).

وبالإضافة إلى ذلك، يحدد هذا البحث المتغيرات التي يمكن أن تؤثر على تنفيذ GHRM بدعمها أو عرقلتها والفوائد المتوقعة من وجهة نظر الشركات المستهدفة. أظهرت نتائج التحليل الوصفي أن المحرك الرئيسي لل GHRM هو "الاعتبارات البيئية"،أما الحاجز الرئيسي لتطبيق GHRM هو ‘‘تكلفة تنفيذ برامج GHRM ’’بينما كانت الفائدة الرئيسية المتوقعة من GHRM هي "تعزيز المسؤولية الاجتماعية تجاه البيئة بين الموظفين."

وأخيرا، من المتوقع أن تقدم معلومات مفيدة لتوجيه البحوث في المستقبل بالاعتماد على نتائج هذا البحث.