

A PROPOSED FRAMEWORK FOR EXAMINING GREEN COMPETENCIES AND ITS IMPACT ON GREEN PERFORMANCE

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Abstract: *This paper intends to contribute to the human resource management (HRM) literature pertaining to the green topic. Based on the review of literature on green HRM, green competencies and green performance, a model is presented and three main hypotheses will be tested in future. This framework can be used by practitioners, specifically human resource managers to develop green competencies among employees towards organizational growth and environmental sustainability. The future results of the research will provide useful insights in the Green HRM area in Malaysia.*

Keywords: *Green Human Resource Management (HRM), Green Competencies, Individual Characteristics, Green Performance, Manufacturing.*

Introduction

The transformation of business structure from a conventional financial structure to a modern capacity-based economy has led companies to explore and implement green economic practices (Ahmad, 2015). Due to industrial pollution and waste material including toxic chemicals, organisations are now adopting and implementing environmental management practices (EMP). The aim of EMP is to reduce the negative effect of environmental degradation on humanity. In addition, the implementation of EMP can make firms to become competitive (Jabbour, Jabbour, Govindan, Teixeira, & Freitas, 2013). The human resource (HR) department plays an important role in promoting and supporting environmental sustainability issues within the organisational community. As mentioned by Subramaniam, Abdulrahman, Wu, and Nath (2016), individual characteristics/competencies which relate to skills, knowledge, and attitude

are some of the critical success factors of the implementation of green practices or policies in a firm. Therefore, HR department should highlight the importance of green competencies (GC) among employees and identify the ways to improve it.

The HR department should develop GC of the employees by effectively aligning human resource activities practices such as recruitment, selection and training with environmental protection practices and indirectly would enhance green performance. Jabbour (2013) also identified the critical role of environmental training in achieving success in environmental management (EM).

The main objective of the present research is to propose a framework on green competencies. Specifically, the proposed framework will be used to investigate the contribution of Green HRM practices (G-HRM) and individual characteristics/competencies toward employee green competencies. Moreover, the study also examines the influence of green competencies on green performance as an outcome.

Theoretically, this study will contribute to green practices literature by integrating green HRM practices literature and individual characteristics/competencies literature. Practically, the findings can be used as a guideline for organisations to formulate green HRM policies to develop employee green competencies to achieve the organisation's environmental and business goals.

Problem statement

In the context of Malaysia, six strategic thrusts and six game changers are envisioned to transform ideas into a reality that will catapult Malaysia towards the end state of being an advanced economy and inclusive nation (Economic Planning Unit, 2015). One of the strategic trusts concerns about pursuing green growth for sustainability and resilience that requires the country's environmental assets and ecological resources are managed in a sustainable way along with the development of the country. To accomplish environmental sustainability and resilience, four key areas are identified. The key areas are strengthening the enabling environment for green growth, adopting the sustainable, consumption and production concept, conserving natural resources for present and future generations, and strengthening resilience against climate change and natural disasters (Economic Planning Unit, 2015). Additionally, in response to global climate change, the government will focus on adaptation strategies to ensure sustainable growth and mitigation strategies to reduce GHGs emission intensity of GDP by up to 40% compared to 2005 levels by the year 2020, (Economic Planning Unit, 2015). Besides, the Prime Minister, Datuk Seri Najib Tun Razak, has been urging the need to slow climate change, reduce pollution, and cut CO₂ emissions through new policies involving green technology and investing in green industries (Mergawati, 2014). Therefore, to address the environmental issues in Malaysia, there is need to investigate on the main element that responsible for the environmental pollution, which is human. To begin, this study attempts to investigate on the capabilities or competencies of employees in delivering and supporting green activities. This study is a fundamental study as attempts to develop a green competencies framework for individual/employee and simultaneously evaluate its impact on green performance.

Climate change, resources depletion, and reduction of biodiversity and ecosystem integrity are among environmental issues that have emerged as major concerns in green

management. As organisations contribute toward environmental degradation, they have a moral responsibility for ensuring that their practices are environmentally sustainable. Furthermore, the damaging effects of industrial pollution and waste became evident, there is an instant need to address environmental concerns in managing organisational jobs and activities (Jackson, Renwick, Jabbour & Camen, 2011). In fact, previous study on environmental claimed that industrial pollution is a major threat to the sustainability (Xiang, Stuber, & Meng, 2011). For this purpose, the human resource department could play an important role in developing and designing environmental strategies at the workplace, which can be achieved by aligning human resource practices with the environmental management objectives (Jabour, 2013). The alignment process is called green human resource management (GHRM) (Renwick, Redman, & Maguire, 2008).

However, green HRM is relatively new and still in infancy in Malaysia. Many studies on green HRM has been widely conducted in western countries. Given the importance of Asian economic development to the world growth, environmental management is an important topic to study in the region (Renwick et al., 2013). However, pull and push factors for organisations to go green in Malaysia are still lacking (Daljit, 2010). Even so, an organisation's intention to adopt environmental practices is often influenced by some critical factors, one of which is individual characteristics. It is possible that g-HRM is not able to be implemented because employees lack green competencies. Indeed, scholars argued that the human element in the organisation responsible for damaging the natural environments has been much neglected by previous studies (Subramaniam et al., 2016).

Since the environmental management practices are crucial to the sustainability and competitiveness of organisation, it is important to ensure that those responsible for implementing the practices have green skills. Notably, organisations can become green only if they have a workforce with substantial green competencies (Jabbour, 2013; Jabbour, Jugend, Jabbour, Gunasekaran, Latan, 2015). Jabour (2013) asserted the critical role of environmental training of employees for successful environmental management.

Previous studies had explored green HRM in various ways. For instance, green HRM practices had been examined to mediate between environmental management and employee satisfaction or retention (e.g., Wagner, 2013). Other studies had looked at the impact of green RM practices on teamwork and organisational culture (Teixeira, Jabbour, Jabbour, 2012), and g-HRM practices as a mediator between stakeholder pressures and environmental performance (Guerci, Longoni & Luzzini, 2015). To date, very few studies investigated whether green HRM practices and individual characteristics/competencies affect green competencies. Hence, the present study attempts to bridge the gap by integrating green HRM practices literature and individual characteristics and competencies literature to develop a conceptual model to identify a green competent individual. In addition to the above, to the best of our knowledge, there are very limited studies in Malaysia that explored the green competencies that would indirectly enable the enhancement of firm's environmental protection efforts and environmental friendliness. The present study also wishes to examine whether green competencies will lead to individual green performance.

Literature Review

Green Human Resource Management (GHRM)

Previous researchers in human resource management studies have defined Green human resource management (GHRM) in various ways. For example, Renwick, Redman and Maguire (2013) have referred GHRM practices as a set of specific HRM practices that enable and sustain a proactive approach to environmental management and the achievement of high performance outcomes in relation to environmental sustainability and other types of business objectives. In addition, GHRM can also be defined as the application of human resources functional activities in the organisation that are aligned with environmental management and organisational sustainability (Askar, Johnson, & Imam, 2012; Jackson, Renwick, Muller, & Muller-Camen, 2011; Rao, 2012; Wagner, 2013). More specifically, GHRM is also referred to as all HRM activities involved in the development, implementation and on-going improvement of a system that aims at making employees of an organisation green and environmentally sustainable (Opatha & Arulrajah, 2014). According to Rao (2012), GHRM is often used to refer to the contribution of people management policies and practices towards the broader corporate environmental agenda.

Notably, GHRM practices begin at the point of an employee's organizational entry and continue until the point of the employee's exit, which means that throughout this stage, HR professionals have the opportunities to engage in environmental management to ensure that the environmental goals and organizational sustainability could be accomplished (Jackson et al., 2011). More specifically, GHRM practices are widely discussed in various functions of human resource activities such as recruitment, performance management and appraisal, training and development, compensation and rewards (Renwick et al., 2013; Wagner, 2013). For instance, developing green staffing practice in attracting high-quality employees is a key move towards environmental sustainability workplace practice. Renwick et al. (2013) contended that green staffing orientation by using web-based recruitment and selection activities had permitted recruiters to provide much information on job requirements, job specification and other staffing activity compared with traditional recruitment approaches such as newspaper advertising, and brochures. Another HRM practice affected by green management is performance appraisal and management. Green performance appraisal covers topics such as environmental incidents, use of environmental responsibilities, and the communication of environmental concerns and policy (Renwick et al., 2013; Wagner, 2013). Moreover, Ahmad (2015) also claimed that green job descriptions are now being seen as important element to be included in recruitment activities. While, green training and development focuses on using materials or techniques in training programs that save energy, reduce waste, and support employee engagement in environmental problem-solving (Zoogah, 2011).

Individual characteristics and competencies and green competencies

Competencies refer to the behaviours and attitudes required of people to do their job effectively (Brownell, 2008). According to Jeou-Shyan, Hsuan, Chih-Hsing, Lin, and Chang-Yen (2011), professional competencies include individual characteristics, behaviours, skills, knowledge, attitudes, self-reflection, personal factors, values, and beliefs. Jeou-Shyan et al. also claimed that these competencies are related to career success. These competencies have also been used to determine and align with organisational performance in different fields (Zopiatis, 2010).

Subramaniam et al. (2016) referred green competencies as the requisite ecological knowledge, skills, and abilities that help individuals behave and act rightly and responsibly toward the overall well-being of their immediate environment. Studies found that individual green competencies could enhance the Green HRM role in achieving the green objectives of the organisation. For example, in examining green marketing, Gan, Wee, Ozanne, and Kao (2008) demonstrated that individual personal attitudes and beliefs were significant in predicting green behaviour specifically in their purchase. In other studies, Ramayah, Lee, and Mohamad (2010) showed that environmental knowledge, attitude and values of individuals significantly influenced green competencies. Individual personal predisposition and environmental values were found to motivate employees to engage in green behaviour (Pichel, 2008). Scholars also revealed that formal education and training enabled the adjustment and internalisation green attitude or green behaviour by individuals (Chou, 2014; Frick, Kaiser, & Wilson, 2004; Tan, 2011). In fact, Murga-Menoyo (2014) mentioned about the role of universities in developing training proposal that includes critical competencies in sustainability with their corresponding performance indicators that permit the evaluation of different levels of achievement in training processes.

Green Performance

In this study, green performance is purported to be the outcome of green competencies. It is the final output resulting from the combination of green HRM practices and individual characteristics. Green performance is pro-environmental behaviour in which a person acts in an environmentally friendly manner and consumes only products that are environmentally friendly (Tan, 2011). Green performance reflects the effective green behaviour of individuals whose acts are based on their self-environmental consciousness and convictions (Subramaniam et al., 2016). It is clearly notified that such individual would not participate in an activity that would harm the environment (Minton & Rose, 1997).

Hypotheses

The following hypotheses are proposed in this study:

H1: Green HRM practices significantly influence green competencies.

H2: Individual characteristics/competencies significantly influence green competencies.

H3: Green competencies significantly influence green performance.

Proposed green competencies framework

The proposed research framework for this study is shown in Figure 1. In this model it is depicted that Green HRM practices and individual characteristics/competencies will influence green competencies. The framework also highlights the effect of green competencies on green performance. It is clearly stated that Green HRM practices and individual characteristics/competencies are the independent variables, green competencies is the mediator and the dependent variable is the green performance.

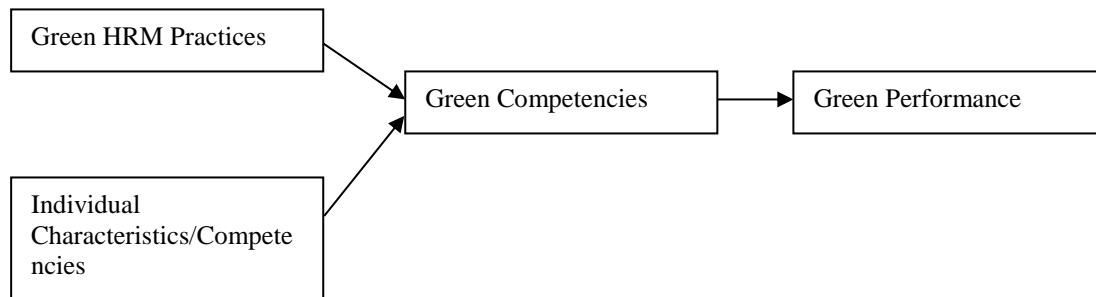


Figure 1: A proposed framework

Implications

According to the 11th Malaysia Plan (2016-2020) embarking on green growth is one of the main changers to the national development. In achieving this purpose, the government is stressing on adopting sustainable consumption and production. Various strategies have been outlined to support the environmental sustainability. The strategies include creating green markets, increasing the share of renewable in the energy mix, enhancing demand-side of management, encouraging low carbon mobility, and managing waste holistically. In line with these strategies, it is hoped that this study can contribute to the development of employee's green competencies in the organisation.

From the theoretical perspective, this study will contribute to the body of knowledge in a new emerging topic in Malaysia, which is Green HRM, which can influence the green performance of employees in organisations. Green HRM is dominated by the western literature and mostly focus on the impact on the triple bottom line (environment, economy, and society). On the other hand, this study attempts to identify how green HRM practices can benefit other aspects in the organisation, i.e., employee green performance. Besides, this study also integrates other factors which are individual characteristics/competencies that link with green competencies.

Conclusions

In conclusion, we discuss an overview of Green HRM practices, individual characteristics, green competencies and green performance. Additionally, a compilation of previous studies on these areas also presented. Based on the discussions, two main hypotheses have been proposed to be related with green competencies. The framework also examines the impact of green competencies on green performance. The future results from the present's research model will provide useful insights in the Green HRM area.

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