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**ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) HUMAN RESOURCE
MANAGEMENT PRACTICES AND ENVIRONMENTAL PERFORMANCE: A
STUDY ON MULTINATIONAL COMPANIES IN PENANG, MALAYSIA**

By

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**Thesis Submitted To
School of Business Management,
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In Partial Fulfillment of the Requirement for the Master of Human Resource
Management**

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ABSTRAK

Kajian ini adalah untuk mengenalpasti pengaruh empat dimensi amalan pengurusan sumber manusia berdasarkan sistem pengurusan alam sekitar terhadap prestasi alam sekitar dalam kalangan organisasi multinasional di Pulau Pinang Malaysia. Empat dimensi amalan pengurusan sumber manusia yang digunakan dalam kajian ini adalah perekrutan dan pemilihan, latihan, penilaian prestasi dan ganjaran. Tujuan kajian ini adalah untuk menguji kesan dimensi amalan pengurusan sumber manusia terhadap prestasi alam sekitar. Secara keseluruhan, sebanyak 75 syarikat multinasional telah terlibat dalam kajian ini. Analisis regresi telah digunakan untuk menguji hipotesis kajian. Keputusan kajian ini menunjukkan bahawa tiga dimensi pengurusan sumber manusia iaitu perekrutan dan pemilihan, latihan dan ganjaran tidak mempunyai pengaruh signifikan terhadap prestasi alam sekitar. Walau bagaimanapun, penilaian prestasi dikenalpasti sebagai faktor yang mempunyai pengaruh signifikan terhadap prestasi alam sekitar. Kajian ini juga memberi implikasi dari segi teoretikal dan praktikal.



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ABSTRACT

This study examined the influence of four dimensions of environmental management system (EMS) human resource management practices which are recruitment and selection, training, performance assessment and rewards on environmental performance among the multinational companies in Penang, Malaysia. The researcher's intention is to examine the effect of environmental management system (EMS) human resource management practices on environmental performance. A total of 75 multinational companies participated in this study. Regression analysis was performed to test the research hypotheses. The results of this findings revealed that the three dimensions of EMS human resource management practices (i.e. recruitment and selection, training and rewards) did not have a significant influence on environmental performance. However, performance assessment was found to have impact environmental performance significantly. This study provided theoretical and practical implications.



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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter indicates about the background of the study, the statement of problem, research questions and objectives, the significant of the study, operational definition and the definition of the key terms used in this study.

1.1 Background of Study

Today, natural environment is a challenging issue for the organizations with the rapid development of the business and technology. It was due to global and local environmental problems. Locally, people are growing concern the needs in protecting and saving the environment and business today's are looking forward toward the greener workplace. Because of the more prominent general eco-friendly concerns it does need for organizations to execute legitimately eco-friendly plans and projects (Daily & Huang, 2001). One of the systems that are currently enforcing the environmental management procedure is the Environmental Management System (EMS). The competitive advantage will be gained by adopting formal environmental strategies and programs as in Aaron and Fetzer (p. 61, 2010), Yalmaz Sidiqi, Global Director of Environmental strategy at Office Depot stated that environmental strategy is a competitive differentiator and wide range of green solutions differentiate their company and help the customers to go green.

Environmental changes will affect the existence of not only people, but habitats around the world. This incorporates access to clean water, wellbeing, sustain and the prosperity of the earth (The Ministry of Foreign Affairs Malaysia, 2015). In Malaysia, the Compendium of Environment Statistics (CES) 2015 presents measurements on environment in an atmosphere, contamination (air, water and waste), ranger service, populace, sicknesses known as vector borne in addition to the Food and Water Borne Diseases (Department of Statistics Malaysia, 2015). The statistical data from the Department of Statistics Malaysia 2015 uncovered the biggest contributor's towards the environment was the manufacturing sector, therefore, it is important to identify the action taken by the manufacturing sector in preventing and protecting the environment for the sake of the future generations (Department of Statistics Malaysia, 2015).

Notwithstanding, several kinds of assistance against the normal organizational task, respectively in human resource management may increase the efficiency by including eco-friendly processes in the organizations (Daily & Govindarajulu, 2004; Ramus, 2001). The system that comprises of HRM in Environmental Management System is known as Green Lean Total Quality Management (LTQM) Human Resource Management (HRM) System and the ultimate goal of this system is to focus on achieving total human resource development that is motivated and capable to optimize their creativity to be a part of Green and Lean TQM organization (Salleh, Kasolang, and Jaffar, 2012). This study will only review the Human Resource Management Practices specifically in terms of Environmental Management System (EMS).

A business company, especially the manufacturing sector should be one step ahead with the implementation of eco-friendly protection program. One of the

environmental protection programs is the Environmental Management System (EMS). It is essential that the administration gives the duty to environmental management force by actualizing the system. According to Barnes (1996) in Daily & Govindarajulu & (2004), an EMS indicate a format that allows management the ability to better control the company's environmental impacts by helping the organization to develop policies as a guidance in protecting the environment. The EMS standard is known as MS ISO 14001. The organization with MS ISO 14001 accreditation means an organization has established a systematic approach to protect the environment, preventing the air, water, land, noise and nuisance, pollution and to improve their environmental performance (Department of Standards Malaysia, 2015).

Besides the conventional system of MS ISO 14000, to go green, an organization must incorporate justifiable thinking in making its decision at all stages throughout the organization. The public today become more aware to go green and individuals are looking forward the extra methods to live green. In order for organizations to implement green management initiatives, human resource management practices expectation is by shaping pleasant environment, human capital and values of a company through contracting master environment representatives, preparing workers with abilities and skill in innovation and development, and additionally giving prizes and motivating forces to making environmental management a success (Wong, Tan, Ng & Fong, 2013). Consequently, this study integrates Human Resource Management Practices in terms of Environmental Management System (EMS).

In discussing the EMS HRM practices, two crucial components must be considered: environmentally friendly HRM practices and the preservation of knowledge

capital. Thus, by changing business environment to be more friendly, it has built the implementation of human resource management (HRM) important towards the performance of the organizations. Human Resource Management is accepted to affect knowledge, skills, abilities, attitudes and behavior of employees; hence it is possible for HRM practices to give impact on the performance of an organization (Snape & Redman, 2010). At the point when workers see a more intricate utilization of HRM practices, organizations do accomplish a better score for their performance (Vermeeren, Kuipers & Steijn, 2014).

Past studies by Moideenkutty, Lamki and Murthy (2010) which test the relationship between the involvements of human resource management practices towards the organizational performance in an Arabian Gulf country, the Sultanate of Oman stated that high-involvement human resource management practices have a positive relationship with the organizational performance. This implies organization that executes highly selective staffing; extensive training, performance management practices and employee empowerment are liable to have higher performance (Katou, 2008; Joseph & Dai, 2009). As a result, numerous organizations have embraced human resource management practices in order to achieve its environmental performance.

Nonetheless, to concentrate on the traditional human resource management practices alone is still inadequate for a business to accomplish its environmental performance as business operations are liable inside and outside organizations to increase pressure and scrutiny from various stakeholders like workers, government servants and not-for-profit groups to go green (Sarkis, 2006). Hence, many organizations

volunteer to operate more towards taking care of the environment so being green could become the norm in the near future (Margaretha & Saragih, 2013).

EMS HRM activities can help organizations discover elective approaches to cut down expense without losing their ability in the green economy as the organization has huge development opportunities by making strides toward environmental friendliness and making another ecological DNA which can get monstrous operational investment funds by decreasing their carbon footprint. Numerous organizations, which are taking a greener methodology inside their company, are encountering a positive and the harmonious impact on the examples of worker relations in the organization.

In addition, the advantages connected with the natural reception as Jackson and Seo (2010) has brought up where acknowledgment of the financial objectives that shape the practices of administrators, shared conceptual frameworks for describing the strategies that businesses pursue to maximize their performance, an increasing recognition of the value of addressing the concerns of multiple stakeholders, and a shift from focusing on domestic businesses to addressing issues faced by firms operating across national borders in an undeniably worldwide economy. Organizations that can alter practices and human resource scopes with the focus of environmental management can be productive in the hierarchical excursion towards environmental practicality (Jabbour, 2011).

Meanwhile, as Ahmed, Montagno and Firenze (1998) survey towards the companies from a wide range of industries including agriculture service and forestry, textile, apparel, printing, chemicals, plastics, metal fabrication, machinery, and automotive which investigates the relationship between environmental strategy and

company performance using samples from a nationwide survey found that environmental companies resulted in a better performance scores and also are more willing to incorporate various performance improvement strategies and techniques into their operations compare to non-environmental companies. In this sense, environmental performance was proven as one of the factors that affected the organizational performance.

Environmental performance is known as the ability of the organization to reduce air emissions, effluent waste, and solid wastes and the capacity to decrease consumption of hazardous and toxic materials (Zhu, Sarkis & Kee, 2008). Greener business will attract customers with high environmental concern, become more trusting in the marketplace, and win more public and private sector contracts (Kane, p. 24, 2011). Furthermore, a business can enhance its competitiveness through improvements in environmental performance in order to meet with environmental regulation, to address the environmental concern of customers and to reduce the environmental impact of its product and service activities (Smith & Perks, 2010). Thus, EMS human resource management practices could be an area of improvement that benefits the organization in terms of its environmental performance.

1.2 Problem Statement

This study investigates issues in EMS human resource management practices and environmental performance (EP) in multinational companies in Penang, Malaysia. It relies on three aspects, namely, theoretical, empirical, and practical. The theoretical aspect includes the explanation of new approaches in creating EMS human resource

management and environmental performance. The experimental viewpoints research the repudiating discoveries in past studies, while the practical aspect identifies current EMS human resource management practices and environmental performance of the Malaysian industry. The following section discusses shortcomings and issues related to these areas.

Currently, cutting carbon emissions was a clear signal that this subject is now at the very top of the global political agenda and if the business does not shift voluntarily, they will be forcibly shoved in this direction by governments, pressure groups, customers and the general public (Kane, p.1, 2011). Sourcing, manufacturing and logistics, and understood to be answerable for most of the environmental issues basically resulted from the business operations activities (Beamon, 1999). Today, at the global agenda as the world is witnessing critical environmental issues. Human activities, such as greenhouse gas releases and the usage of land, caused specific extreme weather and climate events in 2014, incorporating tropical twisters in the Pacific, heavy rainfall in Europe, drought in East Africa, and stifling heat waves in Australia, Asia, and South America (WMO, 2015).

In Malaysia, the most troubling natural issues in 2014 were pulverizing surges and a mudslide cleared away homes, executing five and dislodging hundreds in Bertam Valley and Ringlet in Cameron Highlands on November 5, 2014 in the most recent debacle to hit the precipitous district. It was due to widespread illegal land-clearing and land mismanagement (The Star Online Malaysia, 2014).

In late January, 2014 taps went dry in Hulu Langat and Kuala Langat in Selangor because of high ammonia levels, possibly from sewage pollution or fertilizer runoffs in a river tapped for water supply (The Star Online Malaysia, 2014). In March, a lot of

people in Selangor and Kuala Lumpur had running taps only every two days as reservoirs were drying up (The Star Online Malaysia, 2014). Furthermore, latest issue was near Pahang's state capital Kuantan where the waters and seas has turned red in color stoking environmental concerns as downpours brought an increase in runoff from the ochre-red earth at the mines and the stockpiles (The Star Online Malaysia, 2014).

It shows that environmental issues need to become a critical matter of worry for the Malaysian government and the community. Although numerous pressure groups, especially the Non-Governmental Organizations (NGOs) were created to monitor environmental problems such as Environmental Protection Society of Malaysia (Green Purchasing Network Malaysia (GPNM)), but it is still not enough. Malaysia is frontward to be an industrialized economy from material production to manufacturing. Growth in private investment was driven largely by capital spending in the manufacturing and services sectors, both of which accounted for more than 75.0 percent of private investment (Ministry of International Trade and Industry Malaysia, 2015).

The manufacturing industries have turned out to be the economy's main cause of progression in current years. Though, rapid development has damaging consequence on the environment due to the rise in the pollution, waste and rapid consumption of natural resources. In summary, natural effects are currently incorporated into the ecological execution in Malaysia are an unnatural weather change, fermentation, fossil fuel consumption, indoor air quality, territory adjustment, ozone exhaustion, water admission, criteria air contaminations, brown haze, biological harmfulness and human wellbeing (Hassan, Awang & Jaafar, 2006).

Along these lines, it is vital for Malaysia, and other creating nations, to determine contamination control issues by making strides toward environmental friendliness. In the research area, the commitments of human resource administration to the advancement of environmental management in organizations are measured superficially found as far as standard and experimentally new (Daily & Huang 2001; Jabbour & Santos 2008). Worldwide, current empirical research has been carried out by Jabbour et. al (2015) to examine the involvement of ecological administration in 94 Brazilian organizations with ISO 14001 certification and show affirmation of the first known exact study of human resource management practices amid the periods of environmental management in Brazilian manufacturing companies. The gaps need to be fulfilled with the empirical evidence in order to see the significance of the research theory.

The differences are considerably clearer in the Malaysian organizations setting as the study has previously been investigated. Previous study in Malaysia conducted a formal research with regards to the system/standard of environmental management system. Salleh, Kasolang and Jaffar (2012) in their study on 30 highly active automotive vendors in Malaysia found companies that are practicing Green Lean Total Quality Management (LTQM) Human Resource Management (HRM) System (system comprises of HRM in Environmental Management System (EMS) practices which is integrated to TQM with Lean Manufacturing (LM) principles) have produced more income.

Other research related with the HRM practices towards the environmental management is by Sudin (2011) as he introduces an expansion of an advance model of

strategic green HRM by updating the literature on HR facets of environmental management, integrating the thinking arises from the analysis of the literatures, and propose the model of research. Numerous studies contended that the arrangement of environmental management must be adequately executed wherever the organizations have the suitable individuals with true aptitudes as well as abilities (Daily et. al., 2001).

The study in EMS human resource management is particularly new and centered in the organization also the EMS HRM practices with environmental performance (Jabbour, 2011, Salleh, Kasolang & Jaafar, 2012 & Anusigh & Shikha, 2015). Thus, it is a new research area for the implementation of the environmental human resource management practices.

It therefore provides the much needed empirical evidence on the critical role of HRM in environmental management (Benn, Teo, & Martin, 2015). Meanwhile, environmental performance has been empirically tested previously by researchers such as Ramus (2001) and Green, Zelbst, Bhadauria and Meacham (2012). Environmental Performance (EP) is defined as savings in energy, recycling activities, pollution prevention and environmentally desirable impact of product or service (AnuSingh & Shikha, 2015).

Ramus (2001) found that corporations that want to develop their environmental performance can rise their employee's willingness to eco-innovate through supportive behaviors from line managers. It showed how companies can inspire line managers to implement behaviors that support environmental actions and which behaviors and policies are most efficient at enhancing the environmental performance (AnuSingh et. al,

2015). In addition, Daily et. al (2004) presented a theoretical framework on motivating employees for environmental improvement by integrating top management obligation, employee empowerment, rewards, feedback and analysis and environmental performance. Not many experimental studies have considered these variables in this framework (Wee & Quazi, 2005; Daily, Bishop & Steiner, 2007; Kaur, 2011). These studies delivered a new and vital way for examiners interested in problems related to EMS human resource management practices that impact environmental performance. Hence, it is useful to prolong this stream of study among firms in the Malaysian context.

This study will examine the connection among EMS human resource management practices and environmental performance of multinational companies in Penang state of Malaysia. In this research, the gaps in the literature will be filled by testing the connection among EMS HRM practices and environmental performance in Malaysian MNCs. Thus, this study will specifically be carried out in Penang, Malaysia.

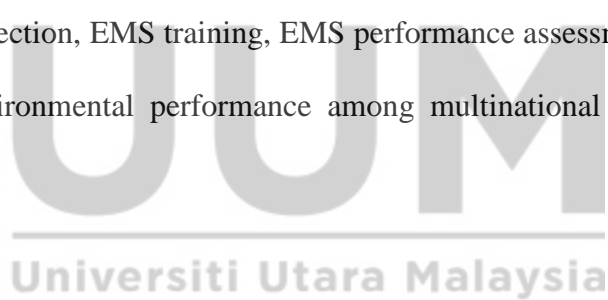
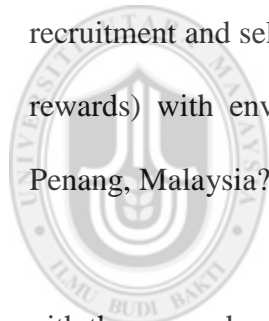
The investigators' main aim were to gather information from multinational corporations in Penang state of Malaysia with MS ISO 14001 certification, which show well collaboration among EMS human resource management and environmental performance. This is due to the fact that organization accredited with MS ISO 14001 has recognized an organized method to safeguard the environment, to avoid pollution and to develop their environmental performance. In order to test the relationship of the variables, under the EMS human resource management practices there will be four dimensions that will be tested, namely EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards. This study will specifically focus on the effect of EMS human resource management practices towards environmental

performance (EP). There might be other factors that may influence environmental performance but the current factors are the major concerns to be examined in this study.

1.3 Research Questions

In order to determine the relationship between EMS human resource management and Environmental Performance (EP), these study intents to answer the following research question:

RQ1 : Is there relationships between EMS human resource management practices (EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards) with environmental performance among multinational companies in Penang, Malaysia?



In line with the research question, the following research objective are formulated.

1.4 Research Objectives

The main objective of this study is to:

1. To examine the relationship of EMS human resource management practices (EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards) and environmental performance among multinational companies in Penang, Malaysia.

1.5 Scope of study

This study will be conducted among multinational companies in Penang state of Malaysia. Multinational Corporation (MNC) is an enterprise operating in several countries, but managed from one (home) country. Generally any firm or group that derives a quarter of its revenue from operations outside of its home country is considered a MNC.

In this study, the effect of EMS human resource management practices and its relationship to environmental performance will be observed. Malaysian Multinational Companies in Penang are chosen as organizations to be concentrated for this research due to several reasons. Multinational Companies in Malaysia have executed the environmental and EMS human resource management practices and being ahead contrasted with the Malaysian organizations, can give an understanding to the nearby organizations on the use of EMS human resource management practices and how its influence the environmental performance in organization. Besides, multinational

organizations in Malaysia being the fundamental givers of Malaysian monetary development and spine of accomplishment towards vision 2020.

1.6 Significance of Study

This research is vital in giving new variables that may add to the environmental performance of the organization. Furthermore, it will determine if the implementation of EMS human resource management practices may affect environmental performance especially in multinational organization in the Malaysian context. Upon completing of the research, this study will investigate the relationship among EMS human resource management towards environmental performance. The importance of this research is the significance of developing EMS HRM practices that can influence environmental performance.

This study allows the organization to organize itself for managing action plan and to realize that EMS HRM practices play a significance role in driving the environmental performance of the organization. Lastly, this study may contribute to the body of knowledge that is currently present in the area of EMS HRM and environmental performance.

1.7 Definitions of Key Terms

The definitions of each variable used for the purpose of this study are as follows.

1.7.1 Environmental Performance

Environmental performance is the capacity of the organization to lessen air emissions, effluent waste, and solid wastes and the ability to diminishing utilization of dangerous and toxic materials (Zhu et al., 2008).

1.7.2 EMS Human Resource Management Practices

EMS HRM is the utilization of HRM policies to support the sustainable use of resources inside organizations and, more usually help to achieve the environmental management system goals (Rani & Mishra, 2014).

1.7.2.1 EMS Recruitment and Selection

EMS recruitment and selection defined as the organization activity in order to find, locate and motivate potential candidates for any accessible and anticipated employment opportunities and the selection of environmentally committed employees especially, in a way of selecting workers with theoretical and practical understanding about environmental management (Jabbour, 2011).

1.7.2.2 EMS Training

EMS training is a program conducted to train employees the skills that are required to fulfill their environmental responsibilities and achieve their environmental goals (Anusigh and Shikha, 2015).

1.7.2.3 EMS Performance Assessment

EMS performance assessment is a gradual process used to review and evaluate employee environmental performance to recognize the accomplishment and achievement of employees aligned with the organization's criteria of environmental performance (Arulrajah et. al, 2015).

1.7.2.4 EMS Rewards

EMS reward is acknowledging the employees' environmental performance by giving appreciation in terms of monetary or non-monetary (Arulrajah et. al, 2015).



1.8 Organization of the study

This study is conducted to accumulate better understanding on the impact of EMS recruitment and selection, EMS training and development, EMS performance assessment and EMS rewards on environmental performance particularly among the multinational companies Penang, Malaysia. This study comprises of five (5) chapters. Chapter one (1) presents the introduction and background of the study. Chapter two (2) presents the literature review on the dependent variable, independent variables and underlying theories used in this study. Chapter three (3) highlights about the research methods, whereas chapter four (4) covers the data analyses and findings of the theory. It is followed by chapter five (5) on the discussion and conclusion of the study.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of literature which is relevant with the research topic. Based on the literature, hypotheses and research framework will be developed; and independent variable and dependent variable will also be presented. This chapter is divided into three sub topics, namely literature review, which provides information specifically on environmental performance, EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards. The second sub topic presents the framework that explains the relationship between variables and finally the conclusions of the chapter will be presented. This chapter also presents the theoretical framework and formation among the variables.

2.1 Concepts of Environmental Performance

Environmental performance is the ability of manufacturing plants to reduce air emissions, effluent waste, and solid wastes and the ability to decrease consumption of hazardous and toxic materials (Zhu et al., 2008). The appearance of environmental management indicates business pioneers these days are gaining deeper conscious about ecological supportability, earnestness to ensure the indigenous habitat and preservation of environmental resources (Wong et. al, 2013). Kreitz (2002) stated that environmental

expectations are going to continue to evolve and to be successful; a company has to keep asking questions over and over about its environmental performance (Sharfman, Shaft & Tihanyi, 2004).

Human resource management practices play a fundamental role in helping the organization achieve its mission and it is the most important function of the organization. So, in order to cope with the environmental concern, the human resource management will be practicing in a greener way. It is to adapt to the need of the world's current situation, rules and regulations with regards to the environments and how the organization should follow. Also, environmental performance is a good support to show whether it may give an impact towards the organization.

Based on Elliot (2011) both inward and outside weights work to drive firms to embrace and keep up earth amicable procedures and to create ecologically neighborly items and administrations, the association must consider the effect of such a natural methodology on business execution and the financial stability of the firm, and additionally on the natural execution of the firm (Green et. al, 2012). These findings clearly suggest the need for additional research in environmental performance in order for an organization to survive in the global competition nowadays and aligning their goals with the environment.

The cost saving nature of environmental performance and improved ability to satisfy customer demand for environmentally sustainable products implicit in environmental performance should lead to improvement in the overall financial and marketing performance of the organization (Green et. al, 2012). Inside the organizations,

initiative develop for environmental management is foreseen to meet the environmental performance objectives which is believe as one of the crucial performance indicators of firms, aside against financial pointers (Wong et. al, 2013).

2.2 Concept of EMS Human Resource Management Practices

2.2.1 What is EMS?

Due to the organization increases of the social concern about the environment, it leads the company voluntarily in implementing the environmental management system practices. Environmental Management System is the most used tool of environmental management in companies (Anusigh and Shikha, 2015). An EMS is a set of management processes that requires firms to identify, measure and control their environmental impacts (Bansal and Hunter, 2003).It provides a management framework for achieving environmental objective hence companies implementing environmental management systems conduct environmental activities to better control the company's environmental impacts because it helps the company in preventing pollution and saving company's money by reducing wastes, reducing energy consumption, carrying recycling activities and overall enhancing the corporate image (Anusigh and Shikha, 2015). It contributes to environmental and economic benefits to the organizations

2.2.2 EMS Human Resource Management Practices

One of the major areas that have gained prominence as target for environmental management in literature is human resources. Human resource is the key resource of any organization and can have a significant impact on how the organization operates (Anusigh and Shikha, 2015). Thus the support of human resource management practices is considered fundamental for adopting environmental management practices (Govinda rajulu and Daily, 2004). Human resource management practices are identified as an instrument that carries out the fundamental role in attaining organization's goals besides sustaining the competitive advantage in the marketplace (Jeet & Sayeeduzzafar, 2014). Quresh et.al (2010) stated that human resource management practices are the policies and practices obligatory to manage the human resource in an organization in order to achieve its goals and objectives.

Walter Wehrmeyer (1997), "Going green is good for business....and HR staff" an article of in an annual survey of top management graduates in Europe with respect to environment has come up with four most important factors for these graduates: (1) green image helps recruitment (2) more support from employees to changes linked with improvement in environmental performance than to cutting costs or raising competitiveness (3) Bonuses tied to environmental performance (4) Pay attention to work place. Quazi's (1999) seven case studies in Singapore revealed that companies attained substantial monetary savings from EMS implementation/ISO14001 through recycling activities, product and process modification, reduced energy consumption, reduction in chemical use, improvement in pollution prevention processes but difficulty in securing employee commitment was found in most of the companies.

The discussion of HR factors in environmental management is prevalent (Daily & Huang, 2001; Govindarajulu & Daily, 2004). However, the empirical research in this topic is still scarce. Even so, a few studies have identified relevant HR factors and their use in environmental management (Jabbour 2011; Anusigh and Shikha, 2015). Carter and Dresner (2001) found barriers to environmental project development could be overcome through team structures as well as formal and informal training. Additionally, Drumwright (1994) determined that top management support is conducive to the success of socially responsible buying. Wee and Quazi (2005) identified seven critical factors for environmental management. Included were three were human resource factors: top management commitment, employee involvement, and training. However, they neither proposed nor tested relevant relationships among them or their relationships with performance (Anusigh and Shikha, 2015).

Because of the scarcity of empirical research addressing HR factors in the environmental literature, we drew upon research from other managerial literature streams for our conceptual base. For example, considerable research indicates that the development of an EMS may parallel that of other well know programs such as Total Quality Management (TQM) (Corbett & Cutler, 2000). Indeed, evidence has been reported suggesting that successful TQM implementation depends upon such HR factors as top management support, training, reward, teamwork, recruitment and selection, performance assessment and employee empowerment (Daily & Bishop, 2003; Daily Bishop Steiner, 2007;Jabbour, 2011). This research coupled with the environmental literature led us to choose the following HR factors: EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards.

As can be seen, the earth frameworks are under danger. An unnatural weather change, freshwater exhaustion, biodiversity lessening, gaps in the ozone layer are all cases of such dangers. Along these lines, it is significant in keeping up the earth as it permits plants to keep developing, manages temperature, moistness, CO₂ levels, a give oxygen, save creature species, allows us to live free of any poisons or risks and permits future eras of people to develop and live without dealing with anything we've done to taint the earth in which we do live and they will live. One of the solutions is by actualizing the EMS human resource management practices inside the organization.

By implementing the EMS human resource management practices it is identified as a part towards showing and enlightening not particularly the environmental performance, as well as the company monetary achievement. Moreover, the EMS human resource management practices analyzed here are possible to enhance workers' comforts in the workplace, not least through promoting a good working environment and feeling the urgency of enlarging environmentally alert workforce. After all, it is trusted that EMS human resource management can possibly add confidently to both workers' well-being and better-quality organizational performance.

In this study, the researchers are focusing on four dimensions of EMS human resource management practices which are EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards as the independent variable. The independent variable will be tested to identify the relationship with environmental performance as the dependent variable. These four scopes of the human resource management practices are well-known as the dimensions that can greatly encourage

employees perform better to improve and increase job performance which also enhances the competitive advantage of the organization (Uen & Chien, 2004; Minbaeva, 2008).

2.2.2.1 Concept of EMS Recruitment and Selection

Attracting high-quality employees is the main indicator of human resource challenge in the 'war for talent' (Renwick, Redman and Maguire, 2013). Given the present condition of the employment market, the challenge for employers is attracting the right talent, with the certain level of education, experience and value to their organization. In order to find the right talent for the organization, organizational should look beyond the organizational needs today. Recruitment and selection in general is the process of attracting applicants for the positions needed and selecting the best candidates for the position (Bernardin and Russell, p.140, 2013).

In accordance with environmental pleasant positions, the selection and recruitment, formation can likewise be ecologically sufficient (Jabbour, 2011). Recently, a few firms have endeavored to influence the organization's environmental position as a basic point in enlisting pitches. Generally, the selection of environmentally committed employees will be specifically by selecting personnel with practical information about environmental management (Jabbour, 2011). It is necessary for organizations to hire employees who are voluntary to sign up with environmental management activities in order to build and sustain a pro-environment organization (Renwick et. al, 2013).

Overall, organizational concerns in recruiting and selecting candidates with environmental management system experience become more important in order to help the organization to achieve its environmental performance.

2.2.2.2 Concept of EMS Training

One of the real achievement elements of natural administration should be considered is the majority of the workers not just those related to specific offices or exercises ought to be given environmental training (Unnikrishnan and Hegde, 2007). Through education and training, employees become more aware of the need for quality and environmental control, increase adaptability to change, and change to a proactive attitude (Wong, 1998). The environmental training prerequisites ought to be incorporated and include the entire division of the organization also (Fernandez et al., 2003) including the top administration group of the company (McCloskey and Maddock, 1994). Specifically, training inclusive of to gain knowledge, skills and abilities from the teaching process meanwhile development is the ability of employees to sharpen and perfecting the knowledge, skills and abilities in the long term (Dermol & Cater, 2013).

EMS training is the environmental training that permits the employees to have the capacity to accomplish the objectives of environmental management programs (Jabbour, 2011). Well prepared and frontline employees whom have the awareness towards the environment are in a perfect world put to distinguish and diminish waste, as they are nearer to it (Renwick et. al, 2013). It is significant in directing green training to communicate with the employees about what sort of green activities should be done,

how and why it should be finished. Employee training in environmental management is to increase awareness, skills, expertise, training for green jobs, and integrated training to create an emotional involvement in environmental management (Renwick et. al, 2013).

In the same fashion, successful environmental improvement mandates employees receive thorough training and insufficient training may result in employees who are unable and unwilling to participate in environmental improvement efforts (Govindarajulu and Daily, 2004). Establishing specific training efforts regarding environmental issues may lead to the following benefits: compliance with regulatory requirements, organizational definitions of employee responsibility and liability, a positive public image, employee encouragement to become stewards of the environment, and employee motivation to participate in proactive environmental management (Cook and Seith, 1992). It is critical for managers to train new employees and continuous education of current staff. Managers can focus their training efforts on front-line employees and those who have a direct influence on the environment, but should not neglect other employees in the organization (Govindarajulu and Daily, 2004).

2.2.2.3 Concept of EMS Performance Assessment

Performance assessment programs are necessary to guarantee effective environmental management activities over the time since they allow the continuous adjustment of an employee performance to the employees' expected performance by the company (Govindarajulu and Daily, 2004). Performance assessment is a gradual process used to

review and evaluate employee performance for the purpose of improvisation, rewarding and acknowledging them accordingly (Gibbons & Kleiner, 1994).

Using performance assessment in environmental management presents many challenges, not least here being how to measure environmental performance standards across different organizational departments/units, and gaining useable data on the environmental performance of these units and staff (Renwick et. al, 2013). A few organizations set the environmental goals of the workers, whose performance is one of the criteria of individual performance upgrade programs which influence the total of incentive and variable compensation that can be yielded to the workers (Jabbour, 2011).

Employee performance appraisal has the capacity to influence employees' performance as the evaluation records determine the expertise of an employee which may support the organization towards higher productivity (Purohit, 2014). It is important for the organization to gather baseline information and determine indicators of environmental performance and performance targets related to the employee's priority on green initiatives. It will help the employee to set targets and measure the success of implementation. Annually tracking the performance assessment results helps to validate efforts, quantify progress, align goals and priorities, and can be used to build momentum for the green initiative. It will also help the management to keep track of what has been done and what should be done more.

Performance assessment allows the employee to compare their year-end environmental performance with results based on baseline information and targets. In fact, Akinyele (2010) supported that having a good performance assessment is

significant for any organization as it is one of the main elements that ensure continuous improvement in employee performance hence it increases the organizational performance. To summarize, with EMS performance assessment indicators, employees will specifically has a duty of care to undertake their activities in a way that minimizes harm to the environment, identify and assess their activities for their impact on the environment and comply with environmental laws and regulations.

2.2.2.4 Concept of EMS Rewards

Reward systems can be used systematically to motivate employees to perform desired behaviors so that both the company and its workers can benefit from the program (Govindarajulu and Daily, 2004). EMS rewards is the rewards given to the selected employees who performed in achieving the environmental management system goals. In accordance with a key way to deal with reward management, defined as the arrangement of pay practices followed the corporate objectives; it was proven that several organizations creating reward frameworks to incentivize environmental management performance, especially for senior supervisors (Renwick et. al, 2013).

In reality, the study by Forman and Jorgensen (2001) exhibited a hypothetical structure of which procurement of rewards or remuneration to workers with a specific end goal to attempt the extra obligation of taking part in environmental efforts was embraced. The utilization of environmental rewards and acknowledgment, for example, day by day acclaim and organization grants “are seen to have a significant sway on employee eagerness to produce eco-activities (Renwick et. al, 2013). Furthermore,

Ramus (2001) in his study recognized the advantages of non-monetary motivating forces on impacting environmental policy implementation as when there was seen perceived supervisory support and better acknowledgment in terms of praise letters and plaques there was an expanded responsibility from employees towards maintaining environmental policies.

Regardless of the type of rewards used, the benefits should fit the needs of the employees. It is important for managers and supervisors to not only reward employees for quality and daily work efforts but also for innovating environmentally-sound processes and products (Govindarajulu and Daily, 2004). Overall, rewards either monetary or non-monetary will encourage the employees to work and perform well in environmental culture in order to achieve the environmental goals.

2.3 Underlying Theories and Model

In this study, the researcher utilizes two theories to understand the link of theoretical paradigm and variables of the study. The researcher used the Resource Based View and Institutional Theory. Further, usage of theory in the research is to relate the discovery of the research with the theory to contribute additional empirical evidence.

2.3.1 Resources Based View Theory

According to authors such as (Pisano & Shuen, 1997) claimed that resource-based view of the firm is an influential theoretical framework for understanding how competitive

advantage within firms is achieved and how that advantage might be sustained over time. In particular, resource-based view assumes that firms can be conceptualized as bundles of resources that those resources are heterogeneously distributed across firms, and that resource differences persist over time (Amit & Schoemaker, 1993).

2.3.2 Institutional Theory

Institutional theory emphasizes the role of social and cultural pressures imposed on organizations that influence organizational practices and structures (Scott, 1992). This theory is implied by Jennings and Zandbergen (1995) who were amongst the first to apply institutional theory to explain the organizations' adoption of environmental management practices. According to Hoffman and Ventresca (2002), the institutional sociology framework emphasizes the importance of regulatory, normative, and cognitive factors that effected firms' decisions to adopt a specific organizational practice, above and beyond the practices of technical efficiency. However, firms can adopt various types of environmental management practices in response to institutional pressures.

As a result of this, Sharma (2000) further explained that there were two conditions to a firm's response to institutional pressures, firstly, there are environmental strategies of conformance that focus on complying with regulations and adopting standard industry practices, and secondly, there are voluntary environmental strategies that seek to reduce the environmental impacts of operations beyond regulatory requirements. In this sense, the organization today's needs to comply with such regulations which the Environmental

Management System (EMS) that will be implemented by the human resource personnel in order to sustain the environmental performance of their organization.

2.4 The Relationship between Variables

In this study, EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards were chosen as independent variables to associate the dependent variable which is an environmental performance by means that these variables may influence environmental performance.

2.4.1 Relationship between EMS Human Resource Management and environmental performance

This study proposed that there is a significant relationship between green human resource management and environmental performance. In the study of Anusigh and Shikha (2015) on the Impact of Green Human Resource Factors on Environmental Performance in Manufacturing Companies, an empirical evidence, the correlation matrix indicates that the EMS HRM were moderately correlated with environmental performance.

Jabbour et al. (2015) identified the theoretical model proposed by Jabbour et. al (2008) with respect to the relationship between EMS human resource management practices and environmental management in companies based on the data collected from four ISO 14001 certified Brazilian companies from manufacturing sector and revealed

the experts responsible for human resource management did not have substantial knowledge about the way this area could support environmental management system, not all the interactions between EMS human resource practices and environmental management system was practiced in the companies as proposed by the model and companies which presented more contribution of EMS human resource practices to the environmental management system tend to have a continuous improvement of the environmental performance.

Conceptually, EMS human resource management may affect the environmental performance and may pose a significant relationship with environmental performance. Therefore, give the needs of the study to identify the relationship between these two dimensions. As such, this study hypothesized that:

H1: There is a significant relationship between EMS human resource management and environmental performance.

2.4.2 Relationship between EMS Recruitment and selection and environmental performance

This study theorized that there is a significant relationship between EMS recruitment and selection and environmental performance. The study by Grolleau et al., (2012) on different private firms in France found that the company with a high environmental commitment adds a profile of a company. They could separate and distinguish those experts more than non-experts were worried concerning the ecological position of an organization.

The study by Jabbour et al., (2010) in examining the importance of EMS HRM in order to promote environmental management in the organization, wherein data was collected from 94 companies in Brazil results that recruitment and selection is important human dimensions that can contribute to the improvement in employee implementation of environmental management principles. Conceptually, EMS recruitment and selection can be a factor that may affect the environmental performance. Therefore, give the needs of the study to identify the relationship among these two dimensions. As such, this study hypothesized that:

H1a: There is a significant relationship between EMS recruitment and selection and environmental performance.

2.4.3 EMS training and environmental performance

This study theorized that there is a significant relationship between EMS training and environmental performance. The study by Jabbour et al., (2010) in examining the importance of HRM in order to promote environmental management in the organization, the results from 94 companies in Brazil shows that environmental training is important human dimensions that can contribute to the advancement in employee implementation of environmental management principles.

Supported with Onyango and Wanyoike (2014) in their study stated that training is significant because the right and effective training programs will build employees' morale and increase their environmental awareness and lead them to practice a good environmental action in the organization which will enhance the environmental

performance. In addition, the study by Daily et al., (2007) on EMS training framework and its relation to HR practices in the organization among 437 employees, it can be concluded that in order to form an effective environmental management system it was directly dependent on environmental training.

Meanwhile, Jabbour et al. (2010) presented a literature review and proposed a model that highlights the importance of environmental training for organizations. Wee and Quazi (2005) developed and validated a set of seven critical factors of environmental management that could be used by managers in assessing and improving their own environmental practices found that one of the critical factors established through reliability and validity analyses was EMS training. This research has proven that EMS training and development in general will enhance the environmental performance. As such, this study theorized that:

H1b: There is a significant relationship between EMS training and environmental performance.

2.4.4 EMS performance assessment and environmental performance.

This study theorized that there is a significant relationship between EMS performance appraisal and environmental performance. It is a must for any organization nowadays to incorporate environmental management goals into the performance assessment system criteria (Arulrajah et. al, 2015). In Schwalm (1994) study, he stated the main objective of an environmental management information system is to control the large scale of pollution effectively, usage of the resource, energy and the regulatory requirements.

Meanwhile, Milliman and Clair (1996) stated that it is important to develop environmental management due to it is not just used for reporting purposes, but need to be included in the performance appraisals of managers as well as employees. This research has proven that EMS performance assessment in general will enhance the environmental performance. Hence, hypothesis for this study is:

H1c: There is a significant relationship between EMS performance assessment and environmental performance.

2.4.5 EMS rewards and environmental performance

Another key function of EMS HRM is EMS rewards. The EMS reward management practices of the organizations will contribute to the sustainability of organization's environmental performance (Arulrajah et. al, 2015). Crosbie and Knight (1995) state that by including environmental criteria in the salary review, some companies have successfully rewarded high environmental performance ideas and practices.

A generic view on the benefits of environmental management was presented in the study by Taylor et al., (1992). The study revealed that employees were more flexible to follow the procedures of environmental management when companies offered EMS rewards incentive. Similarly, in the findings of Mehmood et al. (2013) rewards have been identified as a tool that can increase employee performance as a result increase the firm's performance. EMS reward management has significant contributions in order to motivate managerial and non-managerial workers by incorporating the corporate environmental management initiatives (Arulrajah et. al, 2015).

Daily, Bishop & Steiner (2007) examines empirically the relationship between HR factors and employee perceptions of environmental performance of 437 employees of a large organization in the aerospace field in the South Western U.S. which was ISO 14001 certified found that rewards is related to perceived environmental performance. The researchers added that the fair reward system is very significant for any organization to increase the employee's productivity, behavior and performance hence considered as the main assets of the organization. Furthermore, the result of the finding discovered that rewards system will increase environmental performance regardless of the types of rewards. It could be in the form of direct reward such as monetary rewards or non-monetary rewards which is in the form of promotion and recognition. Hence, hypothesis for this study is:

H1d: There is a significant relationship between EMS rewards and environmental performance.

2.5 Summary of the Hypothesis

H1: There is a significant relationship between EMS human resource management practices and environmental performance.

H1a: There is a significant relationship between EMS recruitment and selection and environmental performance.

H1b: There is a significant relationship between EMS training and environmental performance.

H1c: There is a significant relationship between EMS performance assessment and environmental performance.

H1d: There is a significant relationship between EMS rewards and environmental performance.

2.6 Research Framework

A research framework is developing subsequently after reviewing the theoretical and empirical literature. This research framework was developed to express the link between the underlying theories plus independent variables which are EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards and dependent variable which is environmental performance in this study. Figure 2.1 portrays the proposed links between the independent variables and dependent variable in this study.

Independent Variables

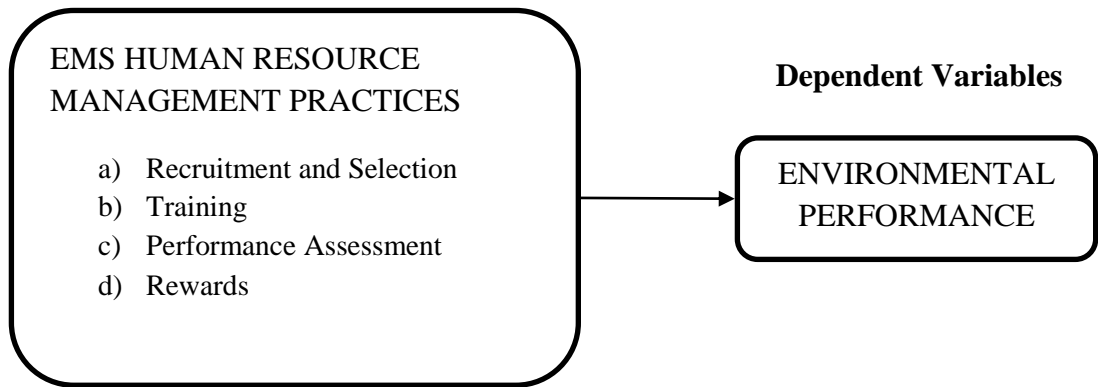


Figure 2.1
Research Framework

2.7 Summary of the chapter

In summary, this chapter reviews previous studies and researches regarding the variables that are examined in this study. The theoretical and empirical evidence from previous studies had been discussed and highlighted in this chapter. In addition, this chapter also presents the proposed hypotheses for each variable and research framework of this study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The objective of the study is to examine the relationship between EMS human resource management practices (independent variables) and environmental performance (dependent variable) among multinational companies in Penang, Malaysia. In order to collect data on multinational companies, questions regarding the variables in a survey were distributed to the representatives of the multinational companies. This study should be able to provide an opportunity to describe the effect of EMS human resource management practices towards environmental performance especially in multinational companies in Penang, Malaysia. This chapter will explain the research design, research framework, conceptual framework, hypotheses, population and sample, instrument and measurement, data collection and data analysis.

3.1 Research Design

This correlational study examines the relationship between EMS human resource management practices namely EMS recruitment and selection, EMS training, EMS performance assessment, and EMS rewards with environmental performance among multinational companies in Penang. Sekaran & Bougie (2010) defined that correlational study is a study used to identify the relationship between independent variable and

dependent variable specifically. For the present study, correlation study is carried out to determine the relationship between independent variables (referred as EMS human resource management practices, namely EMS recruitment and selection, EMS training, EMS performance assessment, and EMS rewards) with the dependent variable (referred as environmental performance).

A quantitative method will be used for data gathering in order to examine the relationship between these two variables. Quantitative method is used to answer questions about relationship among measured variables with the purpose of explaining, predicting, and controlling phenomena (Sekaran & Bougie, 2010). A complete set of a questionnaire is used as an instrument for this study. Multiple regression analysis is used in this study to examine the relationship of the independent variables and dependent variable. The research design indicates the relationship between EMS human resource management practices and environmental performance.

3.2 Population and Sample

The population for this study is derived from 389 multinational corporations located in Penang, Malaysia. The population consisted of all multinational companies operated in Penang with MS ISO 14001 certification. With a population of 1.77 million people, Penang was chosen because it is the leader in manufacturing activities and the growth center for northern Malaysia (OECD, 2011). In 2015, 389 multinational companies have chosen Penang as their location to do business, making it the second growth center in Malaysia, after the Klang valley and Penang's economic growth historically has been

comparable to the growth rate of the country as a whole (Invest Penang, 2015). The population would vary in number of employees, company sales turnover (RM Million) and years of operating in Malaysia.

The unit analysis in this study is an organization and conducted towards Multinational Corporation in Penang. In order to identify the population, the list of the organization was derived from the FMM Directory of Malaysian Industries 2015. According to the FMM Directory there are over 2,600 manufacturing and service companies in Malaysia. The sample has been chosen by using convenience sampling from the 389 multinational companies listed in Penang. From that list, only 280 multinational companies were accredited with MS ISO 14001 (The Department of Standards Malaysia). In order to identify the sample size, the researcher refers to Krejcie and Morgan (1970) Table of Sample Size Identification. Thus, with the size of the population is 389, the total of the sample size needed is 127. In order to enhance the number of respondents, all 389 multinational companies contacted and only 200 companies are willing to receive the questionnaires.

3.3 Measurement

This study is a cross-sectional research where data is collected and analyzed at one point of time. Hence, the fundamental effect cannot be established. This study is an attempt to test the hypotheses that have been constructed in Chapter 2. Obtaining responses by distributing questionnaires is considered as an appropriate tool upon referring to the hypotheses of this study. Questionnaire is one of the most significant tools used for

quantitative based research as the researchers will be able to gather comprehensive responses from the respondents within a short period of time (Sekaran & Bougie , 2010). The survey was carried out by distributing the questionnaires to the selected respondents.

The data collected via questionnaire made up of multiple questions. Data collection sent through the online questionnaire to the company's representatives which are Human Resources Executives / Manager, General Manager or CEO at the end of March, 2016. The questionnaire has been entered into www.esurv.com and transformed into an online survey. The online questionnaires were emailed to the selected respondents. This study is based on the quantitative type of research. The questionnaire contained quantitative measures of environmental performance, EMS human resource management practices (EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards), demographic and organization information. In the background section of the questionnaire, the organization was ask to provide information on the name of the company (optional), number of employees in the company, company sales turnover (RM Million) and operating years in Malaysia whereby the representative of the organization was asked about their gender, age, ethnicity, academic qualification, year of service and position.

The questionnaire is distributed in the English language which contains 26 questions and a cover letter from the researchers was attached to each questionnaire with a complete written instructions. The questionnaires consist of statements describing the organization's representative perceptions on the questions. The questionnaires consist of four (4) sections which comprises of 26 questions with complete written instructions.

Respondents were requested to fill up the questionnaire according to their level of agreement using a five-point Likert scale. The five-point Likert scale range from (1) Strongly disagree, to (5) Strongly agree.

Table 3.1
Questionnaire

Questionnaire Section	Description
Section A	This section illustrates items on the independent variable which is EMS human resource management practices and consists of twelve (12) items on EMS human resource management practices.
Section B	This section illustrates about environmental performance which consists of five (5) questions.
Section C	These sections comprise of six (6) respondent's demographic questions such as gender, age, ethnicity, academic qualifications, year of service and position.
Section D	The last section inclusive of organization demographic questions which are number of employees, company sales turnover and operating years in Malaysia.

3.3.1 Dependent Variable

The following subsection explains the instrument and operational definition used to measure environmental performance as the dependent variable.

3.3.1.1 Environmental Performance

The study used instruments developed by Chow and Chen (2012) to evaluate the environmental performance of respondents' firms. A Likert-type scale indicating strongly disagree (1) to strongly agree (5) were used in this questionnaire. Paille, Chen, Boiral and Jin (2013) in their study have shown the coefficient alpha of 0.93 indicating high reliability results.

Table 3.2
Operational definition and items for environmental performance

Dimension	Operational Definition	Items
<ul style="list-style-type: none">Environmental performance	The ability of the organization to reduce air emissions, effluent waste, and solid wastes and the ability to decrease consumption of hazardous and toxic materials	<ol style="list-style-type: none">1. Our firm reduced wastes and emissions from operations.2. Our firm reduced the environmental impacts of its products/service.3. Our firm reduced environmental impact by establishing partnerships.4. Our firm reduced the risk of environmental accidents, spills, and releases.5. Our firm reduced purchases of non-renewable materials, chemicals, and components.

Source: Adapted from Chow and Chew (2012)

3.3.2 Independent Variables

The following subsection explains the instrument and operational definition used to measure EMS human resource management practices as the independent variable.

3.3.2.1 EMS Human Resource Management Practices

EMS human resources are associated with using every employee's interface to promote sustainable practices and to increase employee awareness and commitments on the issues of sustainability (Fayyazi, 2015). In other words, EMS HRM is the implementation of HRM policies to promote the benefits of environmental friendly practices in order to achieve environmental management system goals.

3.3.2.1.1 EMS Recruitment and Selection

EMS recruitment can be defined as the process of hiring individuals with environmental knowledge, skills, approaches, and behaviors (Ahmad, 2015). Meanwhile, the EMS selection is choosing applicants who are environment friendly and aware the needs to protect the environment and practically engaged in green practices as consumers in their daily life (Opatha & Arulrajah, 2014). For the recruitment and selection instruments, this study adapted 4 items of recruitment and selection survey originally developed by Moreno Lorente and Jimenez (2003) in Spanish language, translated and adapted by Jabbour, Santos and Nagano (2015). A Likert-type scale indicating strongly disagree (1) to strongly agree (5) were used in this questionnaire. Jabbour, Santos and Nagano (2015)

in their study have shown the coefficient alpha of 0.8354 indicating high reliability results.

Table 3.3
Operational definition and items for EMS recruitment and selection

Dimension	Operational Definition	Items
<ul style="list-style-type: none"> EMS Recruitment and Selection 	<p>The activities of either internal or external recruiting and selecting shows a company's preference for candidates committed to the environment.</p>	<ol style="list-style-type: none"> 1. Employees prefer to work in this company because it has good environmental performance. 2. The company declares that it prefers employees with environmental management knowledge when a position opens. 3. During the hiring process of an employee, the candidate's motivation for environmental management is considered. 4. A candidate's environmental motivation is verified during all of the selection stages (application completion, interview, etc.)

Source: Adapted from Moreno Lorente and Jimenez (2003)

3.3.2.1.2 EMS Training

Training is a program that focuses to educate and develop employees' skills, knowledge, and attitudes, with regards to the environmental management related knowledge, skills, and attitudes (Zoogah, 2011). The instrument for EMS training has 3 items and adapted from the survey developed by Moreno Lorente and Jime ´nez (2003) in Spanish language, translated and adapted by Jabbour, Santos and Nagano (2015).

A Likert-type scale indicating strongly disagree (1) to strongly agree (5) were used in this questionnaire. Jabbour, Santos and Nagano (2015) in their study have shown the coefficient alpha of 0.9567 indicating high reliability results.

Table 3.4
Operational definition and items for EMS training

Dimension	Operational Definition	Items
• EMS Training	The program that train the employees to be able to achieve the objectives of environmental management programs.	<ol style="list-style-type: none">1. The company has a continuous environmental training program.2. Environmental training is a priority when compared to other types of company training.3. Environmental training is viewed as an important investment.

Source: Adapted from Moreno Lorente and Jime ´nez (2003)

3.3.2.1.3 EMS Performance Assessment

Performance assessment is a gradual process used to review and evaluate employee environmental performance to identify the achievement and accomplishment of employees aligned with the organization's criteria of environmental performance (Arulrajah et. al, 2015).

The instrument for performance assessment has 3 items and adapted from the survey developed by Moreno Lorente and Jimenez (2003). A Likert-type scale indicating strongly disagree (1) to strongly agree (5) were used in this questionnaire. Jabbour, Santos and Nagano (2015) in their study have shown the coefficient alpha of 0.9567 indicating high reliability results.

Table 3.5
Operational definition and items for EMS performance assessment

Dimension	Operational Definition	Items
<ul style="list-style-type: none">EMS Performance Assessment	Indicators used to review and evaluate employee environmental performance	<ol style="list-style-type: none">1. The company establishes environmental objectives that each employee must accomplish.2. An employee's contributions to environmental management improvement are evaluated by the company.3. Employee environmental performance appraisals are registered by the company.

Source: Adapted from Moreno Lorente and Jimenez (2003)

3.3.2.1.4 EMS Rewards

Rewards are the main HRM practices used to acknowledge employees in terms of monetary or non-monetary based on their work performance. In the context of EMS HRM, rewards assumed as the future tools to support environmental activities in organizations (Ahmad, 2015). Modern organizations are enhancing the reward systems to encourage the employees to perform ecofriendly initiatives becomes one of the organization strategic approaches for reward management.

In this study, the instrument consists of 2 items and adapted from the survey developed by Moreno Lorente and Jime ´nez (2003) in Spanish language, translated and adapted by Jabbour, Santos and Nagano (2015). A Likert-type scale indicating strongly disagree (1) to strongly agree (5) were used in this questionnaire. Jabbour, Santos and Nagano (2015) in their study have shown the coefficient alpha was 0.8354 indicating high reliability results.

Table 3.6
Operational definition and items for EMS rewards

Dimension	Operational Definition	Items
• EMS Rewards	Indicators used to compensate and appreciate employee environmental performance	<ol style="list-style-type: none">1. Employees are financially rewarded for their performance in environmental management issues.2. Employees who contribute to environmental management improvement are publically recognized by the company (prizes,honors,etc.)

Source: Adapted from Moreno Lorente and Jime ´nez (2003)

3.4 Validation of the instrument and Pilot Test

The validation process is to ensure the content used as the instrument were applicable and relevant to the research especially when analyzing the results. A pilot test was conducted in order to examine the validity and reliability of the instrument. A total of 50 questionnaires were distributed via an online survey to the representatives of multinational companies in Kedah, Malaysia from 21st until 27th March 2016. The questionnaire were posted into www.esurv.com and transformed into an online survey. The online questionnaires have been emailed to the selected respondents. The respondents were given seven days to answer the online questionnaires. However, the returned questionnaires were 32 (64%) and only 30 (60%) can be used for further analysis. Reliability test was conducted to determine the validity of the instrument. The result of the reliability is presented in Table 3.7.

Table 3.7
Reliability Result of Pilot Test

Variables	Number of Items	Cronbach Alpa
Dependent Variable		
Environmental Performance	6	0.95
Independent Variable		
EMS Human Resource Management	12	0.91
Recruitment and Selection	4	0.72
Training and Development	3	0.94
Performance Assessment	3	0.84
Rewards	2	0.97

3.5 Analysis Techniques

The data obtained were analyzed using Statistical Package for Social Sciences (SPSS) version 23.0. In this study, explanatory factor analysis, descriptive analysis, reliability test, correlation and multiple regression analysis were used by the researcher. Explanatory factor analysis acts as a tool to measure the validity structure of the factor of each variable to identify the most important variable. Kaiser – Mayer Olkin (KMO) will be tested in this study to measure the sampling adequacy. Cronbach’s Coefficient Alpha was used to measure the internal consistency of the scale. The tests of reliability, multiple regression analysis were used to examine the influence of independent variables on the dependent variables.

3.6 Summary of the Chapter

This chapter covered aspects of methodology which are research design, research framework, conceptual framework, hypotheses, population and sample, instrument and measurement, data collection and data analysis that were carried out in this study. In the next chapter the researcher discussed about the research results and findings.

CHAPTER FOUR

DATA ANALYSES AND FINDINGS

4.0 Introduction

This chapter indicates the findings of this study. The data collected in this research were analyzed using Statistic Package for Social Science (SPSS) 23.0 software. This chapter commences with data screening and demographic profile of the respondents. This is followed by the explanatory factor analysis, validity and reliability results of the measurements correlation and regression analysis.

4.1 Data Screening

The primary data in this research were collected among the multinational companies in Penang, Malaysia. Data collection sent through the online questionnaire to the company's representatives which are Human Resources Executives / Manager, General Manager or CEO at the end of March, 2016. The questionnaire were posted into www.esurv.com and transformed into an online survey. The online questionnaires were emailed to the selected respondents. Once collected, the data were entered into Statistic Package for Social Science (SPSS) 23.0 software. The first step after entering the data is to carry out the data screening. Data screening is carried out before data analysis because this process is important to ensure the accuracy of data input. Based on the data, there is no negative question or statement need to be reverse coding.

Overall, 200 questionnaires about EMS human resource management practices were distributed via email to multinational companies in Penang, Malaysia. The questionnaires were distributed based on the number of multinational companies in Penang, Malaysia but only seventy-seven (77) questionnaires were received. Unfortunately, there were two (2) incomplete questionnaires which are unusable and the usable questionnaires were seventy-five (75). So, the response rate was 37.5 percent for the 75 respondents. The next section presents the organization's demographic data as well as demographic data profiles of the organization's representatives who responded to the questionnaire.

4.2 Demographic Profile

Table 4.1 presents the demographic data which include the number of employees, company sales turnover (RM Million), operating years in Malaysia and MS ISO 14001 status as well as general information of the organization's representatives who answered the questionnaire distributed to the organization.

Table 4.1
Organization Profile

Organization Profile	Frequencies	Percentage (%)
<i>Number of Employees</i>		
1 ~ 500	34	45.3
501 ~ 1000	33	44.0
1001 ~ Above	8	10.7
<i>Company Sales Turnover (RM Million)</i>		
251K ~ 10M	27	36.0
10.1M ~ 25M	14	18.7
25M ~ Above	34	45.3
<i>Operating years in Malaysia</i>		
1 ~ 5 Years	16	21.3
6 ~ 10 Years	8	10.7
11 ~ 25 Years	20	26.7
26 ~ 49 Years	31	41.3

n = 75

With reference to Table 4.1, the majority of organizations consist of one until 500 numbers of employees with the total percentage of 45.3%. In addition, for the company sales turnover, 45.3% of organizations indicated 25 Million and above company sales turnover. Meanwhile for the operating years in Malaysia, majority 41.3% of them had operated between 26 to 49 years.

The profile of the respondents is shown in Table 4.2. The gender distribution of respondents in this study constitutes majority of male respondents with 61.3% and 38.7% of female respondents. Majority number of respondents who participated in this research was between the age range of 41 to 50 years with 44% with the majority of Chinese with 56%. In terms of academic qualifications, respondents with Bachelor Degree constituted 54.7% as the highest percentage of the sample. Based on the results, majority of the respondent's year of service in the company is within 3 to 5 years with

38.7%. Lastly, in term of the position in the organization, 46.7% of respondents were Manager, 41.3% were Executive and 12% were General Manager.

Table 4.2
Profile of the Respondents

Respondent's Profile	Frequencies	Percentage (%)
<i>Gender</i>		
Male	46	61.3
Female	29	38.7
<i>Age</i>		
31 – 40	26	34.7
41 – 50	33	44.0
51 – 60	16	21.3
<i>Ethnicity</i>		
Malay	19	25.3
Chinese	42	56.0
Indian	14	18.7
<i>Academic Qualification</i>		
Diploma	18	24.0
Degree	41	54.7
Master	15	20.0
PhD	1	1.3
<i>Year of Service</i>		
3 – 5 years	29	38.7
6 – 10 years	20	26.7
More than 10 years	26	34.6
<i>Position</i>		
General Manager	9	12.0
Manager	35	46.7
Executive	31	41.3

n = 75

4.3 Exploratory Factor Analysis (EFA)

Exploratory factor analysis is to validate the test conducted for the study and indicate the relationship between the variables. Items which have cross loading and low value were excluded from the correlation and multiple regression analysis. The following section explains the factor analysis result of the independent variables, EMS human resource management and environmental performance and dependent variable organizational performance.

Explanatory factor analysis in this research was performed by using principle component analysis and Varimax rotation. The explanatory factor analysis with Varimax rotation identified five variables in this study which are environmental performance (5 items), EMS recruitment and selection (4 items), EMS training (3 items), EMS performance appraisal (3 items), and EMS rewards (2 items). The explanatory factor analysis was conducted to provide the evidence of validity and factor structure for each variable.

Based on the explanatory factor analysis, no item was omitted. The factor loadings of independent variables are presented in Table 4.3 and the factor loadings for dependent variable are exhibit in Table 4.4.

Table 4.3*Factor Analysis Results for EMS Human Resource Management Variables*

Item	Factor Loading	Eigen Value	Variance (%)	Kaiser-Mayer Olkin (KMO)	Barlett's test for Sphericity
<i>Recruitment and Selection</i>		3.05	76.34	.72	264.67
RS1	.653				
RS2	.951				
RS3	.888				
RS4	.967				
<i>Training</i>		1.55	77.95	.50	27.18
TD1	.883				
TD2	.714				
TD3	.883				
<i>Performance Assessment</i>		2.40	80.12	.55	154.87
PA1	.831				
PA2	.881				
PA3	.968				
<i>Rewards</i>		1.86	93.06	.50	98.15
RD1	.965				
RD2	.965				



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Table 4.4*Factor Analysis Results for Environmental Performance Variables*

Item	Factor Loading	Eigen Value	Variance (%)	Kaiser-Mayer Olkin (KMO)	Barlett's test for Sphericity
<i>Environmental Performance</i>		3.778	75.554	.706	435.870
EP1	.932				
EP2	.920				
EP3	.696				
EP4	.940				
EP5	.834				

4.4 Reliability Analysis

This study had assessed the internal consistency reliability and stability of the instruments used to measure all the variables. The results of Cronbach's Alpha value will determine the acceptability and reliability of the instruments. The internal consistency reliability for the items of independent and dependent variables were obtained through the reliability test. Based on the explanatory factor analysis, reliability test was conducted on the remaining items of the independent and dependent variable.

The reliability test for environmental performance which is the dependent variable of this study consists of five (5) items and the Cronbach's Alpha value being 0.914. Meanwhile, the Cronbach's Alpha value for EMS HRM with twelve (12) items being 0.800, EMS recruitment and selection with four (4) items being 0.888, EMS training with three (3) items are 0.620, EMS performance assessment with three (3) items is 0.868 and EMS rewards with two (2) items being 0.920 respectively. The Cronbach's Alpha results for each variable are presented in Table 4.5.

Table 4.5
Reliability Coefficients Results

Variables	Number of Items	Cronbach Alpha
Dependent Variable		
Environmental Performance	5	0.91
Independent Variable		
EMS Human Resource Management	12	0.80
EMS Recruitment and Selection	4	0.88
EMS Training	3	0.62
EMS Performance Assessment	3	0.86
EMS Rewards	2	0.92

4.5 Descriptive Statistic

This section presents the descriptive statistics for the independent and dependent variables. The mean value and standard deviation for dependent variable and independent variables are presented in Table 4.6. The mean value for environmental performance is 3.90. The mean value for EMS recruitment and selection is 2.96 followed by EMS training 3.93, EMS performance assessment 3.43, and EMS rewards 3.21.

Table 4.6

Descriptive Statistics

Variable	Mean	Standard Deviation
Environmental Performance	3.90	.75
EMS Human Resource Management	3.30	.59
EMS Recruitment and Selection	2.96	.80
EMS Training	3.93	.66
EMS Performance Assessment	3.43	.85
EMS Rewards	3.21	.85

n = 75

4.6 Pearson Correlation Analysis

In this study, the Pearson Correlation analysis will indicate and identify the strength, direction and the relationship between the independent and dependent variable. The results of the Pearson Correlation for this study indicated that EMS Human Resource Management and its three variables significant and correlated positively with environmental performance. The three variables are EMS training, EMS performance assessment and EMS rewards. However, EMS recruitment and selection was not significant. Table 4.7 exhibits the results of Pearson Correlation Analysis.

Table 4.7
Results of Correlation Analysis

	1	2	3	4	5	6
1. Environmental Performance	1					
2. EMS Human Resource Management	.656**	1				
3. EMS Recruitment and Selection	.102	.654**	1			
4. EMS Training	.593**	.859**	.388**	1		
5. EMS Performance Assessment	.801**	.752**	.025	.740**	1	
6. EMS Rewards	.727**	.914**	.399**	.689**	.856**	1

**p ≤ 0.01

4.7 Multiple Regression Analysis

In order to arrange for a further understanding on the influence of the four independent variables on the dependent variable, a multiple regression analysis was carried out. The value of β for each hypothesized relationship is observed and reported in this section. Based on the results, only EMS performance assessment was significant and positively associated with environmental performance. The Beta value of EMS performance assessment is ($\beta = 0.739$, $p < 0.05$). Multiple regression analysis shows the adjusted r^2 is 0.630 with 63% of the variance. Table 4.8 presents the results of multiple regression analysis of EMS human resource management (GHRM) and environmental performance (EP).

Table 4.8

Results of Multiple Regression Analysis of EMS HRM and EP

Dependent Variable (Environmental Performance)	Unstandardized Coefficients		Standardized Coefficient		Sig
	B	Std. Error	Beta	t	
(Constant)	1.32	.37		3.53	.00
Independent Variables					
Recruitment and Selection	.05	.10	.05	.49	.62
Training	-.01	.14	-.01	-.09	.92
Performance Assessment	.65	.17	.73	3.69	.00
Rewards	.07	.17	.08	.40	.68
<i>F</i> Value	32.45				
<i>R</i> ²	.650				
Adjusted <i>R</i> Square	.630				

*EP as Dependent Variable

** $p \leq 0.05$

In a nutshell, the findings of this study proved that only EMS performance assessment directly and positively impact on environmental performance. Meanwhile, EMS recruitment and selection, EMS training and EMS rewards were not significant. Thus, hypothesis **H_{1c}** is supported, while hypothesis **H_{1a}**, **H_{1b}** and **H_{1d}** are not supported.

Based on the results presented, the hypotheses were summarized as follows:

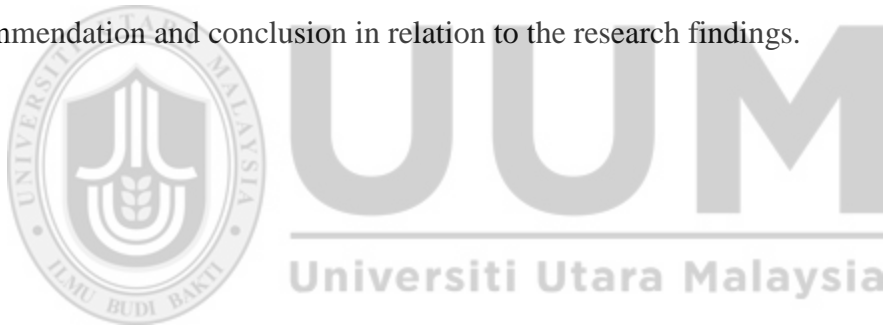
Table 4.9
Hypotheses Results

Hypothesis	Description	Results
H ₁	There is a significant relationship between EMS human resource management and environmental performance	Reject
H _{1a}	There is a significant relationship between EMS recruitment and selection and environmental performance	Reject
H _{1b}	There is a significant relationship between EMS training and development and environmental performance	Reject
H _{1c}	There is a significant relationship between EMS performance assessment and environmental performance	Accept
H _{1d}	There is a significant relationship between EMS rewards and environmental performance	Reject

4.8 Summary of the Chapter

This chapter presents the findings of the study. The analyses were carried out using explanatory factor analysis, descriptive frequencies, correlation and multiple regressions. The results of the findings revealed that only one variable of EMS human resource management practices, namely EMS performance assessment was found directly and positively impact the environmental performance.

Meanwhile the other three EMS human resource management variables, namely EMS recruitment and selection, EMS training and EMS rewards do not indicate positive impacts on environmental performance. The next chapter discussed the result, made the recommendation and conclusion in relation to the research findings.



CHAPTER FIVE

DISCUSSIONS

5.0 Introduction

This chapter discuss findings from the analysis conducted in the previous chapter. The discussions are based on research objectives of the study. This chapter also highlights several limitations in the process of conducting this study. Recommendations for future research are also discussed and recommendations for practitioners are included in order to overcome the problems, and lastly the conclusions of the study were also included.

5.1 Recap of the study

The purpose of this study is to identify the impacts of EMS human resources management practices namely EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards on environmental performance among multinational companies in Penang, Malaysia. In total, 127 questionnaires about EMS human resource management practices were distributed via email to multinational companies in Penang, Malaysia. The questionnaires were distributed but only seventy-seven (77) questionnaires were received. Unfortunately, there were two (2) incomplete questionnaires which are unusable and the usable questionnaires were seventy-five (75). The discussion of the research results will be based on the objective of the study as stated below.

The results showed that only one dimension of EMS human resource management practices, which is EMS performance assessment has a significant and positive impact on environmental performance. However, EMS recruitment and selection, EMS training and EMS rewards do not have a positive impact on environmental performance of multinational companies in Penang, Malaysia.

The research objective as elaborated in Chapter 1 is as follows:

1. To examine the relationship of EMS human resource management practices (such as EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards) and environmental performance among multinational companies in Penang, Malaysia.

5.2 Discussion of the findings

5.2.1 EMS Human Resource Management and Environmental Performance

The result of the research given empirical evidence supported the hypothesis that only one EMS human resource management practices, that is EMS performance assessment has significant and positive impacts on environmental performance among the multinational companies in Penang, Malaysia. The multiple regression analysis result (refer to Table 4.8) showed support for the assertion that EMS performance assessment dimensions impacted environmental performance among the multinational organization in this study. Based on the results of the regression analysis, it can be concluded that the higher the level of EMS performance assessment, the higher the environmental

performance of the organization refer to the Beta value (0.739). These findings are consistent with Jabbour (2011) studies that also show significant relationship between EMS performance assessment and environmental performance. Chinander (2001) stated that performance assessment ensures employees to know their responsibilities and communicates the link between their performance outcomes in environmental endeavors. Informal verbal feedback in addition to formal written feedback may help motivate employees for environmental improvement. The main reason is, there is a strictly instruction to enforce and maintain the environmental accreditation MS ISO 14001, so the environmental objectives and targets is necessary to be included in their performance assessment form. Performance assessment programs are necessary to guarantee effective environmental management activities over the time since they allow the continuous adjustment of an employee performance to the employees' expected performance by the company (Daily et. al, 2004).

In contrast, the other three dimensions of EMS human resource management practices namely EMS recruitment and selection, EMS training and EMS rewards resulted are not significant on environmental performance among the multinational companies in Penang, Malaysia. The multiple regression analysis result for EMS recruitment and selection, EMS training and EMS rewards (refer to Table 4.8) show no significance influence which are in contrast with the study by Jabbour (2011) that revealed that EMS recruitment and selection affect environmental performance. Studies by Kaur (2011) also found that EMS training affect the environmental performance and Daily et. al (2007) found EMS rewards has positive relationship with environmental performance. However, this study results are not similar to previous studies. This shows

that organizational environmental initiatives, goals, policies and results of environmental audits are not frequently communicated inside the organization. Moreover companies are not motivating employees by involving them in environmental improvement activities.

Based on the result, EMS recruitment and selection attained the lowest level of relationship (Beta value = 0.55) towards the environmental performance in contrast with the finding by Jabbour et al. 2010 who found that organization recruiters preferring candidates with environmental knowledge and motivation and revealed a significant result between recruitment and selection and environmental performance. The contradict results may appear due to the difference in culture practices and work environment between the Brazillian and Malaysian. It can be assumed that the organization in Brazil have the higher concern in recruiting candidates with environmental management knowledge in order to meet it EMS target compare with the Malaysian's organization.

In addition, in terms of EMS training, the result is also inconsistent with the research done by Jabbour (2013). Jabbour (2013) assessed the relationship between environmental training (ET) and environmental management maturity (EMM) using survey and statistical analysis of 95 Brazilian companies with ISO14001 certification found that the construct environmental training relates positively and significantly with the environmental management maturity. The result in contrast with the finding in this study as it can be assumed that organization in Penang, Malaysia conduct the EMS training but the EMS program may not impacted the environmental performance. Meanwhile, for the relationship between EMS rewards and environmental performance, the result in this study insignificant with Daily, Bishop & Steiner (2007) findings, as

they found that rewards is related to perceived environmental performance. The organization in Penang, Malaysia gives rewards to the employees but less linking the rewards with the environmental performance of the organization. The rewards either monetary or non-monetary may be given based on a specific event only and not been given based on the overall employees environmental performance. The relationship of EMS rewards and environmental performance, this variable attained the second lowest level of relationship (Beta value = 0.81) agreeable based on the arguments by Ramus (2002) and Daily and Huang (2001) stated that lack of this EMS rewards that specifically associated with environmental performance practice in the organizations context.

5.3 Theoretical Implications

The result of the study provided theoretical ramifications. In this study, resource-based view of the firm is an influential theoretical framework for understanding how competitive advantage within firms is achieved and how that advantage might be sustained over time. Resource based view theory is related to competitive advantage by organization. In other words, the organization could utilize resources and capabilities to achieve the organization objectives. In this study, in order to achieve the objective of environmental performance through the environmental management system, the organization utilized the EMS human resource management system. Based on the result of the study, it found that EMS performance assessment has significant and positive relationship with environmental performance. It indicated that environmental

performance can be improved further when variable of EMS performance assessment is implemented.

Meanwhile, institutional theory emphasizes the role of organization to adopt social, environmental and economic aspects in order to response to institutional pressures on complying regulations (Sharma, 2000). This theory validated the empirically evidence that there is relationship between EMS HRM variables with environmental performance based on the results. In order to comply with the environmental management system regulations and standards, the organization need to implement the EMS HRM practices. In addition, EMS performance assessment has significant improvement in relation with environmental performance.

5.4 Practical Implications

This study had contributed additional empirical evidence to the body of knowledge by identifying that EMS performance assessment has some significant role in influencing environmental performance. In terms of practical implication to the stakeholders, the results of the study provide some insights to the multinational companies in Penang, Malaysia in order to strengthen the EMS performance assessment by considering the fact that EMS performance assessment being found to be the determining factor of environmental performance. Thus, if the organization plan to enhance their environmental performance, the organization should pay close attention to the performance assessment criteria that is highly related with the environmental objectives such as reducing waste, carbon footprint and energy usage. By including all of the

objectives that need to be achieved by the employees in terms of the environmental aspects, it may help in increasing the environmental performance of the organization. Organization with a good reputation in environmental performance may attract more quality candidates and become the role model as the environmental concern organization in the industry.

One of the important performance objectives is by setting up the target to the employees in joining the Corporate Responsibilities Program. By focusing more on Corporate Social Responsibility activity will assist to develop Brand Image to attract quality talent. EMS performance assessment is the first important set in order to develop the environmental culture in the organization. This is due to performance assessment being the standard key performance indicators that employees need to follow in order for them to achieve the mission and vision of the company. Once achieved, the employees will gain their targeted reward. By officially including the environmental criteria in the performance assessment, the company may encourage the employee to think and go green. The assessment criteria will engaged individuals within the organization with the stronger sustainability culture and have a strong motivating force for the environmental initiative itself as well as for the organization as a whole.

These results may serve numerous purposes including to the policy makers, to improve organization internally, and to comply with the regulatory. For the policy makers, companies will have official data from the performance assessment result to benchmark and show performance and improvement over time in both environmental awareness and actions related with the employees and environmental performance. Frequently, the organizations will be asked by Non-Government Organizations, local

community and other organization stakeholders regarding their operations impacts on the environment, their waste streams, and how to assess the organizations corporate green programs and environmental stewardship. The data will help the organizations to justify and provide answers. In addition, the performance assessment data may be the source of the data than can be used by the policy makers to spread the message of change toward more environmental concern activities and programs, setting up the new rewards systems that encourage environmental actions and developing more coercive training programs that meet the environmental objectives of the organization.

The performance assessment data may also be used internally by organization to assess in terms of the performance of the organization in eliminating waste, material recycling, recovery and usage of the energy. Based on the result it will be a baseline measure for continuous improvement inside the organization. Moreover, performance assessment data also can be used in order to comply with either local, national or international regulatory. Companies certified under MS ISO 14001 also are required to maintain the performance assessment data and such a data may proof the environmental performance of the organization and identify whether the organization followed the rules and regulation to maintain the accreditation.

Going green provides bottom line cost savings, as well as a competitive advantage in the marketplace. It allows the organization to act proactively to address new environmental requirements from vendors and suppliers, while getting ahead of upcoming legislation. A solid environmental program also attracts the highest quality employees to the organization

5.5 Limitations of the Study

There were several limitations identified during the process of accomplishing this study. Firstly, in this study the number of respondents obtained is only 75 multinational companies in Penang, Malaysia. The sample is small thus large scale of sample are needed in order to get a better result. This study was conducted in Penang, Malaysia only and do not cover other locations. Hence, the result and findings of this research only will represent the organization within one area only, restricts generalizability of the research results because it could not represent the overall response of other multinational companies in Malaysia. It is recommended that future research to cover wider population and sample. This study encompassed the views from the general manager, managers and executives, and hence only provided perceptions of the top management in the organization.

Therefore, for future researchers it is recommended to identify and consider employee's views and perception in order to provide a more holistic view of this study. Lastly, it is also recommended for further research to incorporate other holistic practices of EMS human resource management as the independent variables and add other moderating variables such as the legal and environment regulatory.

5.6 Recommendations for Future Research

Based on the research results and discussion, this study has made recommendations for future research. Firstly, the study sample may perhaps be extended to a larger population, such as conducting a research involving multinational companies in all states

of Peninsular Malaysia. This may possibly produce more significant findings to enhance the understanding and empirical linkage of all the variables in this study. In addition, a comparison of cross-national towards the green human resource practices may allocate a greater insight into the relevant of green human resource management practices in order for the organization to sustain.

Further, future studies could replicate the framework of this study in different settings and different group of people, for instance towards the services companies in Malaysia. This may increase the understanding on the way of EMS human resource management practices influence environmental performance. Lastly, it is recommended for further research to add various holistic practices of EMS human resource management as the independent variables and add other moderating variables such as the environment regulatory or the organizational characteristics to see the impact on the environmental performance in organization.

5.7 Conclusion

The purpose of this study is to identify the relationship of the dimensions of EMS human resource management practices namely green recruitment and selection, EMS training, EMS performance assessment and EMS rewards with environmental performance among the multinational companies in Penang, Malaysia. The findings of this study had provided the understanding on predicting the role of EMS recruitment and selection, EMS training, EMS performance assessment and EMS rewards on environmental performance. The study had successfully answered the research objectives. The finding

revealed that environmental performance of multinational companies in Penang, Malaysia is only influenced by the EMS performance assessment.

Further, the findings of this study supported the Resource Based View Theory as EMS performance assessment are found as the determinant of achieving high environmental performance among multinational companies in Penang, Malaysia. Taken together, EMS performance assessment has significant influence on environmental performance. The study has contributed a new knowledge in the research area by practicing the human resource in environmentally way especially in term of EMS performance assessment practices it may enhance the environmental performance. Also, the researchers have filled the gap by conducting a research in EMS human resource management area and successfully show the relationship between two variables, EMS performance assessment on environmental performance. Drawing on this, in order to increase the performance of the organization, they should focus in setting environmental objectives in the performance assessment form of the employees. As a conclusion, companies which presented more contribution of human resource practices to the environmental management system tend to have a continuous improvement of the environmental performance.

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