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碩士論文

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Master Thesis

探討員工企業環境責任知覺對員工組織對環境公民行為之影響－以綠色人力資源管理為干擾
The Effect of Employees' Corporate Environmental Responsibility Perception on Employees' Organizational Citizenship Behavior toward the Environment--The Moderating Role of Green Human Resource Management Practice

范春瓊

Pham Xuan Quynh

指導教授：紀信光 博士

Advisor: Hsin-Kuang Chi, Ph.D.

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綠色人力資源管理為干擾
The Effect of Employees' Corporate Environmental Responsibility
Perception on Employees' Organizational Citizenship Behavior Toward
the Environment--The Moderating Role of Green Human Resource
Management Practice

研 究 生：范春瓊

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MBA RECOMMENDATION LETTER

<div align="center">準碩士推薦函</div>

　　本校企業管理學系管理科學碩士班研究生　范春瓊　君在本系修業＿年，已經完成本系碩士班規定之修業課程及論文研究之訓練。

1、在修業課程方面：范春瓊 君已修滿 39 學分，其中必修科目：研究方法、策略管理專題、應用統計、企業倫理專題 等科目，成績及格(請查閱碩士班歷年成績)。

2、在論文研究方面：范春瓊 君在學期間已完成下列論文：

(1)碩士論文：探討員工企業環境責任知覺對員工組織對環境公民行為之影響－以綠色人力資源管理為干擾

(2)學術期刊：2020第四屆永續發展與綠色科技研討會(2020SSDGT)及1st international conference on Sustainable Development Goals: Climate Change and Green Technology (ICSDGs)

　　本人認為 范春瓊 君已完成南華大學企業管理學系管理科學碩士班之碩士養成教育，符合訓練水準，並具備本校碩士學位考試之申請資格，特向碩士資格審查小組推薦其初稿，名稱： 員工企業環境責任知覺對員工組織對環境公民行為之影響－以綠色人力資源管理為干擾，以參加碩士論文口試。

指導教授：

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Lastly, I wish everyone good health, happiness, happiness, and success in life.

Due to limited time and experience, the thesis cannot avoid shortcomings. I look forward to receiving valuable contributions from Professors and interested readers.

<div align="right">

Pham Xuan Quynh

December 2020

</div>

南華大學管理學院企業管理學系管理科學碩士班

109 學年度第 1 學期碩士論文摘要

論文題目：探討員工企業環境責任知覺對員工組織對環境公民行為之影響　以綠色人力資源管理為干擾

研究生：范春瓊　　　　　　　　　　　　指導教授：紀信光 博士

論文摘要內容：

　　關注環境始終是組織人力資源管理戰略中的重要話題，尤其是在改善員工在工作中的環境行為方面。因此，員工對環境的組織公民行為（EOCBE）當前吸引了管理方面的學者。該研究考察了員工的企業環境責任感（ECERP），員工的情感承諾（EAC）和 EOCBE 之間的關係，近年來這種關係一直在增加。這種關係非常重要，因為 ECERP 對 EOCBE 的影響可以擴展到環境績效。此外，關於人力資源活動在將組織戰略轉變為員工行為，對組織績效做出貢獻方面的作用的研究也得到了重視。我的研究集中於綠色人力資源在 ECERP 和 EOCBE 之間關係中的調節作用。該研究從越南製造公司的 270 名員工那裡收集了數據。結果顯示企業環境責任（ECERP），員工的情感承諾（EAC）和員工的組織對環境的公民行為（EOCBE）之間的關係。本研究還探討了研究意義和前景。

關鍵詞：綠色人力資源管理實踐 (GHRMP)， 員工的企業環境責任感 (ECERP)， 員工的情感承諾 (EAC)， 員工組織對環境的公民行為（EOCBE）

Title of Thesis: The Effect of Employees' Corporate Environmental Responsibility Perception on Employees' Organizational Citizenship Behavior toward the Environment--The Moderating Role of Green Human Resource Management Practice

Department: Master Program in Management Sciences, Department of Business Administration, Nanhua University

Graduate Date: December 2020   Degree Conferred: M.B.A

Name of Student: Pham Xuan Quynh   Advisor: Hsin-Kuang Chi Ph.D.

ABSTRACT

Concerns about the environment are always an important topic in the organization of the human resource management strategy, especially in improving employee's environmental behavior at work. Therefore, employees' organizational citizenship behavior towards the environment (EOCBE) is currently attracting scholars in management. The study examines the relationship between employees' corporate environmental responsibility perception (ECERP), employees' affective commitment (EAC), and EOCBE, which has been increasing in recent years. This relationship is very important since the impact of ECERP on EOCBE can spread to environmental performance. Besides, research on the role of human resources activities in transforming organizational strategies into employee behavior, contributing to organizational performance, is also being highlighted. My research focused on the moderating role of green human resources on the relationship between ECERP and EOCBE. The study collected data from 270 employees in manufacturing companies in Vietnam. The results show a relationship between

corporate environmental responsibility (ECERP), employees' affective commitment (EAC), and employees' organizational citizenship behavior towards the environment (EOCBE). Research implications and prospects were also explored in this study.

Key Words: Green Human Resource Management Practice (GHRMP), Employees' Corporate Environmental Responsibility Perception (ECERP), Employees' Affective Commitment (EAC), Organizational Citizenship Behavior toward the Environment (EOCBE)

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CHAPTER ONE

INTRODUCTION

1.1 Research Background and Research Motivation

In the context of as the world faces increasing pressure from population growth, climate change, and resource scarcity, scientists are increasingly interested in research on employees' corporate environmental responsibility perception with employees' organization citizenship behavior toward the environment. Employees' corporate environmental responsibility perception (ECERP) is becoming increasingly relevant as a decisive factor for employees' organizational citizenship behaviors toward the environment (EOCBE) and employees' affective commitment (EAC).

The company's sustainability concept has attracted significant attention from both academics and the government (Afsar et al. 2018; Babiak and Trendafilova, 2011; Linnenluecke et al. 2013). The studies examine the relationship between corporate social responsibility (CSR) and EOCBE, which has been increasing in recent years (Norton et al. 2015). For an organization to achieve ecological sustainability, it is important to understand how CSR affects EOCBE. However, this study only focuses on the environmental aspect, so it will cover how ECERP affects EOCBE.

Until now, scholars have only focused on the effects of green human resource management practice (GHRMP) on EOCBE (Luu, 2019), and CSR on EOCBE (Norton et al. 2015), but none of the studies mentioned how the regulatory role of GHRMP affects EOCBE and ECERP. Therefore, this study presents an entirely new problem to examine the role of GHRMP in the two variables ECERP and EOCBE.

While there have been studies on ECERP that impact on organizational commitment, there are no specific articles on ECERP affecting EAC. For

example, Corinna Dögla and Dirk Holtbrüggea (2014) study the impact of ECERP on employee commitment (not specifically on EAC) through the environmental reputation mediation variable; Ahmad et al. (2020) studied the CSR (not mention the environmental aspect) affecting EAC. Therefore, this study will examine each specific aspect of CSR and the organizational commitment that is ECERP affects directly to EAC.

At present, there are still no articles mentioning the relationship of GHRMP with ECERP and EAC. Dumont et al. (2017) only studied the role of employee psychology to GHRMP; Mandip (2012) only mentioned that GHRMP has a role in making policies for CSR, so this study has given a new direction which is the study of the role of GHRMP come to the relationship between ECERP and EAC.

Besides, previous studies have examined at organizational commitment will be positively impacted EOCBE (Daily, 2009), but there is no specific study on employee commitment to EOCBE, so this study will address this in this respect. Believe that employees' feelings have an important influence on employees' citizenship behavior towards the environment at the company. Based on this proposal, the affective positive impact is important for the employee's organizational citizenship towards a positive environment (Fredrickson, 2003). Differences between employees have been shown for other important behaviors in the work context, such as performance of duties and organizational civic behavior. Internal factors of employees environmental responsibility perception can explain a significant amount of variance in work behavior; personal perception differences, such as environmental friendly attitudes (Dunlap et al. 2000), may not only have a major effect on environmentally friendly behavior but also can interact with in-person variables (e.g., organizational affection will vary) to shape environmental friendly behavior.

Therefore, the overarching purpose of the current study is to investigate the interaction of variables between employees' environmental responsibility perceptions, employee's emotional commitment, and organizational citizenship behavior towards the environment, through green human resource management practices. In addition, these also are new contributions of this study in the context of Vietnam, this study can generate ideas for green human resource management practices to facilitate better behavior for employees to support the environment, and thus can help the organizations efforts to protect the environment.

1.2 Research Objective

This study collects and analyzes data samples from employees at manufacturing companies in Vietnam. There are four goals for this study that are shown below:

1. To investigate the relationship between employees' corporate environmental responsibility perception and employees' affective commitment.

2. To examine the relationship between employees' affective commitment and employees' organizational citizenship behaviors toward the environment.

3. To investigate the relationship between employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment.

4. To investigate the mediating effects of employees' affective commitment on employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment.

5. To examine the relationship between green human resource management practice and employees' organizational citizenship behaviors toward the environment.

6. To investigate the moderating effects of green human resource management practice on employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment.

1.3 Subject and Research Scope

Based on the above discussions, the scope of the research is developed and is detailed in the table below:

Table 1.1: The Scope of the Study

Items	Scope of The Study
Types of research	The nature of this research is quantitative. Review literature to create a foundation of hypotheses and frameworks. Research methods are designed to collect data using questionnaires and data analysis to test hypotheses and find results.
Key Issue	Examine the influence of employees' corporate environmental responsibility perception on employees' organizational citizenship behavior toward the environment in Vietnam.
Dependent variables	EAC, EOCBE
Moderating variable	GHRMP
Mediating variable	EAC
Underlying theory	Signaling theory, Theory of planned behavior
Testing location	Vietnam
Analyzed Unit	Individual
Research method	SPSS version 22.0

Source: This study

1.4 Procedure and Research Structure

To conduct the investigation, this research process includes the following steps. First of all, the study has chosen the topic of ECERP and EAC to affect EOCBE. After the idea of carrying out this study, the research modified various studies to have the most completed view on this issue. The research background, objectives and motivation be determined, leading to the development of the research framework. After that, a literature review was shown about the relationship between the four research structures above.

The conceptual model and the hypotheses that correlate each structure have been explored. To test each hypothesis in the model, a survey with a quantitative questionnaire will be conducted based on the research method shown. Questionnaires and data samples are designed, focused on Vietnamese employees and distributed via online platforms by sending them links to fill out the survey. Next, data analysis and testing happened. Subsequently, discussions about these variables were displayed based on the results. Finally, conclusions and implications were drawn based on the results of this thesis. Respondents are employees working in Vietnam.

SPSS version 22.0 was used in data analysis. Methods of data analysis and hypothesis will be techniques: Descriptive statistical analysis, Factor analysis and Reliability test, Independence T-test, ANOVA, Regression analysis (Multiple regression and Hierarchical regression).

The research process is depicted in Figure 1.1 as shown below:

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┌────────────────────────────────────────────────────────────┐
│   Gather information from previous studies to get an overview of this issue   │
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                              │
                              ▼
┌────────────────────────────────────────────────────────────┐
│         Recognize the purpose and motivation of the research        │
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┌────────────────────────────────────────────────────────────┐
│            Create conceptual models and develop hypotheses           │
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┌────────────────────────────────────────────────────────────┐
│             Create a research method and sample design              │
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                              ▼
┌────────────────────────────────────────────────────────────┐
│               Conducting surveys and data collection               │
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                              ▼
┌────────────────────────────────────────────────────────────┐
│                      Test and analyze data                        │
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                              ▼
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│                      Discuss the results                          │
└────────────────────────────────────────────────────────────┘
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│                   Conclusion and implication                      │
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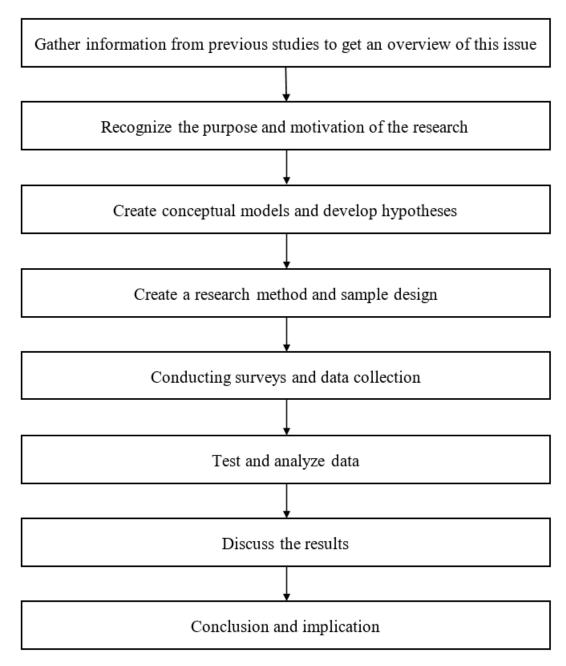
Figure 1.1: Flow of Chart of the Research Process.

Source: This study

The content of this study is divided into 5 chapters: Introduction, Literature Review, Research Methodology, Data Analysis and Results, Conclusions and Suggestions.

Chapter one introduces and explains what is the research background and motivation for investigating this research; research purposes and objectives;

questions, contributions, topics, and scopes of the research; then rely on the research and establishment process to enhance the goals. Besides, it also shows the general procedure and structure of the study.

Chapter two presents the literature review related to employees' environmental responsibility perception, green human resources management practice, employees' organizational citizenship behavior toward the environment, and employees' affective commitment. From the review of previous studies, including evaluating the important features of each factor, explain the definition of research variables. It then leads to the basis for the content of chapter three, which is the relationship between the four constructs. These relationships are developments to make the hypotheses in this chapter.

Chapter three presents the research methodology and research design. In this chapter, the research framework model has been established. Accordingly, the construction of scales to investigate the relationship between variables and research design has been outlined. Besides, sampling plans, questionnaire design to research surveys, data collection, and data analysis procedures are also discussed in this chapter to ensure the comprehensiveness of the research model and complete the items of the survey question.

Chapter four presents data analysis and implies the results. The results are presented running the analysis. Display descriptive statistics for respondents' question items, factor analysis, reliability check and validity of scales, independent

T-test, ANOVA, and related regression results in each hypothesis developed in chapter three. Then the results for each hypothesis will be presented for discussion.

Chapter five presents conclusions, summarizing the main results of the study after discussion, its findings, implications, contributions, and limitations. Based on the results, suggestions for future studies are also presented.

CHAPTER TWO
LITERATURE REVIEW

This chapter will discuss previous studies of the four constructs and related theories. Then the hypothesis will be displayed. Related constructs include employees' corporate environmental responsibility perception, employees' affective commitment, employees' organizational citizenship behaviors toward the environment, green human resource management practice and the correlation between variables.

2.1 Theoretical Background

2.1.1 Signaling Theory

Signaling theory is "useful to describe the behavior when two parties (individuals or organizations) have access to different information" (Connelly et al. 2011). Accordingly, signaling theory holds a prominent position in a variety of management documents, including strategic management, entrepreneurship and human resource management. Signaling theory is "fundamentally concerned with reducing information asymmetry between two parties" (Spence, 2002). Signaling theory is also important for human resource management, some studies have examined the signals that occur during recruitment (Suazo et al. 2009).

An organization may also affect signaling levels (transmission and reception of information) that reduce information asymmetry (Rynes et al. 1991; Lester et al. 2006). When a signaling is explained in a specific way by another individual, an individual who is uncertain about how the signal is interpreted can be considered to be imitated as a means to make a decision (Sliwka, 2007). This may lead to signaling interpreted in a certain way that may be accurate or maybe inaccurate (McNamara et al. 2008).

Signaling serves as an important function in GHRMP strategies communicating to employees that companies operate. From a company's perspective, these signals relay information about the company's unobservable characteristics. Signaling, such as ECERP activities, can serve to identify a company employee with affection and conscious behavior in environmental protection and improve its recognition (Corinna Dögla and Dirk Holtbrüggea, 2014).

2.1.2 Theory of Planned Behavior (TPB)

The theory of planned behavior (TPB), "a theory designed to predict and explain human behavior in specific contexts" (Ajzen, 1991). "TPB is an extension of the theory of reasoned action" (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). A central factor in TPB is the individual's intention to perform a given behavior. Intentions are assumed to capture the motivational factors that influence behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior. The original derivation of TPB (Ajzen, 1985) defined intention (and its other theoretical constructs) in terms of trying to perform a given behavior rather than in relation to actual performance (Ajzen, 1991).

Furthermore, TPB is one of the more commonly referenced theories in the field of environmental studies (Nye and Hargreaves, 2010). According to the TPB, the attitude toward behavior, subjective norms, and perceived behavioral control all together shape an individual's behavioral intentions and behaviors (Blok et al. 2015).

According to Ajzen and Fishbein (2000), a person's perception toward behavior and one's ability to control behavior over a situation where he or she is expected to act and behave in a particular way. Perception is related to a person's affective about the consequences of specific environment behaviors (Cordano et al., 2010). Organizational behavior involves a person's affective

that they 'have toward over' the performance of the environment behavior (Ajzen, 1991). The TPB was applied in the context of pro-environmental behavior by Rioux (2011). Also, other researchers applied the TPB to explain pro-environmental behavior (Whitmarsh and O'Neill, 2010; Wall et al. 2007). Therefore, it is expected that ECERP has a positive relationship with the intention to act EOCBE.

2.2 Definitions of Research Construct

2.2.1 Employees' Corporate Environmental Responsibility Perception (ECERP)

Greening and Turban (2000) explore the notion that prospective employees are more likely to pursue work from a socially and environmentally responsible company. Employers care about social and environmental activities, like "Be good to your employees" and "Understand and find ways to reduce environmental impact" will attract more employees. The environmental aspect of CSR is not included in the original definitions of CSR and has not been considered in many CSR studies (Dahlsrud, 2008).

Based on previous studies (Corinna Dögla and Dirk Holtbrüggea, 2014), distinguishing between four ECERP groups, namely green strategy and culture, green technology and products, green recruitment and evaluation, and green communication. This ECERP classification is based on the concept of environmental responsibility that requires consideration of ecological issues in strategic decisions and their embodiment in organizational culture (green strategy and culture), wealth (green technology and products) and the corresponding motivation of employees (green recruitment and evaluation). Furthermore, appropriate measures and performance reporting (green communication) are required (Olson, 2008).

Green strategy and culture in general can be described as the long-term nature of business. This implies promoting and rewarding an environmentally

friendly culture, responsibility for the company's environmental impacts as well as the strategic importance of environmental protection and restoration (Sharma, 2000; He and Chen, 2009). Companies responsible for environmental impacts and responsibilities often address the implementation of green goals, such as reducing CO_2 emissions, having hazardous waste treatment systems by actively promoting ecological innovation development, in the mission statement and long-term plan (Albino et al. 2009). Encourage employees to participate in environmentally friendly activities to achieve a green strategy and culture. This may include the strategic implementation of voluntary staff activities based on sustainable values. For example, staff members participate in voluntary cleaning challenges around work areas or tree planting. Also, the company regularly organizes green days and recycling events, applies positive environmental activities, and installs energy-saving lamps to reduce CO_2 emissions. ECERP is less obvious and not easy to identify, companies need to set environmental goals in their corporate strategy and culture, signaling their responsibility for environmental issues.

To ensure the implementation of the green strategy is to use green technology and products. Green technology can generally be described as investing in environmentally-friendly and resource-efficient manufacturing companies or equipment, while green products are built with resources or components. Reuse and recycle as well as reduce and change packaging materials (Sharma, 2000). Employees can use simple technology and products such as paper cups and reusable heat instead of plastic or high-tech coffee mugs such as electric cars and factories to produce recycled energy. The use of green technology and products benefits employees who are environmentally responsible and improve their satisfaction by doing something good. Companies that provide or use environmental-efficient technology and

products show their sensitivity to employees' concerns about climate change (McWilliams et al. 2006).

ECERP requires the participation of all employees. To achieve ECERP is to use environmental knowledge, skills and values as recruitment criteria (Netherwood, 1998; Egri and Hornal, 2002). Setting environmental performance criteria to evaluate and reward employees or a part of a variable wage may be based on the achievement of environmental goals. The review of environmental knowledge or remuneration for technological or organizational innovation has a positive impact on environmental performance (Mandip, 2012).

Employees are aware of communicating their environmental responsibilities to their stakeholders. Green communication can include official reports on the company's environmental performance and informal information about environmental indicators and targets on its homepage or other media. The positive perceptions of employees about the environment by communicating environmental activities, goals and performance, companies aim to convey the positive attributes associated with their commitment to the environment (Connelly et al. 2011) and reduce information asymmetry between them and their stakeholders.

2.2.2 Employees' Affective Commitment (EAC)

The affective component of organizational commitment refers to employees' affective attachment to determine, participate and interested as a member of the organizations (Allen et al. 1990). EAC is a reflection of the employee's emotional attachment to the organization. In addition, Meyer and Allen (1991) defined EAC as "the employee's emotional attachment to, identification with, and involvement in the organization" (p. 67). EAC includes altruism, compliance, the assistance of employees and motivation to engage in organized citizenship behavior (Mayer and Schoorman, 1992; Shore and

Wanyne, 1993). "Employees with strong EAC remain because they *want* to do so" (Allen et al. 1990, p. 11).

According to Mowday et al. (1982), the premise for connecting feelings with organizations of four categories: personal characteristics, work characteristics, work experience and structural characteristics, most notably experiences that meet employee's psychological needs to feel comfortable in the organization and competent in the job role. The meaning of an affective commitment includes both work behavior and a set of basic outcomes consistent with the personal health of employees (Brammer et al. 2007).

2.2.3 Employees' Organizational Citizenship Behaviors toward the Environment (EOCBE)

EOCBE has been described, categorized, and studied from numerous perspectives. EOCBE is defined as "voluntary behavior[s] not specified in official job descriptions that, through the combined efforts of individual employees, help to make the organization and/or society more sustainable" (Lamm et al. 2013, p.

165). In addition, according to Daily et al. 2009, p. 246, EOCBE is "discretionary acts by employees within the organization not rewarded or required that are directed toward environmental improvement". Employees engage in OCBE with a view that they want to show care to others so that their well-being could be established along with creating value towards organizational sustainability (Glavas and Kelley, 2014). The EOCBE reflects the employee's willingness to collaborate with his organization and his members to enact behaviors above and beyond his/her job role that is conducive to the natural environment (Daily et al. 2009, p. 246). EOCBE includes a range of actions such as paper recycling, duplex printing, and economical use of resources like water/electricity... Employees actively initiate more environmentally-friendly changes in their workplace policies and procedures.

EOCBE can rely on help and altruism within the workplace, encourage other employees to act for the environment, help solve environmental problems, cooperate with other departments, etc. Environmental sport skills can also be seen as a form of EOCBE, such as being able to withstand the difficulties associated with environmental initiatives and accepting the additional work and time required to implement it shows environmental actions (Boiral and Paillé, 2012).

2.2.4 Green Human Resource Management Practice (GHRMP)

Currently, companies are transforming their business strategies and efforts toward being more focused on the environment. Human resource management (HRM) must adjust its mission and expand its scope by incorporating environmental management to change the way it operates carrying out its core personnel functions (Angel Del Brio et al. 2008). Boudreau and Ramstad (2005) suggest that human resources can measure and impact employee sustainability, behavior, attitudes, knowledge, and motivation. Therefore, organizations can use HRM to provide and effectively implement environmental sustainability policies (Renwick et al., 2013).

GHRMP is designed to implement an organization's HRM strategy. GHRMP include recruiting and selection, training, performance management, rewarding and engaging to build green values as well as knowledge and skills related to green activities (Pless et al. 2012; Renwick et al. 2013; Tang et al. 2018).

Green recruitment and selection are candidates using tests to ensure that employees are positive about environmental issues as well as questions related to beliefs, values and knowledge, awareness of the environment (Renwick et al. 2013; Tang et al. 2018). Green training programs are designed not only to raise awareness, knowledge and skills of employees in green activities but also

to motivate all employees to participate in green initiatives (Fernandez et al. 2003).

Green training focuses on changing attitudes and emotional participation toward green goals (Bissing-Olson et al. 2013; Zibarras and Coan, 2015). Integrated green training not only includes comprehensive green programs but also links them to performance management systems, which is an approach to creating a green climate (Renwick et al. 2013; Tang et al. 2018). Green performance management involves evaluating their employees' performance in green management (Jabbour and Santos, 2008). In keeping with green performance management, nonfinancial rewards should be provided with financial incentives in the form of green tourism benefits, green taxes and green recognition. Employees should be allowed to participate in environmental management through green participation, including seeing a green vision, building a green learning environment, and various information channels, provide green activities and encourage green participation (Tang et al., 2018).

2.3 Hypotheses Development

2.3.1 Relationship between Employees' Corporate Environmental Responsibility Perception and Employees' Affective Commitment

The more environmentally responsible an employee perceives the organization to be, the greater the commitment. Long-term, affective employees with the company will respond by helping colleagues better integrate environmental concerns and suggest new ways to improve environmental practices (Boiral et al. 2018). Due to the commitment of affection towards a positive environment, the awareness level of employees increases significantly and in return, they learn to behave in an environmentally friendly manner. Employees start proposing ideas to improve existing company environmental activities.

This study focuses on exploring the relationship between EAC and ECERP in a model based on signaling theory. Signaling theory is commonly applied in employee commitment documents. Because it allows for exploring the impact of ECERP activities on employee commitments (Connelly et al. 2011). Although previous studies show that ECERP has a strong impact on employees' perceptions, little is known about the impact of ECERP on employee commitment, in particular EAC.

There are times when employees miss useful information of the company, causing unfortunate misunderstandings such as the company has no awareness of environmental protection and pollution. ECERP is becoming increasingly relevant as a determining factor for the attractiveness of employee commitment (Corinna Dögla and Dirk Holtbrüggea, 2014). Believe that, if employees can identify their environmental responsibility awareness for the company will lead to an increase in organizational commitment (Brammer et al. 2007). Therefore, signaling theory is related to reducing information asymmetry between two parties (Spence, 2002).

So, this study hypothesizes that:

H1: Employees' corporate environmental responsibility perception positively effects on employees' affective commitment.

2.3.2 Relationship between Employees' Affective Commitment and Employees' Organizational Citizenship Behaviors toward the Environment

Many studies have reported a positive relationship between organizational commitment and OCB (for example Gregersen, 1993; Shore and Wayne, 1993; Bishop, 2000). Furthermore, the environmental management document shows that employees' commitment at all levels of the organization is essential for sustainability (Cramer and Roes, 1993; Topf, 2000; Zutshi and Sohal, 2003). Therefore, this study argues that EAC (part of the organization's commitment)

is an important structure for OCB in general and the same will happen for EOCBE.

To the extent that individuals are willing to make efforts on behalf of the organization and accept its goals and values, they will direct their efforts in a way that they realize will accomplish the things that the organization values. Employees who have a strong emotional commitment to the organization are more likely to be involved in EOCBE than those who have a weak commitment to the organization.

Employees who are sympathetic to the company will be more proactive in organizational citizenship behavior towards their environment (i.e., more concerned about the corporate environment protection) and more likely to engage in activities to protect environmental protection. Employees who are not affective to the organization will have a supportive attitude towards a less positive environment and can act in a way that causes the company to pollute, not friendly with the environment (depending on their affective for the company). Due to affective commitment of employees to the company's environmental issues, the level of awareness and behavior of employees' environment increases significantly, so they learn to behave environment friendly. In addition, employees also began to propose ideas to improve existing corporate environmental activities (Cheema et al. 2020).

Employees who have an emotional commitment to an organization that positively influence their environmental behaviors such as voluntarily and enthusiastically participate in the corporate's environmental protection activities without prompting or asking for anything. They will feel excited, relaxed and happy for making a small contribution to the corporate environment.

Based on what has been said above, this study hypothesizes that employee affective will positively impact organizational citizen behavior towards the environment:

H2: Employees' affective commitment positively effects on employees' organizational citizenship behaviors toward the environment.

2.3.3 Relationship between Employees' Corporate Environmental Responsibility Perception and Employees' Organizational Citizenship Behaviors toward the Environment

Organizations are involved in ECERP activities to increase environmental sustainability (Rupp et al. 2015) and positive social change (Luu, 2018). ECERP activities create value for society and help solve environmental problems (Rupp et al., 2015). Luu (2018) found a positive relationship between ECERP and EOCBE. ECERP acts as a sustainable environmental force to promote EOCBE (Afsar et al. 2018). Therefore, an organization whose employees are aware of their environmental responsibilities can associate with one another to differentiate themselves from others and voluntarily participate in its environmental programs and activities.

For an organization to achieve ecological sustainability, it is important to understand how ECERP affects EOCBE. Employees in a business or organization can have a significant (positive or negative) impact on the overall outcome of their corporate sustainability strategy. All businesses and organizations need to promote employee engagement in green behaviors. ECERP is a sustainable force to motivate employees to participate in EOCBE (Afsar et al. 2018). ECERP to increase environmental sustainability and positive social change, create social value and help solve environmental problems (Luu, 2018).

Besides, companies promote ECERP activities to improve the natural environment and inspire their employees to go beyond their mandatory job

roles and demonstrate environmental behaviors, and they also helping colleagues build habits of environmental protection (Luu, 2018).

In addition, previous researchers applied the TPB to explain employees' perception of environmental protection behaviors, such as use of public transportation (Heath and Gifford, 2002), recycling behavior (Boldero, 1995; Mannetti et al. 2004), and pro-environmental behavior (Oreg and Katz-Gerro, 2006).

Because of these, based on the TPB, this study hypothesizes::

H3: Employees' corporate environmental responsibility perception positively effects on employees' organizational citizenship behaviors toward the environment.

2.3.4 The Mediator Role of Employees' Affective Commitment between Employees' Corporate Environmental Responsibility Perception and Employees' Organizational Citizenship Behaviors toward the Environment

Signaling theory is to highlight that the signaling effects of ECERP activities differ according to their visibility and perception by employees (Corinna Dögla and Dirk Holtbrüggea, 2014). Research by Henriques and Sadorsky (1999) shows that organizations that make policies for employees to sign emotional commitments to their company will be more active and actively involved in environmental management responsibilities than usual. GHRMP also mentions the use of ECERP to promote sustainable practices and enhance employee behavior and affective commitment to sustainable development issues (Mandip, 2012).

When companies devise and implement steering strategies towards environment improvement, addressing environmental issues and protecting the natural environment, employees have affective commitment a greater degree with these corporate and respond by helping their colleagues improve concerns

about the environment and propose new ways to improve environmental practices or implement them on an arbitrary basis (Boiral et al. 2018).

EAC has been used to mediate the relationship between ECERP and EOCBE. ECERP affects various discretionary and nonobligatory behaviors of employees through the mediation of EAC. ECERP aimed to benefit the society and environment is perceived by employees as attractive and motivating. In turn, EAC strongly with such organizations and show greater attachment to them. Employees would then try to reciprocate to the organization by engaging in behaviors that could bring further good to the organization and support its goals. One such type of behavior that organizations nowadays expect from their employees is to engage in energy conservation and sustainable behaviors to improve the quality of the natural environment and enhance environmental performance (Brammer et al., 2015), and it would support organizational values, mission, and goals. Organizations do incorporate environment protection, eco-innovative activities, environmental management, and initiatives to improve environmental performance into their values, goals, and objectives. If employees have affective and integrate these values into their self-concepts, it is reasonable to expect that they would engage in EOCBE directed towards the protection and improvement of the natural environment (Cheema et al. 2020).

Based on these, this study hypothesizes the following:

H4: Employees' affective commitment has a significant mediating effect on the relationship between employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment.

2.3.5 Relationship between Green Human Resource Management Practice and Employees' Organizational Citizenship Behaviors toward the Environment

In the GHRMP system, employees can acquire a large amount of green-related values, knowledge and skills from green training programs (Tang et al. 2018; Zibarras and Coan, 2015). The various communication channels in the GHRMP system can allow employees to be fully informed about environmental issues in their workplace (Tang et al. 2018). Employees are allowed to participate in quality improvement and address environmental issues. Possessing green-related resources from GHRMP, employees tend to invest their current resources in EOCBE beyond minimum expectations, spiritual experience to achieve resources (many knowledge, skills, and values for the community), as well as individual development of resources such as pride of the organization's green strategy and their contribution directly or indirectly through support assisting others to behave in an environmentally friendly manner (Luu, 2019).

GHRMP can create another outstanding organizational resource, that is, the green learning atmosphere among team members, which is more widely spread by official or informal media channels (Tang et al. 2018). In addition to this green learning atmosphere, green HRM activities have been reported to set standards as a roadmap for environmentally friendly employees (Ren et al. 2018). Therefore, green personnel activities are supposed to provide green-related resources (i.e., knowledge, values, norms and climate-related to green) for employees to engage in EOCBE.

Besides, signaling theory is applied to analyze the impact of different corporates environmental protection policies on employees and their affective (Corinna Dögla and Dirk Holtbrüggea, 2014). Employees who work in a reputable company with positive environmental policies are likely to commit

to sticking with the company and beyond their regular responsibilities to ensure a good company. Because employees often do not have complete information about the company's actual policies, so use signals to conclude the company's intentions and actions.

Luu (2019) reported the impact of green human resource practices may have positive relationships with individual and collective OCBE. Empirical evidence has been established for the association between GHRM and employee green behavior (Zibarras and Coan, 2015) as well as extra-role green behavior (Dumont et al. 2017). Therefore, we can expect that:

H5: Green human resource management practice positively effects on employees' organizational citizenship behaviors toward the environment.

2.3.6 The Moderator Role of Green Human Resource Management Practice between Employees' Corporate Environmental Responsibility Perception and Employees' Organizational Citizenship Behaviors toward the Environment

GHRMP requires all employees to be aware of the greening aspect and involvement of all employees is required in the organization to initiate GHRMP (Mwanja et al. 2018). Each employee of the firm must consider, perceive, and implement greening practices at their workplace. Green practices must be an integral part of the processes and workplace; various activities such as hiring, training, compensation, and performance evaluation must be kept green to implement GHRMP. Recently researchers have stated that to achieve environmental performance and sustainability firms must acquire effective HR and adopt effective HR policies and practices for effective and efficient utilization of human resources (Jermsittiparsert et al. 2019).

GHRMP enables firms to drive the organization to engage in environmental behaviors which help organizations to implement GHRMP and further influence environmental performance (Jermsittiparsert et al. 2019). Any

organization operating cannot act without the involvement of employees; employees possess employee knowledge, skills, productivity, and commitment towards their duties and being green and implement GHRMP (Young et al. 2015). GHRMP and employee with perception, intention to implement and adopt green aspects enhance competency with manufacturing business processes, reduction in cost and waste material, eliminate any damage to the environment, the greater efficiency must be achieved to reduce cost and adopt effective and beneficial business processes (Combs et al. 2006).

Current research uses the role of GHRMP to adjust the relationship between the impact of environmental protection responsibility perception on friendly behavior towards employees' environment (i.e. the degree to which employees complete necessary work tasks in an environmentally friendly manner, and proactive behavior in the environment (that is, the degree to which employees show personal initiative when acting in a friendly manner) environmentally friendly at work). Literature has found and stated that the greening function of HR plays important role in enhancing implementation, employees' perceive and donating to protect the environmental performance of organizations (Jermsittiparsert et al. 2019).

Wells et al. (2015) suggest that those employees who perceive their organizations have environmental responsibility display a greater propensity to contribute positively to the environment. However, the underlying mechanisms through which ECERP is related to EOCBE remains underdeveloped. Researchers have mostly examined direct positive relationships linking ECERP with OCBE and suggest that there could be intervening variables that can further explain the effect of ECERP on EOCBE (Luu, 2017; Tian and Robertson, 2017; Luu, 2018), particular is GHRMP. Therefore, this study hypothesizes that:

H6: Green human resource management practice has a significant moderating effect on the relationship between employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment.

CHAPTER THREE
RESEARCH METHODOLOGY

In this chapter, the purpose is to introduce the research framework model and hypotheses, along with measuring four research constructs. In addition, it also refers to the design of research methods to test hypotheses; presenting sampling plans, designing questionnaires, collecting and analyzing data.

3.1 Research Framework

Based on the results from all the hypotheses evaluated in chapter two, this study developed a research framework model, as shown in Figure 3-1 below.
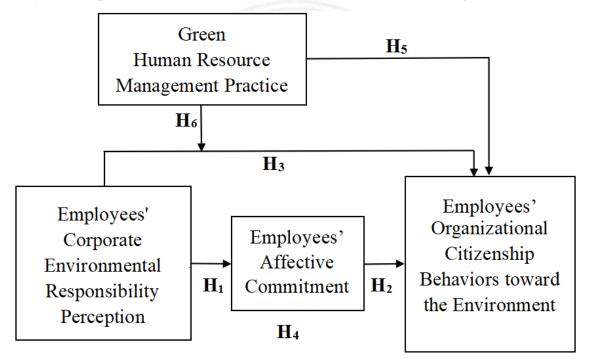
Figure 3.1: The framework model

Source: This study

According to the research model, the hypotheses for this study are:

Hypothesis 1 – H1: Employees' corporate environmental responsibility perception positively effects on Employees' affective commitment

Hypothesis 2 – H2: Employees' affective commitment positively effects on Employees' organizational citizenship behaviors toward the environment

Hypothesis 3 – H3: Employees' corporate environmental responsibility perception positively effects on Employees' organizational citizenship behaviors toward the environment

Hypothesis 4 – H4: Employees' affective commitment as a significant mediating effect on the relationship between employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment

Hypothesis 5 – H5: Green human resource management practice positively effects on Employees' organizational citizenship behaviors toward the environment

Hypothesis 6 – H6: Green human resource management practice has a significant moderating effect on the relationship between Employees' corporate environmental responsibility perception and Employees' organizational citizenship behaviors toward the environment

3.2 Research Design

This study uses quantitative research to solve hypotheses. This quantitative research method is mainly related to the forms of surveys in collecting, analyzing and interpreting data that researchers were proposed. The survey in this study included a questionnaire about the relevant variables that were carried out by employees working in manufacturing companies. Because these industries are mostly responsible for environmental pollution issues. By conducting a sample survey of each respondent, information about employees' corporate environmental responsibility perception and other constructs will be

displayed to test hypotheses and achieve the purpose of the investigation. Staff answered questions using a 7 point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Respondents were asked to rate the survey.

3.3 Research Instrument and Questionnaire Design

3.3.1 Research Instrument and Measurement

This study identified four research structures and assessed the correlation between these research structures. GHRMP, ECERP, EOCBE, EAC is the research structure. For each structure, the operational concept and the measurement items are also defined. There is a survey to collect data for research variables. The final detailed questionnaire was completed in English first, then carefully translated into Vietnamese (see Appendix I and Appendix II). The specific questionnaire for each construct will be shown below.

3.3.1.1 Employees' Corporate Environmental Responsibility Perception (ECERP)

ECERP used a thirteen items scale measurement adjusted from Corinna Dögla and Dirk Holtbrüggea (2014). Detailed questionnaires for ECERP are shown below:

❖ Green strategy and culture (3 items)

[GSC1] My firm encourage and reward corporate culture that fosters the environmental value

[GSC2] My firm takes full responsibility for our company's environmental impacts and liabilities

[GSC3] Protection and restoration are a green strategic priority

❖ Green technology and products (4 items)

[GTP1] My firm substitute our energy sources with renewable/alternate energy sources

[GTP2] My firm substitute our materials with green products materials

[GTP3] My firm reduce packaging material and introduce packaging made from recycled materials

[GTP4] My firm obtain ecological certification for products or services

❖ Green recruitment and evaluation (3 items)

[GRE1] Environmental knowledge and skills are criteria for the recruitment of potential employees

[GRE2] Environmental performance is a criterion used in the evaluation of our employees

[GRE3] My firm job descriptions contain environmental objectives

❖ Green communication (3 items)

[GCO1] My firm issue a formal report regarding corporate environmental performance

[GCO2] My firm communicate environmental performance indicators and goals

[GCO3] My firm measure our company's environmental performance

3.3.1.2 Green Human Resource Management Practice (GHRMP)

GHRMP is measured by Dumont et al. (2017) scale of six items. Employees' perception of GHRMP has been evaluated because many studies have evidenced that employees' working attitudes are more strongly affected by their perceptions of HRM than providing actual HRM as reported by managers (Den Hartog et al, 2013; Liao et al, 2009; Meijerink et al, 2018). Detailed questionnaires for GHRMP are shown below:

[GHR1] My firm sets green goals for its employees

[GHR2] My firm provides employees with green training to promote green values

[GHR3] My firm provides employees with green training to develop employees' knowledge and skills required for green management

[GHR4] My firm considers employees' workplace green behavior in performance appraisals

[GHR5] My firm relates employees' workplace green behaviors to rewards and compensation

[GHR6] My firm considers employees' workplace green behaviors in promotion

3.3.1.3 Employees' Organizational Citizenship Behaviors toward the Environment (EOCBE)

EOCBE used a ten items scale measurement adjusted from Boiral and Paillé (2012). The advantage of this scale is that it can apply to many different fields and organizations (Boiral et al. 2018). Detailed questionnaires for EOCBE are shown below:

[EOC1] In my work, I weigh the consequences of my actions before doing something that could affect the environment

[EOC2] I voluntarily carry out environmental actions and initiatives in my daily work activities

[EOC3] I make suggestions to my colleagues about ways to protect the environment more effectively, even when it is not my direct responsibility [EOC4] I actively participate in environmental events organized in and/or by my company

[EOC5] I stay informed of my company's environmental initiatives

[EOC6] I undertake environmental actions that contribute positively to the image of my organization

[EOC7] I volunteer for projects, endeavors or events that address environmental issues in my organization

[EOC8] I spontaneously give my time to help my colleagues take the environment into account in everything they do at work

[EOC9] I encourage my colleagues to adopt more environmentally conscious behavior

[EOC10] I encourage my colleagues to express their ideas and opinions on environmental issues

3.3.1.4 Employees' Affective Commitment (EAC)

Eight items were selected for inclusion in the EAC scale by Allen and Meyer (1990). Detailed questionnaires for EAC are shown below:

[EAC1] I would be very happy to spend the rest of my career with this organization

[EAC2] I enjoy discussing my organization with people outside it

[EAC3] I really feel as if this organization's problems are my own

[EAC4] I think that I could easily become as attached to another organization as I am to this one

[EAC5] I do not feel like 'part of the family' at my organization

[EAC6] I do not feel 'emotionally attached' to this organization

[EAC7] This organization has a great deal of personal meaning for me

[EAC8] I do not feel a strong sense of belonging to my organization

3.3.2 Questionnaire Design

According to Figure 3.1, the questionnaire of this study includes the following 4 constructs: (1) Employees' corporate environmental responsibility perception, (2) Employees' affective commitment, (3) Employees' organizational citizenship behaviors toward the environment, (4) Green human resource management practice.

The questionnaire for this study has 37 items and includes 4 sections. Each section asks respondents to express their opinions on ECERP, EAC, EOCBE, GHRMP. These are the number of methods that assist researchers in collecting data in which one method will involve the use of a scale. Likert scales are often used for measurement. For objective reasons, the information will be collected

by online survey methods. After collecting the answers, the data will be calculated to produce research results.

Respondents were asked how strongly he/she agreed or disagreed with a statement. This study uses a seven-point Likert scale that ranges from 1 = strongly disagree to 7 = strongly agree, to measure data. The answers to the questionnaire were analyzed statistically by SPSS 22.0, regarding the weight of the Likert scale.

3.3.3 Questionnaire Translation

This study was conducted in Vietnam with respondents who are employees in Vietnam. Therefore, Vietnamese plays an important role in data collection. First, the survey questionnaire was designed in English, then translated into Vietnamese by a professional translation company in Ho Chi Minh, Vietnam. The questionnaire was then translated back into English to check for corrections, incorrect words were deleted, and the final version was completed. The final version of the questionnaire in Vietnamese was completed after careful discussion and revision (see Appendix I and Appendix II). The questions have been translated into the Vietnamese version so the respondent can better understand and answer the questions carefully. The benefits of translation help respondents understand the meaning and structure of the answers. The definition of the question and the structure have been checked by the translator to match between the English and Vietnamese versions.

3.3.4. Sample and Data Collection

To explore the relationship among four constructs: ECERP, EAC, EOCBE, GHRMP; the survey will be implemented with a total of 300 respondents who are the current employees in Vietnam so that they could provide evaluate responses for the research. Those respondents have different positions, ages, education backgrounds, monthly income, and working experience as well as demographic factors, which guarantees the variety of

sample. Because of objective reasons, the information would be collected by the online survey method. After gathering the answers, the data would be computed to generate the research findings.

Data collection consisted of five steps. Firstly, identifying related research variables through literature review and advice from the thesis advisor. The second step was to complete the drafting of the survey questionnaire. Next, the third step, translating the research questionnaires into Vietnamese and then translate them back into English one more time to double-check the meaning of the items remained the same. Fourthly, running a pre-test of the Vietnamese questionnaires to check α (alpha). 50 respondents were invited for the pre-test, who are the current employees in Vietnam and 27 effective respondents were accepted. Based on the pre-test, an internal consistency reliability coefficient of each item was computed. If the consistency reliability coefficient of each question cannot be achieved, the questionnaire was modified one more time as a result to reach greater consistency. The final step was to deliver the Vietnamese questionnaire indirectly to Vietnamese respondents. When the data was completed, it could be used for analysis in the following step.

The data in this thesis was collected by sending 300 questionnaire items to employees in Vietnam. The sample planning was designed to ensure that the precise characteristics of respondents are encompassed in this study. The employees, who are working in Southern Vietnam, were asked for answering the survey. It took approximately two months (from July to August 2020) for completing the survey. In total, 300 survey questionnaires were delivered to the employees, and 270 were returned and used.

3.3.5 Pilot Test

Reliable questionnaires bring consistent results from repeating patterns and different researchers over time. Therefore, this study carried out a pilot study to ensure that all respondents understood the questions with the same

meaning, resulting in the accuracy, validity, and reliability of the data. Pilot testing is an important step that can be mentioned in a small-scale study that will help uncover design errors before comprehensive testing. Through this step, the researchers determine if the questionnaires are problematic and completely fix them before examining the larger observations.

According to Connelly (2008), the number of pilot samples is ten percent of the sample expected for larger research. The pilot test was conducted in the Vietnamese version to enhance the effectiveness of the questionnaire and selected four Vietnamese manufacturing companies. The pilot was conducted on the internet and sent 50 respondents to check the execution time, layout, words and question quality, reliability, validity, and reduce unrelated questions, especially not answering official surveys. Collected 27 effective responses from employees who submitted surveys. Respondents from different companies include different monthly income, ages, education levels, and work experience, to ensure feedback evaluation.

Therefore, this test data is analyzed in the reliability test to obtain an internal consistency of each item and component. Acceptable consistency levels will be reflected in values of α not less than 0.7 in this study. Cronbach's α results show that the questionnaire for each variable has a relatively higher coefficient of 0.7.

3.4 Data analysis method

Use SPSS 22.0 software to calculate data. To test the hypotheses developed from this study, five methods were applied:

• Descriptive Statistic Analysis

• Factor Analysis and Reliabilities Test

• Independent T-test

• ANOVA (stand for analysis of variance)

• Multiple regression analysis

3.4.1 Descriptive Statistics

Descriptive statistics are applied as the first level of analysis. It is used to explain the characteristics of all variables in quantitative terms. Descriptive statistics calculate the frequency, means, average value, percentage, range and standard deviation of each variable in the study. Descriptive statistical analysis is extremely helpful.

3.4.2 Factor Analysis and Reliabilities Test

3.4.2.1 Factor Analysis

The purpose of factor analysis is to analyze the basic variance structure of a set of correlation coefficients. It may be related to probing and validation purposes. Factor analysis is used to summarize or reduce data on a large number of variables into some explainable basic factors. Moreover, the relationship of each variable with the base element is represented by the so-called factor loading. According to Hair et al. (2010), items will be deleted unless they adapt to the factor loading requirement of more than 0.6. Measurements with a coefficient factor loading greater than 0.6 will be selected as members of a particular factor. At the end of the factor load analysis, the study will use reliability to test Cronbach's α and the correlation between the entries.

The factor loading analysis criteria include: Kaiser-Meyer-Olkin Measure (KMO) is above 0.5, Factor Loading is above 0.6, Eigenvalue >1, Explained Variance >0.6 (this is to reduce the number of items/questions to explain the factor), Difference between loadings >0.3 (the highest loading minus the second-highest loading should be at least be bigger than 0.3), Item-to-total correlation >0.5 (This is the relationship between the item and the total, and what part of the total the item represents) Communality >0.5, Cronbach's alpha >0.6 (Hair et al. 2010).

3.4.2.2 Reliabilities Test

The reliability test is performed after the factor analysis results. After running the reliability test of the structures, the correlation between items and Cronbach's α will be displayed. Cronbach's α must be above 0.6 and Item-to-total correlation must be greater than 0.5 and KMO must be higher than 0.5. Correlated items lower than 0.5 will be deleted from the analysis (Hair et al. 2010).

3.4.3 Independent T-test

To test whether the significant difference between the means of the two groups is related to a variable, the independent t-test is used in this case. In this study, it was applied to compare the differences between male and female employees in the four constructs.

3.4.4 One-way Analysis of Variance (ANOVA)

To test whether the significant difference between the means of more than two independent groups is related to a variable, one-way variance analysis is used in this case. The result will be significant if the F value is above 4 and the p-value is below 0.05 (Hair et al. 2010).

3.4.5 Regression Analysis

There are two types of regression analysis used in this study:

Multiple regression analysis is used to analyze the relationship between a single dependent variable and several independent variables. Another goal of multiple regression is to maximize the overall predictability of the independent variables as expressed in the variance. Multiple regression analysis can also meet the goal of comparing two or more independent variables to determine the predictability of each variable. The analysis results will be significant when the square of R is higher than 0.1, the correlation is higher than 0.3, the F value is higher than 4, the VIF is lower than 3, the Durbin-Watson Statistic (DW) index is between 1.5 and 2.5 and p-value is lower than 0.05 (Hair et al. 2010).

Because there is a moderator variable in the framework of the research model, it is necessary to examine the effect of the moderation variable on the relationship between the independent and dependent variables. The method named *hierarchical regression analysis* is performed.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

In this chapter, the results of the study have been presented. The first section was the descriptive analysis of the respondents including demographics, characteristics of respondents, and the measurement results of variables. The result of the factor loading, independent T-test, common method variance, measurement model, structural model.

4.1 Descriptive Analysis

To have a better understanding of the characteristics of research structure and demographic information, descriptive statistics analysis was performed to illustrate the mean and standard deviation for all of the research variables as well as the frequency for demographic information was conducted in this section.

4.1.1 The Characteristics of Respondents

There are six control variables, which present characteristics of respondents in this research: gender, age, educational background, working experience, working position, and monthly income.

Table 4.1 below would show these factors, in total 270 effective respondents, female respondents are 51.1% while man respondents are 48.2%.

In this research area on this group of age: 51.9% (n=140) of them are from 26 to 35 years old; and 38.1% (n=103) of respondents are from 18 to 25 years old; while only 10.0% (n=27) of them are from 36 to 45 years old. Not any answerer had high than 45 years old.

University is educational background of a large portion of research's respondents, which is 76.3% (n=206); while percentage of respondents who have college, high school, master and above master degree are 9.6% (n=26), 6.7% (n=18) and 1.5% (n=4) respectively. This proves the general requirement

of recruiters about qualification as well as the knowledge and skills of applicants in Vietnam nowadays.

About the working experience, the rate of the respondents has less than 1 years 12.6% and 61.1% of them were from 1 to 5 years. The percent of the total number of respondents who have 6-10 years of working time is 23.0%, and those who have more than 10 years get 3.3 %.

Most of the respondents are employees (74.1%), 12.6% of them are supervisors, about 7.0% of the respondents are the captain and 6.3% of the respondents are the manager.

Finally, the largest portions of respondents, which is 45.2%, have a monthly income of 10-20 million VND. Less than 10 million VND is 31.9%. 21-30 million VND is 13.0%, while only 7.0% and 3.0% of respondents have 31-40 million VND and large than 40 million VND respectively.

Table 4.1: Characteristics of Respondents (n=270)

Item	Description	Frequency	Percentage (%)
Gender	Male	132	48.9
	Female	138	51.1
Age	18–25	103	38.1
	26–35	140	51.9
	36–45	27	10.0
Education	High school	18	6.7
	College	26	9.6
	University	206	76.3
	Master	16	5.9
	Above Master	4	1.5
Working experience	<1 year	34	12.6
	1–5 years	165	61.1
	6–10 years	62	23.0
	>10 years	9	3.3

Table 4.1: Characteristics of Respondents (Continue)

Item	Description	Frequency	Percentage (%)
Current position	Employee	200	74.1
	Supervisor	34	12.6
	Captain	19	7.0
	Management	17	6.3
Monthly income	<10 million	86	31.9
	10–20 million	122	45.2
	21–30 million	35	13.0
	31–40 million	19	7.0
	>40 million	8	3.0

Source: This study

4.1.2 Descriptive Statistics of Questionnaire Items

Table 4.2 below shows the descriptive statistics of research variables for 270 respondents. There are 37 questionnaire items in this research in terms of mean value and standard deviation for each item, which presents the tendency of respondents' choice for a particular construct. There are 13 items for Employees' Corporate Environmental Responsibility Perception, 6 items for Green Human Resource Management Practice, 10 items for Employees' Organizational Citizenship Behaviors toward the Environment, 8 items for Employees' Affective Commitment. Most of the mean values are above 5 for all the items in research constructs of the framework, which indicated the high agree levels of respondents.

Table 4.2: Results of Mean and Standard Deviation of Items

Items	Descriptions	Mean	Standard Deviation
Employees' Corporate Environmental Responsibility Perception			
Green strategy and culture			
GSC1	My firm encourage and reward corporate culture that fosters the environmental value	5.49	1.284
GSC2	My firm takes full responsibility for our company's environmental impacts and liabilities	5.33	1.299
GSC3	Protection and restoration are a green strategic priority	5.23	1.288
Green technology and products			
GTP1	My firm substitute our energy sources with renewable/alternate energy sources	5.68	1.135
GTP2	My firm substitute our materials with green products materials	5.64	1.186
GTP3	My firm reduce packaging material and introduce packaging made from recycled materials	5.71	1.159
GTP4	My firm obtain ecological certification for products or services	5.73	1.143
Green recruitment and evaluation			
GRE1	Environmental knowledge and skills are criteria for the recruitment of potential employees	5.63	1.203
GRE2	Environmental performance is a criterion used in the evaluation of our employees	5.71	1.243
GRE3	My firm job descriptions contain environmental objectives	5.72	1.151
Green communication			
GCO1	My firm issue a formal report regarding corporate environmental performance	5.36	1.256
GCO2	My firm communicate environmental performance indicators and goals	5.63	1.206
GCO3	My firm measure our company's environmental performance	5.53	1.197

Table 4.2: Results of Mean and Standard Deviation of Items (Continue)

Items	Descriptions	Mean	Standard Deviation
Green Human Resource Management Practice			
GHR1	My firm sets green goals for its employees	5.54	1.320
GHR2	My firm provides employees with green training to promote green values	5.32	1.400
GHR3	My firm provides employees with green training to develop employees' knowledge and skills required for green management	5.59	1.191
GHR4	My firm considers employees' workplace green behavior in performance appraisals	5.53	1.278
GHR5	My firm relates employees' workplace green behaviors to rewards and compensation	5.69	1.114
GHR6	My firm considers employees' workplace green behaviors in promotion	5.48	1.290
Employees' Organizational Citizenship Behaviors toward the Environment			
EOC1	In my work, I weigh the consequences of my actions before doing something that could affect the environment	5.16	1.444
EOC2	I voluntarily carry out environmental actions and initiatives in my daily work activities	4.77	1.548
EOC3	I make suggestions to my colleagues about ways to protect the environment more effectively, even when it is not my direct responsibility	5.29	1.281
EOC4	I actively participate in environmental events organized in and/or by my company	5.13	1.403
EOC5	I stay informed of my company's environmental initiatives	5.46	1.248
EOC6	I undertake environmental actions that contribute positively to the image of my organization	4.89	1.676

Table 4.2: Results of Mean and Standard Deviation of Items (Continue)

Items	Descriptions	Mean	Standard Deviation
Employees' Organizational Citizenship Behaviors toward the Environment			
EOC7	I volunteer for projects, endeavors or events that address environmental issues in my organization	5.04	1.414
EOC8	I spontaneously give my time to help my colleagues take the environment into account in everything they do at work	5.11	1.448
EOC9	I encourage my colleagues to adopt more environmentally conscious behavior	4.95	1.512
EOC10	I encourage my colleagues to express their ideas and opinions on environmental issues	5.07	1.496
Employees' Affective Commitment			
EAC1	I would be very happy to spend the rest of my career with this organization	5.43	1.244
EAC2	I enjoy discussing my organization with people outside it	5.27	1.292
EAC3	I really feel as if this organization's problems are my own	5.30	1.297
EAC4	I think that I could easily become as attached to another organization as I am to this one	5.48	1.234
EAC5	I do not feel like 'part of the family' at my organization	5.41	1.287
EAC6	I do not feel 'emotionally attached' to this organization	5.34	1.280
EAC7	This organization has a great deal of personal meaning for me	5.41	1.324
EAC8	I do not feel a strong sense of belonging to my organization	5.40	1.317

Source: This study

4.2 Factor Analysis and Reliability Tests

To identify the dimensionalities and reliability of the research constructs, the measurement items' purification procedure is conducted as necessary. The purification process including factor analysis, correlation analysis, and internal consistency analysis (Cronbach's alpha) was conducted. After factor analysis,

to identify the internal consistency and reliability of the construct measurement, the item-to-total correlation, Cronbach's alpha are calculated.

Kaiser-Meyer-Olkin Measure (KMO) greater than 0.5, factor loadings are higher than 0.6, and the difference of factor loadings between each other is greater than 0.3, accumulated explained variance >0.6, Item-to- total correlation >0.5, and Cronbach's alpha (α) >0.6 were also adopted. In this study, all the items loading exceed 0.60, and Cronbach's alpha (α) exceeds 0.7. The complete results of the factor analysis and reliability test were presented from Table 4.3 to Table 4.6.

4.2.1 Employees' Corporate Environmental Responsibility Perception (ECERP)

Table 4.3 presents the results of factor loading for the measurement of ECERP. There is a total of thirteen variables and four factors were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6.

Green strategy and culture (GSC) has the highest factor loading of 0.926 (GSC2), and the lowest is GSC1 with a factor loading of 0.895. KMO is 0.745 and the variance explained by this factor was 83.280%. All variables within this factor had a coefficient of item-to-total correlation are greater than 0.5 (0.834 - 0.884), Cronbach's α = 0.900, eigenvalue = 2.498. Based on all criteria, can conclude that the reliability and internal consistency of this factor are acceptable.

Green technology and products (GTP) has the highest factor loading of 0.885 (GTP1), and the lowest is GTP4 with a factor loading of 0.868. KMO is 0.829 and the variance explained by this factor was 77.086%. All variables within this factor had a coefficient of item-to-total correlation are greater than 0.5 (0.868 - 0.877), Cronbach's α = 0.901, eigenvalue = 3.083. Based on all

criteria, can conclude that the reliability and internal consistency of this factor are acceptable.

Green recruitment and evaluation (GRE) has the highest factor loading of 0.924 (GRE3), and the lowest is GRE1 with a factor loading of 0.910. KMO is 0.754 and the variance explained by this factor was 83.975%. All variables within this factor had a coefficient of item-to-total correlation are greater than 0.5 (0.851 - 0.871), Cronbach's α = 0.905, eigenvalue = 2.519. Based on all criteria, can conclude that the reliability and internal consistency of this factor are acceptable.

Green communication (GCO) has the highest factor loading of 0.910 (GCO3), and the lowest is GCO1 with a factor loading of 0.848. KMO is 0.717 and the variance explained by this factor was 78.961%. All variables within this factor had a coefficient of item-to-total correlation are greater than 0.5 (0.776 - 0.872), Cronbach's α = 0.866, eigenvalue = 2.369. Based on all criteria, can conclude that the reliability and internal consistency of this factor are acceptable.

Table 4.3: Results of Factor Analysis and Reliability Tests on ECERP

Items	Factor loading	Eigenvalue	Cumulative Explained Variance	Item-to-total correlation	Cronbach's alpha
GSC2	0.926			0.834	
GSC3	0.916	2.498	83.280	0.851	0.900
GSC1	0.895			0.884	
GTP1	0.885			0.868	
GTP2	0.884	3.083	77.086	0.869	0.901
GTP3	0.875			0.873	
GTP4	0.868			0.877	

Table 4.3: Results of Factor Analysis and Reliability Tests on ECERP

(Continue)

Items	Factor loading	Eigenvalue	Cumulative Explained Variance	Item-to-total correlation	Cronbach's alpha
GRE3	0.924			0.851	
GRE2	0.915	2.519	83.975	0.866	0.905
GRE1	0.910			0.871	
GCO3	0.910			0.776	
GCO2	0.907	2.369	78.961	0.782	0.866
GCO1	0.848			0.872	

Source: This study

4.2.2 Green Human Resource Management Practice (GHRMP)

Table 4.4 presents the results of factor loading for the measurement of GHRMP. There is a total of six variables were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. GHR3 has the highest factor loading of 0.861, and the lowest is GHR1 with a factor loading of 0.701. KMO is 0.882 and the variance explained by this factor was 62.923%. All variables within this factor had a coefficient of item-to-total correlation are greater than 0.5 (0.585 - 0.779), Cronbach's α = 0.881, eigenvalue = 3.775. Based on all criteria, can conclude that the reliability and internal consistency of this factor are acceptable.

Table 4.4: Results of Factor Analysis and Reliability Tests on GHRMP

Items	Factor loading	Eigenvalue	Cumulative Explained Variance	Item-to-total correlation	Cronbach's alpha
GHR3	0.861			0.779	
GHR4	0.834			0.735	
GHR5	0.818	3.775	62.923	0.717	0.881
GHR2	0.818			0.720	
GHR6	0.714			0.596	
GHR1	0.701			0.585	

Source: This study

4.2.3 Employees' Organizational Citizenship Behaviors toward the Environment (EOCBE)

Table 4.5 presents the results of factor loading for the measurement of GHRMP. There is a total of ten variables were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. EOC8 has the highest factor loading of 0.894, and the lowest is EOC10 with a factor loading of 0.664. KMO is 0.914 and the variance explained by this factor was 60.852%. All variables within this factor had a coefficient of item-to-total correlation are greater than 0.5 (0.595 - 0.855), Cronbach's α = 0.927, eigenvalue = 6.085. Based on all criteria, can conclude that the reliability and internal consistency of this factor are acceptable.

Table 4.5: Results of Factor Analysis and Reliability Tests on EOCBE

Items	Factor loading	Eigenvalue	Cumulative Explained Variance	Item-to-total correlation	Cronbach's alpha
EOC8	0.894			0.855	
EOC9	0.848			0.800	
EOC7	0.842			0.790	
EOC2	0.813			0.758	
EOC1	0.782	6.085	60.852	0.720	0.927
EOC4	0.776			0.715	
EOC6	0.721			0.656	
EOC5	0.717			0.651	
EOC3	0.714			0.645	
EOC10	0.664			0.595	

Source: This study

4.2.4 Employees' Affective Commitment (EAC)

Table 4.6 presents the results of factor loading for the measurement of GHRMP. There is a total of eight variables were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. EAC6 has the highest factor loading of 0.909, and the lowest is EAC3 with a factor loading of 0.772. KMO is 0.921 and the variance explained by this factor was 71.792%. All variables within this factor had a coefficient of item-to-total correlation are greater than 0.5 (0.706 - 0.875), Cronbach's $\alpha = 0.943$, eigenvalue = 5.743. Based on all criteria, can conclude that the reliability and internal consistency of this factor are acceptable.

Table 4.6: Results of Factor Analysis and Reliability Tests on EAC

Items	Factor loading	Eigenvalue	Cumulative Explained Variance	Item-to-total correlation	Cronbach's alpha
EAC6	0.909			0.875	
EAC5	0.891			0.850	
EAC2	0.871			0.827	
EAC4	0.855	5.743	71.792	0.806	0.943
EAC8	0.838			0.786	
EAC1	0.831			0.774	
EAC7	0.802			0.740	
EAC3	0.772			0.706	

Source: This study

4.3 Independent Sample T-test

To identify the differences between males and females of four constructs. The independent sample t-test was used to compare means for group male and group female employees on their perception of ECERP, GHRMP, EOCBE, EAC in this study. The difference is considered as significance whether p-value < 0.05 and absolute value of t-value >= 1.96.

The independent t-test results were present in Table 4.7. It showed that there is no significant difference in the agreement level of respondents of different sexes in three constructs ECERP, GHRMP, EOCBE. Except for the EAC construct, t-test results indicated that there are differences between males and females in this construct (Male respondents higher than female respondents with mean = 5.5653 and 5.2002 respectively).

Table 4.7: Independent T-test Results

Constructs	Male Employees	Female Employees	t-value	p-value
	N=132	N=138		
ECERP	5.6509	5.4905	1.445	0.150
GHRMP	5.6364	5.4179	1.802	0.073
EOCBE	5.2098	4.9696	1.760	0.080
EAC	5.5653	5.2002	2.795	0.006**

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: This study

4.4 One-way Analysis of Variance (ANOVA)

One-way ANOVA was used in this research to identify the significant difference among two or more groups of respondents' ages, educational backgrounds, positions, working experience, and monthly income based on the mean score of each construct in each group. The one-way ANOVA produces a one-way analysis of variance of a quantitative dependent variable by a single factor as known as the independent variable.

4.4.1 Age

There is no significant difference in the four constructs among different age levels. All four constructs checked with ANOVA have p-value larger than 0.05.

Table 4.8: Results of the Different Level of Age among the Four Constructs

Constructs	18 - 25 years old N = 103 (1)	26 – 35 years old N = 140 (2)	35 - 45 years old N = 27 (3)	F-value	p-value	Differences between group
ECERP	5.6453	5.5341	5.4587	0.656	0.520	N.S
GHRMP	5.5502	5.5143	5.4815	0.066	0.936	N.S
EOCBE	5.1612	5.0800	4.8407	0.871	0.420	N.S
EAC	5.4381	5.3732	5.1806	0.603	0.548	N.S

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: This study

4.4.2 Educational Background

There is no significant difference in the four constructs among different educational background levels. All four constructs checked with ANOVA have p-value larger than 0.05.

Table 4.9: Results of the Different Level of Education among the Four Constructs

Constructs	High school N = 18 (1)	College N = 26 (2)	University N = 206 (3)	Master N = 16 (4)	Above Master N = 4 (5)	F-value	p-value	Differences between group
ECERP	5.5769	5.6036	5.5523	5.6635	5.7885	0.126	0.973	N.S
GHRMP	5.7870	5.6667	5.4498	5.8437	6.0000	1.370	0.244	N.S
EOCBE	4.9222	5.2308	5.0830	5.0625	5.2000	0.212	0.931	N.S
EAC	5.2778	5.5769	5.3568	5.4688	5.3125	0.304	0.875	N.S

Note: *** $p < 0.001$, ** $p<0.01$, * $p< 0.05$

Source: This study

4.4.3 Working Experience

There is no significant difference in the four constructs among different working experience levels. All four constructs checked with ANOVA have p-value larger than 0.05.

Table 4.10: Results of the Different Level of Working Experience among the Four Constructs

Constructs	< 1 year N = 34 (1)	1–5 years N = 165 (2)	6–10 years N = 62 (3)	> 10 years N = 9 (4)	F-value	p-value	Differences between group
ECERP	5.7398	5.5217	5.6154	5.4701	0.629	0.597	N.S
GHRMP	5.7451	5.4909	5.4892	5.5556	0.640	0.590	N.S
EOCBE	5.0765	5.1509	4.9210	5.1000	0.625	0.599	N.S
EAC	5.3125	5.4220	5.2782	5.5278	0.360	0.782	N.S

Note: *** p < 0.001, ** p<0.01, * p< 0.05

Source: This study

4.4.4 Working Position

There is no significant difference in the four constructs among different experience position levels. All four constructs checked with ANOVA have p-value larger than 0.05.

Table 4.11: Results of the Different Level of Working Position among the

Four Constructs

Constructs	Employee N = 200 (1)	Supervisor N = 34 (2)	Captain N = 19 (3)	Management N = 17 (4)	F-value	p-value	Differences between group
ECERP	5.5596	5.6584	5.7004	5.3529	0.560	0.642	N.S
GHRMP	5.5333	5.5588	5.4737	5.4118	0.106	0.957	N.S
EOCBE	5.1255	4.9765	4.9421	5.0176	0.311	0.817	N.S
EAC	5.3994	5.4412	5.3092	5.0882	0.490	0.690	N.S

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: This study

4.4.5 Monthly Income

There is no significant difference in the four constructs among different monthly income levels. All four constructs checked with ANOVA have p-value larger than 0.05.

Table 4.12: Results of the Different Level of Monthly Income among the Four

Constructs

Constructs	<10 million N = 86 (1)	10–20 million N = 122 (2)	21–30 million N = 35 (3)	31–40 million N = 19 (4)	>40 million N = 8 (5)	F-value	p-value	Differences between group
ECERP	5.4204	5.6387	5.6088	5.7935	5.3942	1.125	0.345	N.S
GHRMP	5.3760	5.6216	5.5095	5.5965	5.5417	0.787	0.535	N.S
EOCBE	5.0581	5.1598	5.1457	4.8684	4.5500	0.797	0.528	N.S
EAC	5.2442	5.4928	5.4179	5.3421	5.0000	0.925	0.450	N.S

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: This study

4.5 Regression Analysis

4.5.1 Correlation among the Four Constructs

The table below showed the relationship between each pair of a factor in the framework. As the results presented, the highest mean score among the four constructs was 5.5689, belonged to ECERP with a standard deviation equal to 0.91377. On the other hand, the factor, which had the lowest mean score was EOCBE with 5.0870 of average score and 1.12584 of standard deviation. As the table showed, each construct in the research model has a positively significant correlation with the others.

First, when it comes to the relationship between ECERP with GHRMP, EOCBE as well as EAC, the positive relation was set with r = 0.820 for the former, 0.618 for the middle, and 0.420 for the latter, when the p-value was both lower than 0.01 with two stars significance. Second, GHRMP also showed the positive correlation with EOCBE (r=0.550, p<0.01), and EAC (r=0.665, p<0.01). Third, EOCBE was also found to be positively correlated with EAC (r=0.682, p<0.01).

The pair with the closest relationship among four constructs belongs to ECERP with GHRMP. The weakest correlation is between GHRMP and EOCBE.

Table 4.13: Results of Correlation of the Research Constructs (N=270)

Constructs	ECERP	GHRMP	EOCBE	EAC	Mean	Std. Dev
ECERP	1				5.5689	.91377
GHRMP	.820**	1			5.5247	.99980
EOCBE	.618**	.550**	1		5.0870	1.12584
EAC	.725**	.665**	.682**	1	5.3787	1.08646

**. Correlation is significant at the 0.01 level (2-tailed)

r = Sample correlation coefficient

Source: This study

4.5.2 The Influence of Employees' Corporate Environmental Responsibility Perception and Employees' Affective Commitment, on Employees' Organizational Citizenship Behaviors toward the Environment

Table 4.14 below showed how ECERP and EAC affect EOBCE of the employee in Vietnam, specifically, employees working in manufacturing companies.

Table 4.14: Result of the Influence of ECERP, and EAC on EOCBE

Independent Variables	Dependent Variable		
	EOCBE		EAC
	Model 1	Model 2	Model 3
ECERP	0.618***		0.725***
EAC		0.682***	
R^2	0.381	0.465	0.525
Adj-R^2	0.379	0.463	0.524
F-value	165.287	233.039	296.693
P-value	0.000	0.000	0.000
Durbin-Watson	2.010	2.034	1.791
VIF	1.000	1.000	1.000

Note: *** $p < 0.001$, ** $p<0.01$, * $p< 0.05$

β = Standardized coefficient

Source: This study

Model 1 shows that ECERP has a significantly positive influence on EOCBE with $\beta = 0.618$, $p < 0.001$. Furthermore, the results show that $R^2 = 0.381$ and adjust $R^2 = 0.379$, it means that 37.9% variance of EOCBE can be explained by an independent variable namely ECERP. Additionally, F-value = 165.287 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H3 is

supported, Employees' corporate environmental responsibility perception positively effects on Employees' organizational citizenship behaviors toward the environment.

Model 2 shows that EAC has a significantly positive influence on EOCBE with $\beta = 0.682$, $p < 0.001$. Furthermore, the results show that $R^2 = 0.465$ and adjust $R^2 = 0.463$, it means that 46.3% variance of EOCBE can be explained by an independent variable namely EAC. Additionally, F-value = 233.039 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H2 is supported, Employees' affective commitment positively effects on Employees' organizational citizenship behaviors toward the environment.

Model 3 shows that ECERP has a significantly positive influence on EAC with $\beta = 0.725$, $p < 0.001$. Furthermore, the results show that $R^2 = 0.525$ and adjust $R^2 = 0.524$, it means that 52.4% variance of EAC can be explained by an independent variable namely ECERP. Additionally, F-value = 296.693 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H1 is supported, Employees' corporate environmental responsibility perception positively effects on Employees' affective commitment.
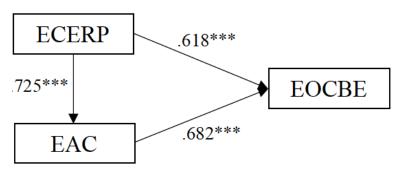

Figure 4.1: Influence of ECERP and EAC on EOCBE

Source: This study

4.5.3 The Mediating Effect of Employees' Affective Commitment

To test how EAC mediates on the relationship between ECERP and EOCBE (H4), this study adopts Baron and Kenny's (1986) approach. According to Baron and Kenny's (1986), "to establish mediation, the following conditions must hold: First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation. If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. Perfect mediation holds if the independent variable has no effect when the mediator is controlled."

Then, to test if the mediation effects are statistically significant, researchers may choose one of the various methods as the Test of Joint Significance, Sobel Test, or Bootstrapped Confidence Intervals.

Table 4.15 and 4.16 below will show these.

Table 4.15: Mediation Test of EAC between ECERP and EOCBE

Constructs	EAC	EOCBE		
		Model 1	Model 2	Model 3
ECERP	0.725***	0.618***		0.260***
EAC			0.682***	0.494***
R^2	0.525	0.381	0.465	0.497
Adj-R^2	0.524	0.379	0.463	0.493
F-value	296.693	165.287	233.039	131.982
P-value	0.000	0.000	0.000	0.000
D-W	1.791	2.010	2.034	2.045
VIF	1.000	1.000	1.000	2.107

Note: *** p < 0.001, ** p<0.01, * p< 0.05

Source: This study

According to table 4.15, Model 1 tested the relationship between ECERP (independent variable) and EAC (mediator variable). The results show that ECERP is significant and positively affected to EAC ($\beta = 0.725$, $p < 0.001$). Next, ECERP and EAC are the independent variables and EOCBE is inputted as a dependent variable in Model 2 and Model 3 respectively; the results performed that both of them are significant and positively affected to EOCBE. For ECERP, $\beta = 0.618$, $p < 0.001$; for EAC, $\beta = 0.682$, $p < 0.001$. Finally, ECERP and EAC regressed with EOCBE ($\beta = 0.260$, $p < 0.001$; $\beta = 0.494$, $p < 0.001$) in Model 4. The results in Model 4 showed that $R^2 = 0.497$ and the adjusted $R^2 = 0.493$, meaning that 49.30% of the variance in EOCBE can be predicted from ECERP and EAC. F-value = 131.985 (p-value < 0.001) is significant, meaning that this linear regression model provides a good fit to the data. We don't need to worry about multicollinearity because VIF is 2.107 (lower than 3).

According to the results above, the beta value of ECERP decreases from 0.618 in Model 2 to 0.260 in Model 4, besides, both ECERP and EAC have a

significant correlation with EOCBE. Hence, H4 is supported, EAC generates a partial mediation effect on the relationship between ECERP and EOCBE.
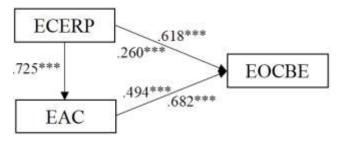

Figure 4.2: Mediating Effect of EAC on the Relationship of ECERP and EOCBE

Source: This study

According to Preacher and Hayes (2004), the Sobel test and Bootstrapped Confidence Intervals test were applied in this research to modify the mediating effect. Firstly, without presence of EAC, ECERP was significantly regressed on EOCBE with $\beta = 0.7610$, Standard Error = 0.0592, t-value = 12.8564 > 1.96 and p-value = 0.0000. Secondly, ECERP was significantly regressed on the mediator EAC as well with $\beta = 0.8618$, Standard Error = 0.0500, t-value = 17.2248 > 1.96 and p-value = 0.0000. Thirdly, when ECERP was controlled, the mediator EAC was significantly regressed on EOCBE with $\beta = 0.5116$, Standard Error = 0.0653, t-value = 7.8368 > 1.96 and p-value = 0.0000. Fourthly, when the mediator was controlled, ECERP was significantly regressed on EOCBE with $\beta = 0.3201$, Standard Error = 0. 0776, t-value = 4.1240 > 1.96 and p-value = 0.0000. The results showed in the table below also indicated that the Sobel test is significant with the z-value = 7.1233 (higher than 1.96, meaning that p < 0.05), on the other hand, the value of the mediating effect is 0.4409. Besides, Bootstrap confidence intervals (CIs) were determined to verify the results of the Sobel test; the results of bootstrapping also presented the same value of mediating effect with CIs are between 95% and 5% (not including 0) and significant. Those provide evidence to prove that there is a

partial mediating effect of EAC on the relationship between ECERP and EOCBE. Therefore, H4 received confirmation.

Table 4.16: The Results of the Regression Analysis of the Indirect Effects of ECERP on EOCBE

Direct effect and the total effect		B	SE	t	p
ECERP -> EOCBE		.7610	.0592	12.8564	.0000
ECERP -> EAC		.8618	.0500	17.2248	.0000
EAC -> EOCBE, ECERP is controlled		.5116	.0653	7.8368	.0000
ECERP -> EOCBE, EAC is controlled		.3201	.0776	4.1240	.0000
Indirect effect and significance using the normal distribution					
	Value	SE	LL95%CI	UL95%CI	z	p
Sobel	.4409	.0619	.3196	.5622	7.1233	.0000
Bootstrap results for indirect effects					
	Value	SE	LL95%CI	UL95%CI	Mean	p
Effect	.4409	.0728	.2920	.5863	.4376	.0000

Note: *** p < 0.001, ** p<0.01, * p< 0.05

N= 270, Number of Bootstrap Resamples = 1000

LL = Lower Limit, CI = Confidence Interval; UL = Upper Limit;

β = Unstandardized Coefficient

Source: This study

4.5.4 The Moderating Effect of Green Human Resource Management Practice between Employees' Corporate Environmental Responsibility Perception and Employees' Organizational Citizenship Behaviors toward the Environment

To test the moderating effects of Green Human Resource Management Practice, the study followed Baron & Kenny's (1986) procedure for applying the hierarchical regression test, creating the interaction term after inserting the main impact from the interacting variables. All of the variables related to the

interaction terms were centered to minimize multicollinearity problems (Aiken et al., 1991).

Table 4.17 presents the results of a hierarchical regression analysis that considered the moderating effects of Green human resource management practice on the relationship between Employees' corporate environmental responsibility perception and Employees' organizational citizenship behaviors toward the environment. Besides, Table 4.17 also showed how GHRMP affect EOBCE of the employee in Vietnam, specifically, employees working in manufacturing companies.

Table 4.17: The Moderating Effects of GHRMP on the Relationship between ECERP and EOCBE

Variables	EOCBE			
	Model 1	Model 2	Model 3	Model 4
Independent variable **ECERP**	.618***		.508***	.528***
Moderating variable **GHRMP**		.550***	.134	.135
Interactive effect **ECERPxGHRMP**				.050
R	.618	.550	.622	.624
R^2	.381	.303	.387	.389
Adj-R^2	.379	.300	.383	.383
F-value	165.287	116.332	84.405	56.547
p-value	.000	.000	.000	.000
D-W	2.010	1.898	1.979	1.993
VIF	1.000	1.000	3.048	1.214-3.237

Note: *** $p < 0.001$, ** $p<0.01$, * $p< 0.05$

Source: This study

As shown in Model 1, the result discloses that ECERP (β = 0.618, p<0.001) is positively and significantly affected to EOCBE. Therefore, model 1 is supported.

Model 2 shows that GHRMP has a significantly positive influence on EOCBE with β = 0.550, p < 0.001. Furthermore, the results show that R^2 = 0.303 and adjust R^2 = 0.300, which means that 30.0% variance of EOCBE can be explained by an independent variable namely GHRMP. Additionally, F-value = 116.332 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H5 is supported, Green human resource management practice positively effects on Employees' organizational citizenship behaviors toward the environment.

Model 3 in table 4.17, the result showed that the independent variable (ECERP, β=0.508, p<0.001) is significantly affected to the dependent variable (EOCBE) and the moderating variable (GHRMP, β=0.134, p>0.05) is not significantly affected to the dependent variable (EOCBE).

Besides, the result in Model 4 revealed the interaction effect (R^2=0.389, β = 0.050, p>0.05) of ECERP and GHRMP is not significant to EOCBE. This meant that GHRMP is not a moderator in the relationship between ECERP and EOCBE. Therefore, H6 is not supported.
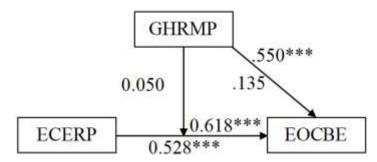

Figure 4.3: Moderating Effect of GHRMP on the Relationship of ECERP and EOCBE

Source: This study

CHAPTER FIVE
CONCLUSIONS AND SUGGESTIONS

In this final chapter, the summary of the research would be shown with the following primary part: (1) Concluding the findings of the research, (2) Giving discussion with previous studies, theoretical and practical contribution of research, and (3) Identifying research limitation and give several suggestions for future research.

5.1 Research Conclusion

As mentioned in chapter 1, the purposes of this study are (i) to test the effect of Employees' corporate environmental responsibility perception on Employees' affective commitment, (ii) to analyze the effect of Employees' affective commitment on Employees' organizational citizenship behaviors toward the environment, (iii) to check the effect of Employees' corporate environmental responsibility perception on Employees' organizational citizenship behaviors toward the environment, (iv) to analyze whether Employees' affective commitment is a mediator in the relationship between Employees' corporate environmental responsibility perception and Employees' organizational citizenship behaviors toward the environment, (v) to analyze the effect of Green human resource management practice on Employees' organizational citizenship behaviors toward the environment, (vi) to test whether Green human resource management practice as a moderator on the relationship between Employees' corporate environmental responsibility perception and Employees' organizational citizenship behaviors toward the environment.

Through reviewing the previous literature and researches, chapter 2 of this research established a foundation to distribute six hypotheses which were shown, tested and brought a couple of results in chapters 3 and 4. Following

the findings from the previous chapter, the conclusion shown in the below table would be explained more intensively below.

Table 5.1: Result of the Tested Hypotheses

	Hypotheses	Results
H₁	Employees' corporate environmental responsibility perception positively effects on Employees' affective commitment	Supported
H₂	Employees' affective commitment positively effects on Employees' organizational citizenship behaviors toward the environment	Supported
H₃	Employees' corporate environmental responsibility perception positively effects on Employees' organizational citizenship behaviors toward the environment	Supported
H₄	Employees' affective commitment as a significant mediating effect on the relationship between employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment	Supported
H₅	Green human resource management practice positively effects on Employees' organizational citizenship behaviors toward the environment	Supported
H₆	Green human resource management practice has a significant moderating effect on the relationship between Employees' corporate environmental responsibility perception and Employees' organizational citizenship behaviors toward the environment	Not Supported

Source: This study

According to the results, some conclusions have been drawn in the study. First of all, this research indicates that Employees' corporate environmental responsibility perception positively effects on Employees' affective commitment, which followed the previous studies of Ahmad et al. (2020), Farooq et al. (2014), Hofman and Newman (2014), Mueller et al. (2012), Turker (2009), Brammer et al. (2007). Specifically, the study shows that employees prefer to work in socially responsible organizations and their

affective commitment level is positively affected by corporate environmental responsibility perception to the natural environment.

The second conclusion showed that Employees' affective commitment positively effects on Employees' organizational citizenship behaviors toward the environment, which are the same idea as the study' results of Daily et al. (2009), Gregersen (1993), Shore and Wayne (1993), Bishop (2000). That means affective commitment is an important construct with EOCBE. To the extent that individuals have emotional with the company, are willing to put forth effort on the company behalf, and accept the company goals and values, they will direct their efforts in ways that they perceive will accomplish things that are valued by the organization. Employees with a strong affective commitment will engage in EOCBE more than those with a weak affective commitment to the organization.

Third, following the studies of Cheema et al. (2020), Ahmad et al. (2020), Luu (2018), Luu (2017), Employees' corporate environmental responsibility perception one more time is affirmed to have an active impact on employees' organizational citizenship behaviors toward the environment through this research. Moreover, the results showed that companies promote activities to improve the natural environment and inspire their employees to go beyond their mandatory job roles and demonstrate environmental behaviors, and they also helping colleagues build habits of environmental protection.

The study proposed a hypothesis that investigates the mediation of employees' affective commitment on the relationship between employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment and found that it is supported. Furthermore, the analysis test showed that EAC provided a partial mediation effect because the impact of ECERP to EOCBE was significantly reduced but still higher than zero.

Luu (2019), Luu (2018), Luu (2017), Dumont et al. (2017), Zibarras and Coan (2015) also concluded that green human resource management was significantly associated with organizational citizenship behaviors. However, this study indicates a more specific aspect that is green human resource management practice positively effects on employees' organizational citizenship behaviors toward the environment - the fifth conclusion in this study. The more employees following the green human resource management practice policy the more they aim to protect the environment.

Although this study wants to contribute new results that green human resource management practice has a significant moderating effect on the relationship between employees' corporate environmental responsibility perception and employees' organizational citizenship behaviors toward the environment. However in this study, following the results revealed that GHRMP has no significant moderating effect on ECERP and EOCBE. Maybe the employees in Vietnam still have a conservative. That means people are conservative they are not willing and afraid to go out to practice on Green human resource management practice. Therefore, there is no moderating effect on employees' organizational citizenship behaviors toward the environment.

5.2 Research Discussions and Implications

This study aimed to investigate the impact of other variables on Employees' organizational citizenship behaviors toward the environment by manufacturing firms in Vietnam. And the primary objective of this research was to empirically examine the impact of employees' corporate environmental responsibility perception on employees' organizational citizenship behaviors toward the environment via the important moderator (Green human resource management practice). Specifically, the present study represents one of the first attempts to examine the moderating roles of Green human resource management practice in the relationship between Employees' corporate

environmental responsibility perception (independent variable) and Employees' organizational citizenship behaviors toward the environment (dependent variable).

However, the result of Green human resource management practice has no effect on the relationship between Employees' corporate environmental responsibility perception and Employees' organizational citizenship behaviors toward the environment. Depending on the cultural background differences, in Vietnam, employees often do not have complete information about the company's actual environmental sustainability policies strategies, and green values knowledge and skills related to green activities. They don't know how to efforts toward the environment. Employees are just according to their visibility and perception and afraid to go out to practice on Green human resource management practice. So, Green human resource management practice has no effect on the perception and responsibility toward the environment of employees in Vietnam.

This research takes a step further to study Employees' affective commitment as a mediator on the linkage among Employees' corporate environmental responsibility perception and Employees' organizational citizenship behaviors toward the environment. The result showed that when employees have a strong affective commitment to their company, the effect of Employees' corporate environmental responsibility perception on Employees' organizational citizenship behaviors toward the environment will be significantly reduced. When it happened, the effects of Employees' corporate environmental responsibility perception were no longer direct but indirect through Employees' affective commitment. The results indicated that if employees have affective in the company, they will be more aware of corporate environmental protection.

Through the research results, it can be seen that the employees in the company organization are self-aware of their responsibility to protect the environment. The more long-term employees who have a strong attachment to the company, all have environmentally-oriented behaviors. And human resource management policies also focus on environmental protection. These behaviors show that, at present, everyone is highly responsible for protecting their living environment, particularly in the workplace (especially in factories that are at risk of causing environmental pollution high).

5.3 Research Limitation and Future Research Suggestion

Our research has certain limitations that need to be addressed by future studies. Due to some difficulties and the period of time that the survey was conducted, the way to choose a sample for this study is based on convenience, thus the results somewhat cannot be representative of the whole employees Vietnam. On the other hand, the data collected from multiple sources (i.e. employees and their managers) through the perceptions, the affective of the participants may not reflect the actual happening. Therefore, in future research, the data for green human resource practice can be sourced from reports from human resource departments, and the data for Employees' organizational citizenship behaviors toward the environment can be sourced through participant observations.

Since this research was based on the data from the manufacturing firms in the Vietnamese, its results may have limited generalizability to other industries and other contexts. This research should hence be replicated in other types of organizations such as hospital organizations or restaurants and hotel organizations.

Future research should examine other mediators and moderators for Employees' Organizational Citizenship Behaviors toward the Environment.

Further study should be done with a larger size and specific sample in order to increase the representation of everyone.

REFERENCES

1. Afsar, B., Cheema, S., and Javed, F. (2018). Activating employee's proenvironmental behaviors: The role of CSR, organizational identification, and environmentally specific servant leadership. <u>Corporate Social Responsibility and Environmental Management</u>, Vol. 25, No. 5, pp. 904-911.

2. Albino, V., Balice, A., and Dangelico, R.M. (2009). Environmental Strategies and Green Product Development: An Overview on Sustainability-Driven Companies. <u>Business Strategy and the Environment</u>, Vol. 18, No. 2, pp. 83-96.

3. Allen, N. J., and Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. <u>Journal of occupational psychology</u>, Vol. 63, No. 1, pp. 1-18.

4. Ahmad, R., Ahmad, S., Islam, T., & Kaleem, A. (2020). The nexus of corporate social responsibility (CSR), affective commitment and organizational citizenship behavior in academia. <u>Employee Relations: The International Journal</u>, Vol. 42, No. 1, pp. 232-247.

5. Angel Del Brio, J., Junquera, B., and Ordiz, M. (2008). Human resources in advanced environmental approaches - a case analysis. <u>International Journal of Production Research</u>, Vol. 46, No. 21, pp. 6029-6053.

6. Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall.

7. Ajzen, I. (1991). The theory of planned behavior. <u>Organizational Behavior and Human Decision Processes</u>, Vol. 50, No. 2, pp. 179-211.

8. Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. <u>European review of social psychology</u>, Vol. 11, No. 1, pp. 1-33.

9. Babiak, K., and Trendafilova, S. (2011). CSR and environmental responsibility: Motives and pressures to adopt green management practices. <u>Corporate Social Responsibility and Environmental Management</u>, Vol. 18, No. 1, pp. 11-24.

10. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. <u>Journal of personality and social psychology</u>, Vol. 51, No. 6, pp. 1173.

11. Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment, and employee outcomes in a team environment. <u>Journal of Management</u>, Vol. 26, No. 6, pp. 1113-1132.

12. Bissing-Olson, M. J., Iyer, A., Fielding, K. S., and Zacher, H. (2013). Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. <u>Journal of Organizational Behavior</u>, Vol. 34, No. 2, pp. 156-175.

13. Blok, V., Wesselink, R., Studynka, O., & Kemp, R. (2015). Encouraging sustainability in the workplace: a survey on the pro-environmental behaviour of university employees. <u>Journal of cleaner production</u>, Vol. 106, pp. 55-67.

14. Boiral, O., and Paille, P. (2012). Organizational citizenship behaviour for the environment: Measurement and validation. <u>Journal of Business Ethics</u>, Vol. 109, No. 4, pp. 431-445.

15. Boiral, O., Raineri, N., and Talbot, D. (2018). Managers' citizenship behaviors for the environment: A developmental perspective. <u>Journal of Business Ethics</u>, Vol. 149, No. 2, pp. 395-409.

16. Boldero, J. (1995). The Prediction of Household Recycling of Newspapers: The Role of Attitudes, Intentions, and Situational

Factors. <u>Journal of Applied Social Psychology</u>, Vol. 25, No. 5, pp. 440-462.

17. Boudreau, J. W., and Ramstad, P. M. (2005). Talent ship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. <u>Human Resource Management</u>, Vol. 44, No. 2, pp. 129-136.

18. Brammer, S., Millington, A., & Rayton, B. (2007). The contribution of corporate social responsibility to organizational commitment. <u>The International Journal of Human Resource Management</u>, Vol. 18, No. 10, pp. 1701-1719.

19. Brammer, S., He, H., & Mellahi, K. (2015). Corporate social responsibility, employee organizational identification, and creative effort: The moderating impact of corporate ability. <u>Group & Organization Management</u>, Vol. 40, No. 3, pp. 323-352.

20. Cheema, S., Afsar, B., & Javed, F. (2020). Employees' corporate social responsibility perceptions and organizational citizenship behaviors for the environment: The mediating roles of organizational identification and environmental orientation fit. <u>Corporate Social Responsibility and Environmental Management</u>, Vol. 27, No. 1, pp. 9-21.

21. Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. <u>Personnel psychology</u>, Vol. 59, No. 3, pp. 501-528.

22. Connelly, L. M. (2008). Pilot studies. <u>Medsurg Nursing</u>, Vol. 17, No. 6, pp. 411.

23. Connelly, B.L., Certo, S.T., Ireland, R.D., and Reutzel, C.R. (2011). Signaling Theory: A Review and Assessment. <u>Journal of Management</u>, Vol. 37, No. 1, pp. 39-67.

24. Cordano, M., Marshall, R. S., & Silverman, M. (2010). How do small and medium enterprises go "green"? A study of environmental management programs in the US wine industry. <u>Journal of Business Ethics</u>, Vol. 92, No. 3, pp. 463-478.

25. Cramer, J. M., & Roes, B. (1993). Total employee involvement: Measures for success. <u>Total Quality Environmental Management</u>, Vol. 3, No. 1, pp. 39-52.

26. Dahlsrud, A. (2008). How Corporate Social Responsibility is Defined: An Analysis of 37 Definitions. <u>Corporate Social Responsibility and Environmental Management</u>, Vol. 15, pp. 1-13.

27. Daily, B. F., Bishop, J. W., and Govindarajulu, N. (2009). A conceptual model for organizational citizenship behavior directed toward the environment. <u>Business and Society</u>, Vol. 48, No. 2, pp. 243-256.

28. Den Hartog, D. N., Boon, C., Verburg, R. M., and Croon, M. A. (2013). HRM, communication, satisfaction, and perceived performance: A cross-level test. <u>Journal of Management</u>, Vol. 39, No. 6, pp. 1637-1665.

29. Dögl, C., and Holtbrügge, D. (2014). Corporate environmental responsibility, employer reputation and employee commitment: An empirical study in developed and emerging economies. <u>The International Journal of Human Resource Management</u>, Vol. 25, No. 12, pp. 1739-1762.

30. Dumont, J., Shen, J., and Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. <u>Human Resource Management</u>, Vol. 56, No. 4, pp. 613-627.

31. Dunlap, R. E., Van Liere, K. D., Mertig, A. G., and Jones, R. E. (2000). Measuring endorsement of the New Ecological Paradigm: A revised NEP scale. <u>Journal of Social Issues</u>, Vol. 56, No. 3, pp. 425-442.

32. Egri, C. P., & Hornal, R. C. (2002). Strategic environmental human resource management and perceived organizational performance: An exploratory study of the Canadian manufacturing sector. Research in corporate sustainability: The evolving theory and practice of organizations in the natural environment, 205236.

33. Farooq, O., Payaud, M., Merunka, D., & Valette-Florence, P. (2014). The impact of corporate social responsibility on organizational commitment: Exploring multiple mediation mechanisms. Journal of Business Ethics, Vol. 125, No. 4, pp. 563-580.

34. Fernandez, E., Junquera, B., and Ordiz, M. (2003). Organizational culture and human resources in the environmental issue: A review of the literature. International Journal of Human Resource Management, Vol. 14, No. 4, pp. 634-656.

35. Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley.

36. Fredrickson, B. L. (2003). Positive emotions and upward spirals in organizations. In K. S. Cameron, J. E. Dutton and R. E. Quinn (Eds.), Positive organizational scholarship (pp. 163-175). San Francisco: Berrett-Koehler.

37. Glavas, A., and Kelley, K. (2014). The effects of perceived corporate social responsibility on employee attitudes. Business Ethics Quarterly, Vol. 24, No. 2, pp. 165-202.

38. Greening, D.W., and Turban, D.B. (2000). Corporate Social Performance as a Competitive Advantage in Attracting a Quality Workforce. Business and Society, Vol. 39, No. 3, pp. 254-303.

39. Gregersen, H. B. (1993). Multiple commitment at work and extra role behavior during three stages of organizational tenure. Journal of Business Research, Vol. 26, pp. 31-47.

40. Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). Multivariate data analysis: A global perspective (Vol. 7).

41. He, M., and Chen, J. (2009). Sustainable Development and Corporate Environmental Responsibility: Evidence from Chinese Corporations. Journal of Agricultural and Environmental Ethics, Vol. 22, No. 4, pp. 323–339.

42. Heath, Y., & Gifford, R. (2002). Extending the theory of planned behavior: Predicting the use of public transportation. Journal of Applied Social Psychology, Vol. 32, No. 10, pp. 2154-2189.

43. Henriques, I. and Sadorsky, P. (1999). The relationship between environmental commitment and managerial perceptions of stakeholder importance. Academy of Management Journal, Vol. 42, pp. 87-89.

44. Hofman, P. S., & Newman, A. (2014). The impact of perceived corporate social responsibility on organizational commitment and the moderating role of collectivism and masculinity: Evidence from China. The International Journal of Human Resource Management, Vol. 25, No. 5, pp. 631-652.

45. Jabbour, C. J. C., and Santos, F. C. A. (2008). Relationships between human resource dimensions and environmental management in companies: Proposal of a model. Journal of Cleaner Production, Vol. 16, No. 1, pp. 51-58.

46. Jermsittiparsert, K., Siriattakul, P., & Wattanapongphasuk, S. (2019). Determining the environmental performance of Indonesian SMEs influence by green supply chain practices with moderating role of green HR practices. International Journal of Supply Chain Management, Vol. 8, No. 3, pp. 59-70.

47. Lamm, E., Tosti-Kharas, J., and Williams, E. G. (2013). Read this article, but don't print it: Organizational citizenship behavior toward the

environment. <u>Group and Organization Management</u>, Vol. 38, No. 2, pp. 163-197.

48. Lester, R. H., Certo, S. T., Dalton, C. M., Dalton, D. R., & Cannella, A. A. 2006. Initial public offering investor valuations: An examination of top management team prestige and environmental uncertainty. <u>Journal of Small Business Management</u>, Vol. 44, pp. 1-26.

49. Linnenluecke, M. K., Griffiths, A., and Winn, M. I. (2013). Firm and industry adaptation to climate change: A review of climate adaptation studies in the business and management field. <u>Wiley Interdisciplinary Reviews: Climate Change</u>, Vol. 4, No. 5, pp. 397-416.

50. Luu, T. T. (2017), CSR and organizational citizenship behavior for the environment in hotel industry: The moderating roles of corporate entrepreneurship and employee attachment style. <u>International Journal of Contemporary Hospitality Management</u>, Vol. 29, No.11, pp. 2867-2900.

51. Luu, T. T. (2018). Activating tourists' citizenship behavior for the environment: The roles of CSR and frontline employees' citizenship behavior for the environment. <u>Journal of Sustainable Tourism</u>, Vol. 26, No. 7, pp. 1178-1203.

52. Luu, T. T. (2019). Green human resource practices and organizational citizenship behavior for the environment: the roles of collective green crafting and environmentally specific servant leadership. <u>Journal of Sustainable Tourism</u>, Vol. 27, No. 8, pp. 1167-1196.

53. Mandip, G. (2012). Green HRM: People Management Commitment to Environmental Sustainability. <u>Research Journal of Recent Sciences</u>, Vol. 1, pp. 244-252.

54. Mayer, R. C., and Schoorman, F. D. (1992). Predicting participation and production outcomes through a two-dimensional model of organizational commitment. <u>Academy of Management Journal</u>, Vol. 35, pp. 671-684.

55. McNamara, G. M., Haleblian, J., & Dykes, B. J. 2008. The performance implications of participating in an acquisition wave: Early mover advantages, bandwagon effects, and the moderating influence of industry characteristics and acquirer tactics. <u>Academy of Management Journal</u>, Vol. 51, pp. 113-130.

56. McWilliams, A., Siegel, D.S., and Wright, P.M. (2006). Guest Editor's Introduction: Corporate Social Responsibility: It's Implications. <u>Journal of Management Studies</u>, Vol. 43, No. 1, pp. 1-18.

57. Meijerink, J., Bos-Nehles, A., & de Leede, J. (2018). How employees' proactivity translates high-commitment HRM systems into work engagement: The mediating role of job crafting. <u>The International Journal of Human Resource Management</u>, pp. 1-26.

58. Meyer, J. P., and Allen, N. J. (1991). A three-component conceptualization of organizational commitment. <u>Human Resource Management Review</u>, Vol. 1, No. 1, pp. 61-89.

59. Mowday, R. T., Porter, L. W. and Steers, R. M. (1982). Employee-Organization Linkages: The Psychology of Commitment, Absenteeism and Turnover. New York: Academic Press.

60. Mueller, K., Hattrup, K., Spiess, S. O., & Lin-Hi, N. (2012). The effects of corporate social responsibility on employees' affective commitment: A cross-cultural investigation. <u>Journal of applied psychology</u>, Vol. 97, No. 6, pp. 1186.

61. Mwanja, S. K., Evusa, Z., & Ndirangu, A. W. (2018). Influence of corporate social responsibility on firm performance among companies listed on the Nairobi Securities Exchange. <u>International Journal of Applied Economics, Finance and Accounting</u>, Vol. 3, No. 2, pp. 56-63.

62. Netherwood, A. (1998). Environmental Management Systems, in Corporate Environmental Management, ed. R. Welford, London: Earthscan, pp. 37-60.

63. Norton, T. A., Parker, S. L., Zacher, H., and Ashkanasy, N. M. (2015). Employee green behavior: A theoretical framework, multilevel review, and future research agenda. Organization and Environment, Vol. 28, No. 1, pp. 103-125.

64. Nye, M., & Hargreaves, T. (2010). Exploring the social dynamics of proenvironmental behavior change: A comparative study of intervention processes at home and work. Journal of Industrial Ecology, Vol. 14, No. 1, pp. 137-149.

65. Olson, E.G. (2008). Creating an Enterprise-Level "Green" Strategy. Journal of Business Strategy, Vol. 29, No. 2, pp. 22-30.

66. Oreg, S., & Katz-Gerro, T. (2006). Predicting pro-environmental behavior cross-nationally: Values, the theory of planned behavior, and value-belief-norm theory. Environment and behavior, Vol. 38, No. 4, pp. 462-483.

67. Pless, N. M., Maak, T., and Stahl, G. K. (2012). Promoting corporate social responsibility and sustainable development through management development: What can be learned from international service learning programs? Human Resource Management, Vol. 51, No. 6, pp. 873-904.

68. Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior research methods, instruments, & computers, Vol. 36, No. 4, pp. 717-731.

69. Ren, S., Tang, G., and Jackson, S. E. (2018). Green human resource management research in emergence: A review and future directions. Asia Pacific Journal of Management, Vol. 35, No. 3, pp. 769-803.

70. Renwick, D. W. S., Redman, T., and Maguire, S. (2013). Green human resource management: A review and research agenda. <u>International Journal of Management Reviews</u>, Vol. 15, No. 1, pp. 1-14.

71. Rioux, L. (2011). Promoting pro-environmental behaviour: Collection of used batteries by secondary school pupils. <u>Environmental Education Research</u>, Vol. 17, No. 3, pp. 353-373.

72. Rupp, D. E., Wright, P. M., Aryee, S., & Luo, Y. (2015). Organizational justice, behavioral ethics, and corporate social responsibility: Finally the three shall merge. <u>Management and Organization Review</u>, Vol. 11, No. 1, pp. 15-24.

73. Rynes, S. L. 1991. Recruitment, job choice, and post-hire consequences: A call for new research directions. In M. D. Dunnette & L. M. Howe (Eds.), <u>Handbook of industrial and organizational psychology</u>: pp. 399-444. Palo Alto, CA: Consulting Psychologists Press.

74. Sharma, S. (2000). Managerial Cognitions and Organizational Context as Predictors of Firm Choice of Environmental Strategies. <u>Academy of Management Journal</u>, Vol. 43, No. 4, pp. 681-697.

75. Shore, L. M., and Wanyne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. <u>Journal of Applied Psychology</u>, Vol. 78, pp. 774-780.

76. Sliwka, D. 2007. Trust as a signal of a social norm and the hidden costs of incentive schemes. <u>American Economic Review</u>, Vol. 97, pp. 999-1012.

77. Spence, M. (2002). Signaling in Retrospect and the Informational Structure of Markets. <u>American Economic Review</u>, Vol. 92, No. 3, pp. 434-459.

78. Suazo, M. M., Martinez, P. G., & Sandoval, R. 2009. Creating psychological and legal contracts through human resource practices: A

signaling theory perspective. <u>Human Resource Management Review</u>, Vol. 19, pp. 154-166.

79. Tang, G., Chen, Y., Jiang, Y., Paille, P., and Jia, J. (2018). Green human resource management practices: Scale development and validity. <u>Asia Pacific Journal of Human Resources</u>, Vol. 56, No. 1, pp. 31-55.

80. Tian, Q., and Robertson, J. L. (2017). How and when does perceived CSR affect employees' engagement in voluntary pro-environmental behavior? <u>Journal of Business Ethics</u>, pp. 1-14.

81. Topf, M. D. (2000). The importance of site manager involvement. <u>Occupational Hazards</u>, Vol. 62, No. 9, pp. 31-32.

82. Turban, D.B., and Greening, D.W. (1997). Corporate Social Performance and organizational Attractiveness to Prospective Employees. <u>Academy of Management Journal</u>, Vol. 40, No. 3, pp. 658-673.

83. Turker, D. (2009). How corporate social responsibility influences organizational commitment. <u>Journal of Business ethics</u>, Vol. 89, No. 2, pp. 189.

84. Wall, R., Devine-Wright, P., & Mill, G. A. (2007). Comparing and combining theories to explain proenvironmental intentions: The case of commuting-mode choice. <u>Environment and behavior</u>, Vol. 39, No. 6, pp. 731-753.

85. Wells, V. K., Manika, D., Gregory-Smith, D., Taheri, B., and McCowlen, C. (2015). Heritage tourism, CSR and the role of employee environmental behavior. <u>Tourism Management</u>, Vol. 48, pp. 399-413.

86. Whitmarsh, L., & O'Neill, S. (2010). Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviors. <u>Journal of environmental psychology</u>, Vol. 30, No. 3, pp. 305-314.

87. Young, W., Davis, M., McNeill, I. M., Malhotra, B., Russell, S., Unsworth, K., & Clegg, C. W. (2015). Changing behaviour: successful environmental programmes in the workplace. Business Strategy and the Environment, Vol. 24, No. 8, pp. 689-703.

88. Zibarras, L. D., and Coan, P. (2015). HRM practices used to promote proenvironmental behavior: A UK survey. The International Journal of Human Resource Management, Vol. 26, No. 16, pp. 2121-2142.

89. Zutshi, A., & Sohal, S. (2003). Stakeholder involvement in the EMS adoption process. Business Process Management Journal, Vol. 9, No. 2, pp. 133-148.

APPENDIX I: QUESTIONNAIRE - ENGLISH VERSION

南華大學

NANHUA UNIVERSITY

COLLEGE OF MANAGEMENT

Master Program in Management Science

Dear Respondents,

My name is Pham Xuan Quynh, a master's student of business administration at Nanhua University, Taiwan. I am researching "The Effect of Employees' Corporate Environmental Responsibility Perception on Employees' Organizational Citizenship Behavior toward the Environment – The Moderating Role of Green Human Resource Management Practice" as a thesis to fulfill the requirement of the study completion.

I sincerely invite you to spend 10 minutes to complete the questionnaire below. No personal information will be made public. Please be assured that your answers will be kept in strict confidence. Please take your time to fill out the questionnaire as accurately as possible. Your help is crucial to this research. The survey data will be used as the purpose of this study only.

Thank you very much for participating in this survey! Have a nice day!

Yours faithfully,

Part I: Personal information

Please tick on the box which best describes your situation:

1.   Gender: ☐ Male   ☐ Female
2.   Age: ☐ 18-25   ☐ 26-35   ☐ 36-45   ☐ >45
3.   Education: ☐ High school   ☐ College   ☐ University
        ☐ Master   ☐ Above Master
4.   Working experience: ☐ <1 year   ☐ 1-5 years   ☐ 6-10 years   ☐ >10 years
5.   Current position: ☐ Employee   ☐ Supervisor   ☐ Captain   ☐ Management
6.   Monthly income (VND): ☐ <10 million   ☐ 10-20 million   ☐ 21-30 million
        ☐ 31-40 million   ☐ >40 million

Part II: You will be asked to what extent you judge the issue in the following question. Answers can range from strongly agree (1) **STRONGLY DISAGREE** (2) **DISAGREE** (3) **SOMEWHAT DISAGREE** (4) **NEUTRAL** (5) **SOMEWHAT AGREE** (6) **AGREE** (7) **STRONGLY AGREE**.

Please **CIRCLE** the level of your agreement on each of the following question in your opinion	Levels of Agreement						
	Strongly disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
Employees' Corporate Environmental Responsibility Perception (ECERP)							
1. My firm encourage and reward corporate culture that fosters the environmental value	1	2	3	4	5	6	7
2. My firm take full responsibility for our company's environmental impacts and liabilities	1	2	3	4	5	6	7
3. Protection and restoration are a green strategic priority	1	2	3	4	5	6	7
4. My firm substitute our energy sources with renewable/alternate energy sources	1	2	3	4	5	6	7
5. My firm substitute our materials with green products materials	1	2	3	4	5	6	7
6. My firm reduce packaging material and introduce packaging made from recycled materials	1	2	3	4	5	6	7
7. My firm obtain ecological certification for products or services	1	2	3	4	5	6	7
8. Environmental knowledge and skills are criteria for the recruitment of potential employees	1	2	3	4	5	6	7
9. Environmental performance is a criterion used in the evaluation of our employees	1	2	3	4	5	6	7
10. My firm job descriptions contain environmental objectives	1	2	3	4	5	6	7
11. My firm issue a formal report regarding corporate environmental performance	1	2	3	4	5	6	7

12. My firm communicate environmental performance indicators and goals	1	2	3	4	5	6	7
13. My firm measure our company's environmental performance	1	2	3	4	5	6	7
Green Human Resource Management Practice (GHRMP)							
1. My firm sets green goals for its employees	1	2	3	4	5	6	7
2. My firm provides employees with green training to promote green values	1	2	3	4	5	6	7
3. My firm provides employees with green training to develop employees' knowledge and skills required for green management	1	2	3	4	5	6	7
4. My firm considers employees' workplace green behavior in performance appraisals	1	2	3	4	5	6	7
5. My firm relates employees' workplace green behaviors to rewards and compensation	1	2	3	4	5	6	7
6. My firm considers employees' workplace green behaviors in promotion	1	2	3	4	5	6	7
Employees' Organizational Citizenship Behaviors toward the Environment (EOCBE)							
1. In my work, I weigh the consequences of my actions before doing something that could affect the environment	1	2	3	4	5	6	7
2. I voluntarily carry out environmental actions and initiatives in my daily work activities	1	2	3	4	5	6	7
3. I make suggestions to my colleagues about ways to protect the environment more effectively, even when it is not my direct responsibility	1	2	3	4	5	6	7
4. I actively participate in environmental events organized in and/or by my company	1	2	3	4	5	6	7
5. I stay informed of my company's environmental initiatives	1	2	3	4	5	6	7
6. I undertake environmental actions that contribute positively to the image of my organization	1	2	3	4	5	6	7
7. I volunteer for projects, endeavors or events that address environmental issues in my organization	1	2	3	4	5	6	7

8. I spontaneously give my time to help my colleagues take the environment into account in everything they do at work	1	2	3	4	5	6	7
9. I encourage my colleagues to adopt more environmentally conscious behavior	1	2	3	4	5	6	7
10. I encourage my colleagues to express their ideas and opinions on environmental issues	1	2	3	4	5	6	7
Employees' Affective Commitment (EAC)							
1. I would be very happy to spend the rest of my career with this organization	1	2	3	4	5	6	7
2. I enjoy discussing my organization with people outside it	1	2	3	4	5	6	7
3. I really feel as if this organization's problems are my own	1	2	3	4	5	6	7
4. I think that I could easily become as attached to another organization as I am to this one	1	2	3	4	5	6	7
5. I do not feel like 'part of the family' at my organization	1	2	3	4	5	6	7
6. I do not feel 'emotionally attached' to this organization	1	2	3	4	5	6	7
7. This organization has a great deal of personal meaning for me	1	2	3	4	5	6	7
8. I do not feel a strong sense of belonging to my organization	1	2	3	4	5	6	7

APPENDIX II: QUESTIONNAIRE - VIETNAMESE VERSION

Kính gửi anh/chị,

Tôi tên là Phạm Xuân Quỳnh, là sinh viên thạc sĩ quản trị kinh doanh tại trường Đại học Nam Hoa, Đài Loan. Tôi đang thực hiện nghiên cứu về đề tài "Ảnh hưởng Sự nhận thức về trách nhiệm môi trường công ty của nhân viên đối với Hành vi công dân tổ chức của nhân viên hướng tới môi trường - Vai trò Điều tiết của Thực hành quản lý nguồn nhân lực xanh".

Tôi xin chân thành mời anh/chị dành 10 phút để hoàn thành bảng câu hỏi dưới đây. Không có bất kỳ thông tin cá nhân nào sẽ được công khai. Hãy yên tâm rằng câu trả lời của anh/chị đều được bảo mật. Xin anh/chị vui lòng dành thời gian của mình để điền vào bảng câu hỏi một cách chính xác nhất có thể. Sự giúp đỡ của anh/chị là rất quan trọng cho nghiên cứu này của tôi. Dữ liệu khảo sát sẽ chỉ được sử dụng làm mục đích của nghiên cứu này.

Cảm ơn anh/chị rất nhiều vì đã tham gia cuộc khảo sát này! Chúc một ngày tốt lành!

Trân trọng,

Phần I: Thông tin cá nhân

Xin anh/chị vui lòng cho biết các thông tin sau:

1.　　Giới tính: ☐ Nam　　☐ Nữ

2.　　Độ tuổi: ☐ 18-25　　☐ 26-35　　☐ 36-45　　☐ >45

3.　　Trình độ học vấn: ☐ Trung học phổ thông　　☐ Trung cấp/ Cao đẳng　　☐ Đại học
☐ Thạc sĩ　　☐ Trên thạc sĩ

4.　　Kinh nghiệm làm việc: ☐ <1 năm　　☐ 1-5 năm　　☐ 6-10 năm　　☐ >10 năm

5.　　Vị trí hiện tại: ☐ Nhân viên　　☐ Giám sát　　☐ Tổ trưởng　　☐ Quản lý/Trưởng phòng

6.　　Thu nhập hằng tháng (VND): ☐ <10 triệu　　☐ 10-20 triệu　　☐ 21-30 triệu
☐ 31-40 triệu　　☐ >40 triệu

Phần II: Các câu trả lời dưới đây được đo lường với mức độ đồng ý từ (1) **RẤT KHÔNG ĐỒNG Ý** (2) **KHÔNG ĐỒNG Ý** (3) **PHẦN NÀO KHÔNG ĐỒNG Ý** (4) **BÌNH THƯỜNG** (5) **PHẦN NÀO ĐỒNG Ý** (6) **ĐỒNG Ý** (7) **RẤT ĐỒNG Ý**.

Vui lòng **KHOANH TRÒN** vào lựa chọn phù hợp với ý kiến của Anh/Chị	Mức độ đồng ý						
	Rất không đồng ý	Không đồng ý	Phần nào không đồng ý	Bình thường	Phần nào đồng ý	Đồng ý	Rất đồng ý
Nhận thức về Trách nhiệm Môi trường Công ty của Nhân viên (ECERP)							
1. Công ty tôi khuyến khích và đề cao nền văn hóa doanh nghiệp hướng tới giá trị môi trường	1	2	3	4	5	6	7
2. Công ty của tôi hoàn toàn chịu trách nhiệm về các tác động môi trường và các trách nhiệm pháp lý về môi trường	1	2	3	4	5	6	7
3. Bảo vệ và phục hồi môi trường là một ưu tiên trong chiến lược phát triển bền vững/phát triển xanh của công ty tôi	1	2	3	4	5	6	7
4. Công ty của tôi thay thế các nguồn năng lượng bằng các nguồn năng lượng tái tạo / thay thế	1	2	3	4	5	6	7
5. Công ty của tôi thay thế các nguyên vật liệu bằng các nguyên vật liệu sản phẩm xanh	1	2	3	4	5	6	7
6. Công ty của tôi giảm vật liệu bao bì và giới thiệu bao bì làm từ vật liệu tái chế	1	2	3	4	5	6	7
7. Công ty của tôi đạt chứng nhận sinh thái cho các sản phẩm hoặc dịch vụ	1	2	3	4	5	6	7
8. Kiến thức và kỹ năng về môi trường là tiêu chí để tuyển dụng nhân viên cho công ty	1	2	3	4	5	6	7
9. Bảo vệ môi trường là một tiêu chí được sử dụng để đánh giá nhân viên của chúng tôi	1	2	3	4	5	6	7
10. Bản mô tả công việc của nhân viên trong công ty tôi có các mục tiêu về bảo vệ môi trường	1	2	3	4	5	6	7
11. Công ty của tôi phát hành một báo cáo chính thức về kết quả hoạt động môi trường của công ty	1	2	3	4	5	6	7
12. Công ty của tôi truyền thông các chỉ số và mục tiêu hoạt động môi trường	1	2	3	4	5	6	7
13. Công ty của tôi đo lường hiệu suất môi trường của mình							

	1	2	3	4	5	6	7
Thực hành quản lý nguồn nhân lực xanh (GHRMP)							
1. Công ty của tôi đặt mục tiêu phát triển xanh/ phát triển bền vững cho nhân viên	1	2	3	4	5	6	7
2. Công ty của tôi cung cấp cho nhân viên chương trình đào tạo xanh để thúc đẩy các giá trị xanh/ bền vững của công ty	1	2	3	4	5	6	7
3. Công ty của tôi cung cấp cho nhân viên chương trình đào tạo xanh để phát triển kiến thức và kỹ năng cần thiết cho quản lý phát triển xanh của công ty	1	2	3	4	5	6	7
4. Công ty của tôi xem xét hành vi xanh tại nơi làm việc của nhân viên trong đánh giá hiệu suất	1	2	3	4	5	6	7
5. Công ty của tôi xem xét hành vi xanh tại nơi làm việc của nhân viên trong trả lương thưởng	1	2	3	4	5	6	7
6. Công ty của tôi xem xét các hành vi xanh tại nơi làm việc của nhân viên trong việc đề bạt/ thăng chức	1	2	3	4	5	6	7
Các Hành vi Công dân trong Tổ chức của Nhân viên hướng tới Môi trường (EOCBE)							
1. Trong công việc của mình, tôi cân nhắc hậu quả của hành động của mình trước khi làm điều gì đó có thể ảnh hưởng đến môi trường	1	2	3	4	5	6	7
2. Tôi tự nguyện thực hiện các hành động và sáng kiến về môi trường trong các hoạt động công việc hàng ngày của tôi	1	2	3	4	5	6	7
3. Tôi góp ý với đồng nghiệp về cách bảo vệ môi trường hiệu quả hơn, ngay cả khi đó không phải là trách nhiệm trực tiếp của tôi	1	2	3	4	5	6	7
4. Tôi tích cực tham gia các sự kiện môi trường được tổ chức trong công ty của tôi	1	2	3	4	5	6	7
5. Tôi nắm rõ các thông báo về các sáng kiến môi trường của công ty tôi	1	2	3	4	5	6	7
6. Tôi thực hiện các hành động vì môi trường góp phần tích cực vào hình ảnh của công ty tôi	1	2	3	4	5	6	7
7. Tôi tình nguyện cho các dự án, nỗ lực hoặc sự kiện giải quyết các vấn đề môi trường trong công ty của tôi	1	2	3	4	5	6	7
8. Tôi tình nguyện dành thời gian của mình để giúp các đồng nghiệp thực hiện hành động bảo vệ môi trường trong mọi việc	1	2	3	4	5	6	7

họ làm tại nơi làm việc							
9. Tôi khuyến khích các đồng nghiệp của mình áp dụng hành vi có ý thức về môi trường hơn	1	2	3	4	5	6	7
10. Tôi khuyến khích các đồng nghiệp của tôi bày tỏ ý kiến và quan điểm của họ về các vấn đề môi trường	1	2	3	4	5	6	7
Cam kết về tình cảm của nhân viên (EAC)							
1. Tôi sẽ rất vui khi dành phần còn lại của sự nghiệp cho công ty này	1	2	3	4	5	6	7
2. Tôi thích thảo luận về tổ chức của mình với những người bên ngoài công ty	1	2	3	4	5	6	7
3. Tôi thực sự cảm thấy như thể vấn đề của công ty là của riêng tôi	1	2	3	4	5	6	7
4. Tôi nghĩ rằng tôi có thể dễ dàng gắn bó với một công ty khác như khi tôi gắn bó với công ty này	1	2	3	4	5	6	7
5. Tôi không cảm thấy mình là "một phần của gia đình" tại công ty của mình	1	2	3	4	5	6	7
6. Tôi không cảm thấy 'gắn bó tình cảm' với công ty này	1	2	3	4	5	6	7
7. Công ty này có rất nhiều ý nghĩa cá nhân đối với tôi	1	2	3	4	5	6	7
8. Tôi không cảm thấy mình thuộc về công ty của mình	1	2	3	4	5	6	7