



**The Place of Human Resource in developing workplace green behaviour model for eThekweni Municipality Durban, South Africa.**

**By**

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## DECLARATION

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## ABSTRACT

Green human resources management practice is a pro-environmental behavioural strategy that can be employed by HRM departments or HR managers to make their organization adopt a green workplace culture or behaviour. Municipal government institutions, with their services-centred focus, can help its employees and citizens, in general, adopt a pro-environmental behaviour lifestyle. Adoption of pro-environmental behaviours can help save the environment from the scourge of climate change and global environmental challenges. This study aimed to develop a workplace green behaviour model for a municipal institution and its employees. This way, employees can engage in environmentally sustainable practices. Consequently, the employees will contribute to saving the global environment by adopting green practices at their workplace. The study was a mixed-method empirical study conducted among the HR employees of a metropolitan municipality in South Africa.

Data was collected through an in-depth interview schedule and a self-administered questionnaire survey. Results indicated that GHRM was not in use or in place at the selected municipal organization. Despite the absence of a GHRM strategy or policy, there were partial green recruitment structures in place for the employees. Green reward and compensation also used to have a recognition award for environmental sustainability initiatives, but presently this is no longer in practice. Although environmental sustainability was acknowledged by the municipality management in the integrated development plan (IDP) as one of the municipal goals, there was nothing to indicate managerial support and other efforts to reach the goal by the management. The findings from the data analysis also showed that the GHRM practices (green recruitment, green training, green reward & compensation, green performance management, and management support) were all significantly positive to influence employee workplace green behaviours.

The study recommends that managerial support should institute green centred policies, the inclusion of the policies into the city's strategic vision and mission, providing special funds for green projects, and drive a consistent massive awareness campaign. A further recommendation suggests that all GHRM practices, such as green recruitment, green training, green reward & compensation, green performance management, and managerial support, must be deliberately applied as a whole and not in part to achieve the desired pro-environmental behaviour. The significant contribution of this study was the proposed conceptual model on how to implement and operationalize greening culture at the municipality.

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# CHAPTER ONE: INTRODUCTION

## 1 Introduction

This study investigates the role of HR in developing employees' green behaviour, using eThekweni municipality as a reference point. South Africa is the second-largest emitter of carbon dioxide on the continent after Libya; this is due to the mostly coal-dependent energy source for energy production (DEAT, 2006). South African could be described as the 'most-carbon-intensive economy in the world' (Warburton, Schulze, & Jewitt, 2012; Morrison-Saunders & Retief, 2012). In 2009 alone, according to global estimations, about 387 million tons of CO<sub>2</sub> was released to the atmosphere, this represents 1.6% of global estimates (RSA National Treasury, 2010). Globally the waste sector contributes about 3% to the global greenhouse gas emission (GHG) rate, while the South African national average stands at around 2% to the greenhouse gas emission rate. (Friedrich & Trois, 2016; Harris, Zeyer, Kegel, Muller, Emmenegger & Mohn, 2015). eThekweni municipality, one of the few metropolitan municipalities in South Africa, is one of the highest emitters of green-house-gas and wastes in South Africa. eThekweni municipal greenhouse gas emissions as of 2014 stood at 29 million tonnes, a 1% increase from 2013 figures (eThekweni Municipality IDP, 2017). Incidentally, emission calculations and future projections are gradually increasing among several organizations, although at different levels (Bakas, Sieck, Hermann, Andersen & Larsen, 2011; Friedrich & Trois, 2013). In other words, climate change is one of the single most deadly threat facing humanity in the 21<sup>st</sup> century (Davis & Challenger, 2013, p. 112). Therefore, environmental concerns have forced organizations and eThekweni municipality to seek for new ways and interventions to become green organizations.

Although, there have been studies, policies and practical interventions commissioned to look at finding solutions to the environmental challenge. Their main gaps are that there has been no focus on the adoption of green behaviours. The HR department, among other departments in an organization, has the responsibility to manage and instil a 'green' organizational culture or behaviour on employees' of organizations. Green organization merges its organizational objectives with environmental sustainability ethos; this creates a 'green work culture' that applies GHRM practices to its operations.

Green organizations are firms that prioritize environmental goals and integrate them into their organizational objectives. Green human resource management (GHRM) is a term derived from

green organizations. GHRM refers to the "various activities involved in the development, implementation and on-going maintenance of a system that aims at making employees of an organization green" (Opatha, 2013, p. 31). Human resource management (HRM) practices should inculcate green self-efficacy and green consciousness into employees training and development programs (Opatha, 2013). To attain environmental sustainability, some organizations will, therefore, take steps to reduce environmental damage to the environment. One of those gaps is focused on examining and proffering workplace green behaviour models for employees of eThekweni municipality and see how the HR roles can influence the effect of a change in their behaviour.

This chapter presents the background, problem statement and significance of the study on the relationship between HR roles/functions and employee green behaviours at eThekweni municipality. The specific objectives emanating from the main objectives of this study were listed, and the research questions derived from the problem statement are listed below. These research questions and objectives were tested using a statistical tool analysis with the most appropriate inferential statistics. The structure of the thesis were also presented in this chapter.

## **1.1 Background of the study**

Globalization and the struggle for clients, customers and a higher percentage of markets all over the world has increased the rate of environmental resource depletion and environmental degradation. This increasing trend has led to a research emphasis (Behrend, Baker, & Thompson, 2009; Opatha, 2013; Reynolds & Yuthas, 2008; Unsworth, Dmitrieva, & Adriasola, 2013) on the management of the environmental challenges and how these resource use can be reduced. Resource management and environmental sustainability are critical for any business or organization all over the world.

In the past decade, GHRM studies have increased gradually, (Bartlett, 2011; Gully, Phillips, Castellano, Han, & Kim, 2013; Opatha, 2013; Bouten, Everaert, Van Liedekerke, De Moor, & Christiaens, 2011; Unsworth, Dmitrieva, & Adriasola, 2013). This trend points to the recurring issue of environmental management and environmental sustainability. Despite the increased growth of GHRM works of literature globally, there is still a gap in African empirical studies or perspectives on green human resource management. This study intends to help fill the African and South African perspective gaps in environmental sustainability practices and efficient resource management. This study will focus on organizations having a green culture while conducting their operations using environmentally friendly practices.

The increasing rate of globalization all over the world has increased two-folds, particularly the rate at which earth's natural resources is used calls for concern (Idris & Abdullahi, 2016; Rahman, Kumar, Fazal, & Bhaskaran, 2011). Due to the rapid changes in earth's climate caused by pollution, reduction of resources in the environment globally such as deforestation, greenhouse-gas emissions, overpopulation and other environmental issues. These environmental problems have piled more pressure on business or service organizations, as well as managers of the industry on the need to adopt environmentally friendly practices, services and products (Prasad, 2013; Huang, Wong & Yang, 2014). Even Cape town in South Africa ran out of water for some months in 2019, due to climate change, a consequence of environmental pollution (Ziervogel, 2019). These challenges have intensified the search for more proactive strategies and interventions. Some of those strategies are for business leaders to consider developing green products and servicing clients using environmentally friendly practices. Adoption of environmentally friendly initiatives can influence employees' green behaviours in organizations. Greening of employee behaviours requires urgent intervention through the HR department since HRM plays an essential function in shaping the organizational culture, organizational strategy and developing a firm development policy (Schuler & Jackson, 2014).

Therefore, the HR department needs to provide adequate intervention to ensure that employees are exhibiting pro-environmental behaviours in their daily activities. Much of these environmental efforts had been focused on the private sectors to the detriment of the public sectors. There is a lack of public sector environmental initiative; they (public service institutions) need to design their strategy of combating the immediate problem of consumption of natural resources and the consequence of environmental degradation. In other words, they need to put in place their own public sector environmental strategies or initiatives. The study also aims to fill this gap by focusing on public sector service institution in Durban, South Africa, and their existing efforts at becoming an environmentally sustainable organization.

Further review on Zibarras & Ballinger (2011) and Prasad (2013) studies, revealed issues such as reduced support from the management, absence of an operational framework, and fewer empirical studies on environmental management to make for a general theory. This empirical research study will also focus on managerial support towards the environment and as proposing an environmental operations framework for employees at eThekweni municipality.

Besides, several articles reviewed by GHRM scholars such as Parker (2011), Jackson (2012) Taylor, Osland, & Egri (2012) and Ones & Dilchert (2013) alluded that, existing studies had

failed to align the needed pro-environmental training, the rewards & compensation interventions required for employee pro-environmental behaviours.

According to Zibarras & Coan (2015), workplace green behaviour and GHRM is still an under-researched topic. There is a dearth of workplace green behaviour studies with an African and South African perspective, and this study is designed to fill that gap.

The study by Kim, Han, Jackson & Ployhart (2017) looked at the motivation of employee's voluntary behaviours. It found that conscientiousness and moral duty motivated employees to engage in green voluntary behaviours. This current study will, therefore, address this gap by focusing on identifying five HR practices: recruitment, training, rewards & compensation, performance management and management support. The aim is to determine the most influential amongst the HR practice.

Recently, GHRM studies that focused on examining the influence and role of green HRM practices on employee's workplace behaviour have steadily increased from 2015. What has remained unchanged is the focus on business-oriented organisations or institutions that prioritize profit over welfare services of their environment. GHRM studies such as Saeed, Afsar & Afeez (2019), examined green psychological capital across different manufacturing sectors. Ojo, Ling Tan & Alias (2020), focused on engaging information technology (IT) employees on pro-environmental behaviour across IT companies. Gilal, Ashraf, Gilal, Gilal & Chaana (2019), investigated the role and influence of GHRM practices on employees in a higher educational institution. This current study will focus at advancing the role of GHRM practices on employee pro-environmental behaviour, in a local government (public service oriented) institution, where governance is not efficient or well-structured and employee engagement is not at the level of private organisations or higher educational institutions.

Furthermore, the erection of environmental structures in organizations will not suddenly influence employees to engage in green behaviours (Jordan & Lenschow, 2010; Ucci, 2010). In addition to the structures, there needs to be a will (managerial support) from the organization's management to direct and encourage them at the same time to make them pro-environmental. This study will hopefully identify the pro-environmental structures and the appropriate HR behaviours that go with it.

## **1.2 Statement of the problem**

The unsustainable environmental behaviour of employees of an organization has become a cause for concern for organizations management and the global community. The private and public organizations have found it challenging to sustain workplace green behaviours among their employees. The HR department, which is usually regarded as the 'keeper of organizational culture' (Jackson, Renwick, Jabbour, & Muller-Camen, 2011), have not been able to solve or reduce the challenge. Public service institutions, like municipalities, are significant contributors to various environmental issues like climate & weather change, sea & air pollution, exploitation of scarce natural resources and global emissions (Parker, 2011). It was reported that eThekwini municipality, one of the first metropolitan municipalities in South Africa, ranks high as one of the highest emitters of green-house-gas (GHGs) and wastes in South Africa (Morrison-Saunders & Retief, 2012). According to the eThekwini municipal IDP report of (2017), the GHGs emissions of 2014 exceeded 29 million tonnes, this indicated a rise of 1%, from the 2013 figures, which stood at 28 million tonnes. The figures indicate a high degree of wastage of resources, such as energy, water usage, paper usage, and pollution. Environmental irresponsibility may also include high demand and consumption of energy leading to increased pressure and load shedding of electricity (a recent spell in South Africa). Load shedding is a consequence of diesel shortages, depletion of water reserves at hydro power stations, breaking down of critical components of the system as well as generating capacity being offline due to planned maintenance (Van der Nest, 2015). Other consequences may be reduction in water sources, and a high rate of depletion of natural resources. This might indicate an unsustainable behaviour of citizens of eThekwini municipality.

Although, organizations like Eskom, Ford wildlife foundation, Nampak, Bridgestone-SA and eThekwini municipality, have made considerable efforts to manage and make their organizations green or environmentally friendly (Stubbs, 2018). There is still a need to help them sustain the greening culture (Herald, 2018). The human resource department has been lagging in efforts to introduce green activities in their operations. Having green human resource management (GHRM) policy or model could help fill the gap. Furthermore, despite the great strides on green HRM scholarly research, the same cannot be said of (GHRM) implementation across private and public organizations (Jackson & Janghoon, 2010). This study intends to fill this gap by proposing to develop a conceptual framework model for eThekwini municipality and by extension, other municipalities in South Africa.

An environmentally friendly organization indicates that employees' behaviour is pro-environmental or 'green'. Employees' green behaviour means the HR department utilizes GHRM functions (green recruitment & selection, green training, green rewards & compensation, green performance management system & has managerial support) in its operations. This is another problem this study intends to examine, that is how the various green HR functions will influence employee's green behaviour? How will managerial support influence employee's workplace green behaviour?

Lastly, having employees imbibe a workplace green behaviour voluntarily will indicate a successful 'green' organizational culture at the workplace. Environmental sustainability practices such as reducing waste emissions, setting targets, penalizing defaulting employees & organizations by not conducting business with them, aligning production and supply lines to environmentally sustainable practices should be a daily occurrence, this may subsequently reduce damage to the environment. The reality of not being environmentally friendly or having a 'green culture' organization is climate change, with the increased hurricane threats, tsunamis, energy and nuclear-radioactive pollution crisis - like Fukushima, exploding population figures, sea pollution, flooding and the imminent water crisis by 2025 (UNEP, 2019). There is a need for an immediate behavioural change of everyone, and most importantly, employees of public service organizations, such as eThekweni municipality. eThekweni municipality is needed to be environmentally compliant, also a need for its proper alignment of HR practices with green initiatives. This current study examines the role of HRM in developing workplace green behaviour for eThekweni municipality.

### **1.3 Research objectives**

The main objective of this study is to develop a best-practice model on workplace green behaviour for employees of eThekweni municipality in South Africa.

The specific objectives of this study include the following:

1. To investigate the influence of green recruitment on employees' green behaviour
2. To ascertain the effects of green training and development intervention on employees' pro-environmental outcomes.

3. To ascertain the most effective type of reward system in place to enhance good pro-environmental behaviour for the organization.
4. To examine the influence of environmentally sustainable key performance areas on employees' green behaviour.
5. To investigate the relative influence of environmental behaviours and GHRM practices on green workplace behaviour.
6. To examine the influence of managerial support on green workplace behaviour.

#### **1.4 Research questions**

From the following objectives, the study raises the following questions:

1. How does green recruitment influence employees' green behaviour?
2. How do green training and development interventions influence employee pro-environmental outcomes?
3. Which is the most effective type of reward that can enhance good pro-environmental behaviour for the organization?
4. How does the environmentally sustainable key performance areas influence employees' green behaviour?
5. How do green HRM practices influence workplace green behaviours?
6. How does managerial support influence workplace green behaviour?

#### **1.5. Original contributions of study to knowledge**

The contributions of this study are centred on updating academic knowledge literature on green human resource management (GHRM) research and practice; with a conceptual framework for workplace green behaviour for municipalities in the HRM discipline. Another significant

contribution of the current study will be the addition of the South African municipality perspective of GHRM to academic literature. The study will also contribute to knowledge by proposing the AMO conceptual model, which will be tested using a more sophisticated statistical tool (covariance-based SEM).

Furthermore, this study will also contribute immensely to the practical use of green HRM principles at the municipalities, since a municipality is used as the case analysis. The findings from this study will also benefit policy improvements of green HRM at the municipality regulations guiding GHRM and its implementation strategy. It is also envisaged that the model and recommendations from the study when effectively implemented by the municipalities or organizations can lead employees to engage in pro-environmental behaviours. Another important significance of the knowledge from this study will be the socio-economic and technological impact it will have on the communities serviced under the municipality. The socio-economic and technological impact will be significant because environmental sustainability will be mainstreamed across the municipality; this will translate to improvement in people's lives, living sustainably and making the environment safer for future generations. Posing the adequate answers to the research questions for this study will assist the HR department navigate how traditional HR functions such as 'recruitment & selection, training & development, reward & compensation, performance management & appraisal and management support' can be used to guide employees engagement in green workplace behaviour. This will aid the contribution to both theory and practice of GHRM.

## **1.6. The rationale for the study**

The rationale for this study was the gap identified in the literature, which is the need to improve awareness of pro-environmental green behaviours of employees and to make GHRM mainstream. Mainstreaming GHRM and improving pro-environmental behaviours in the community is much more achievable through a municipal study such as this topic. GHRM is expedient based on the realization that environmental sustainability awareness and pro-environmental behaviours will benefit the employee's immensely and make the municipalities more amenable to environmental sustainability initiatives (in practice or for policies) for the present and future generations.

Conducting GHRM study on municipalities is vital to address the problem of non-adoption of green behaviour, facing worse climate change impacts, or even a debilitating social problem

such as pollution, overpopulation, and waste management problem. According to Jordan & Lenschow (2010), environmental sustainability initiatives are essential to be adopted, due to the protection of the environment it offers, and the prevention of wastages plus reduced pressure on the natural resources.

For this to be achieved across municipalities, the human resource department will need to play the role of environmental sustainability change champions on behalf of employees of the municipality. The study's main motive is to accelerate the HR department executives and other employees of the municipality to continue to adopt green HRM initiatives in all their operations and behaviours. The study may therefore encourage joint efforts to fight non-green environmental behaviours or wastage of natural or municipality resources. It is, therefore, a worthwhile endeavour to identify green workplace behaviours that are environmentally sustainable at eThekweni municipality Durban, South Africa.

### **1.7. Scope and limitation of the study**

The scope of this study is limited to understanding the relationship between each HR function and its influence on employee's green behaviour. Human resource practices or functions are utilized as the independent variables in the interplay between HR functions and employee green behaviour (dependent variable). The dependent variable (employee behaviour) value depends on the performance of each HRM function. Employee green behaviours will be examined to test the level of influence between each HR function. As such, the explanations offered in this study are limited to the interplay between green recruitment & selection, training & development, rewards & compensation, performance management, management support and employee green behaviour.

The population of the study is limited to eThekweni municipality Durban, South Africa. eThekweni municipality was selected as it is one of the few metropolitan municipalities in South Africa, in which they are very active in managing and integrating environmental sustainability into their operations. Besides, eThekweni municipality is a notable municipality that houses an extensive community. Therefore, findings from this study will be limited to eThekweni municipality and all smaller municipalities in its environs.

### **1.8 Structure of the thesis**

- **Chapter 1: Introduction**

Chapter one serves as an introductory chapter. It also presents the background of the study, the research problem, the research objectives and the research questions, the rationale for the study, the original contribution of the study and the thesis structure.

- **Chapter 2: Literature review:**

This chapter also presents another literature review section that assesses green human resource behaviours, green HRM functions, green behaviour or green practices at eThekweni municipality. Lastly, it will present the proposed conceptual framework of the study and a brief explanation of the framework.

- **Chapter 3: Research methodology**

Chapter three presents a discussion on various research philosophies showcasing their strengths and weaknesses before adopting pragmatism as the appropriate philosophical position for this study. The also explains the methodology and the research design adopted and the justification for the adoption. The study also adopted a convergent-parallel mixed-methods research design, which is aimed at deriving the level of influences evident between HRM and green environmental behaviour. The research methodology section also includes developing a green behaviour model, where an empirical factor analysis test will be done to test for "model fit". The chapter presents the population of the study, sampling techniques, research instrument, instrument administration, procedures for data collection and analysis, as well as limitations of the study.

- **Chapter 4: Data presentation and analysis**

Chapter four will present the data and the technique used in analyzing the collected data. This chapter also interprets the results that emanated from the quantitative and qualitative data collected in order to find the relationship between HRM functions and green employee behaviours. The results are presented either in tables, pie-charts or bar graphs. The research questions are tested using inferential statistics such as correlations, factor analysis and structural equation modelling.

- **Chapter 5: Discussion of results/ conceptual framework**

Chapter five presents the findings based on empirical data collected and presented in chapter four. The discussion is presented with the research questions and research objectives. The discussion was done to provide an adequate understanding of the focus of study, thus expanding

the frontiers of knowledge on green HRM on HEIs. This chapter will also present the conceptual framework that emanated from the findings of the study.

- **Chapter 6: Recommendations and conclusion**

This chapter presents the recommendations and conclusions of the study according to the research objectives. The conclusion of the entire study is presented, and its scholarly contribution to knowledge in the fields of green human resource management (GHRM) at eThekweni municipality, highlighting employees' green behaviour at the workplace. This chapter also highlights the limitations and suggestions for future research.

### **1.9 Chapter summary**

This section presents a summary of each chapter discussed. It adequately summarizes the main points and structure of the chapter. The next chapter is the literature review on green human resource management, concerning eThekweni municipality is reviewed and discussed.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 INTRODUCTION**

This literature review chapter will focus on the review of works of literature on the concepts of HRM, green human resource management (GHRM), the GHRM roles; green recruitment & selection, green training, green compensation & rewards, green performance management and management support, and the benefits of GHRM adoption by organizations. Also, this chapter will focus on reviewing recent literature on green environmental behaviours in organizations. Furthermore, this chapter will conduct a review of the literature on environmental sustainability at eThekweni municipality, highlighting the gaps in the literature and lastly reviewing previous GHRM frameworks and the proposed conceptual frameworks.

### **2.2 DEFINING HUMAN RESOURCE MANAGEMENT (HRM) & ROLES**

According to Noe, Hollenbeck, Gerhart & Wright (2013, p. 5), "Human Resource Management (HRM) refers to the policies, practices and systems that influence employee's behaviour, attitudes, and performance". The HR department deals with all organizational issues that pertain to the human resource 'people practices' all in a bid to influence the performance or productivity in the organization positively. According to Boz, (2014); Lee, Willis, & Tian, (2018), HRM practices are the HR processes, programs and techniques that get to be implemented in the organization or business unit.

These practices include

- HR planning (this involves determining all HR needs and assigning resources to them),
- Recruitment and selection (procurement and choosing of talented employees),
- Training & development (teaching and preparing employees on how to perform their assigned tasks),
- Reward & compensation (motivating and rewarding of employees),
- Performance management (monitoring and evaluation of employees' performance, and

- Employee relations (involves providing employees with a conducive and positive work environment (Noe *et al.*, 2013, p. 6).

All these HRM practices are aligned towards the main organizational goals and objectives. While achieving these goals and objectives, HR department performs its primary functions or roles in line with these HR practices listed in table 2.1.

Table 2.1 Human Resource Roles & Functions

Employment & recruiting	Interviewing, recruiting, testing and selecting the qualified candidate
Training & development	Orientation, performance management skills training, productivity enhancement
Compensation	Wage and salary administration, job descriptions, executive compensation, incentive pay, job evaluation
Benefits	Insurance, vacation leave administration, retirement plans, profit-sharing, stock plans
Employee services	Employee assistance programs, relocation services, outplacement services
Employee & Community relations	Attitude surveys, labour relations, publications, labour law compliance, discipline
Personnel records	Information systems, records
Health and Safety	A safety inspection, drug testing, health, wellness
Strategic planning	International human resources, forecasting, planning, mergers and acquisitions

**Source:** Noe *et al.* (2013, p. 6).

The roles and functions of HR can sometimes be undertaken solely by HR or can be shared with managers in other departments. It all depends on how the organization chooses to structure its HR department.

However, these HR roles and functions have evolved partly due to global technological change all over the world. The HRM role has evolved from one of the mere administrative operations to strategic roles. Many of the administrative tasks are now being done with technology. The HR department has been tasked to contribute more to make the organizations have a competitive edge against its rival organizations. For example, the existing HR roles are more

of administrative services and transactions, business partnering services and strategic partners. Terms like "shared service model, self-services, evidence-based HR and HR/workforce analytics, are commonplace terms used to describe new HR roles in the organizations" (Noe *et al.*, 2013, p. 7-11).

Considering the changing HR roles, the Department is also tasked care for the communities, i.e. corporate social responsibility (CSR) (among other functions) in which they operate. Several organizations now engage in corporate social responsibilities (CSR) as part of their community roles or duties. CSR increasingly has been embraced by many organizations as it promotes a company's public image across all stakeholders (employees, customers, shareholders, and the community). CSR grants organizations benefits to access new markets, gain new customers, helps to attract, and retain employees (Noe *et al.*, 2013).

CSR thus give organizations impetus to meet shareholders and the community demands, this way, they become socially and ethically responsible to the environment. Several organizations have made attempts to be socially responsible: e.g., 'International Paper; a global packaging firm has focused on conserving water and energy usage when manufacturing. They have succeeded in reducing fuel purchases by 21%' (Noe *et al.*, 2013, p. 23). Equally, Pepsi cola, a non- alcoholic beverage company, has also introduced an all-electric truck for distribution of their products. This act will reduce their fuel consumption by 500,000 gallons annually, it will also help to preserve the environment and climate change by reduction of greenhouse gas (GHG) emissions (Noe *et al.*, 2013, p. 24).

Global businesses need to re-strategize in light of the in considering the growing concern for the imminent climate change and the destructive impact of corporate organizations on the global environment. Organizations need to do more than just CSR. There is a need to make organizations go 'green'. Green organizations go the extra mile to take care of the environment rather than just limiting their firms to optional corporate social responsibility (CSR). Greening involves organizations subjecting all its roles, functions, products and operations to environmental management. The HR of an organization are most times saddled with the responsibilities of 'greening the organization' (Renwick *et al.*, 2013). In the light of the worldwide scourge of environmental degradation, South African organizations are lacking behind in incorporating into their roles and functions environmental sustainability ethos. Green HRM has become expedient for organizations to implement. The South African academic circle has had few studies focusing on environmental management concepts/empirical studies

such as; students perception on 'green branding at Woolworths' (Grootboom, 2018), 'green supply chain management challenges in the South African fast-moving consumer goods industry' (Mvubu, 2015), 'factors influencing green practices among SA food retailers' (Ghebrehiwet, 2019) 'environmental management in the hotel & lodging sector in KZN' (Sucheran, 2013), 'greening small business- assessing the level of environmental awareness and practices in small business in Edenvale (Dobeyn, 1998), and green HRM towards sustainable organization at KwaZulu-Natal (KZN) (Mtembu, 2017).

The above empirical studies examined green HRM and environmental sustainability management practices in a private firm. The reviewed studies above, except for Mtembu (2017), failed to account for how employees will acquire green workplace behaviours and how an organizational green workplace strategy can achieve green culture amongst employees. Although Mtembu (2017) looked at GHRM adoption in a public, academic higher institution, it was looked at through the organizational lens, rather than through the employee lens.

This study, therefore, aims to fill the gap by looking at GHRM practices and its influence on employee workplace green behaviour at a public service organization (eThekweni municipality) through the employee lens.

### **Concept of Green**

Furthermore, before going ahead to explain the concept of Green HRM, there is need to list several green concepts that have been in practice before now: green accounting (Renwick *et al.*, 2013; Murray, Skene, & Haynes, 2017), green marketing (Renwick *et al.*, 2013, Peattie, 2016, green retailing by (Kee-hung, Cheng, & Tang, 2010; Renwick *et al.*, 2013) and green management (Mburu, Obuya, & Kamau, 2018; Renwick *et al.*, 2013) to sum it up. All the listed green concepts showed that GHRM was a late bloomer in this context.

Greening or 'green organizations' is a term used to describe organizations that are environmentally friendly or strive to protect the natural environment. Several other authors have also described the concept of green, albeit with the HR concept. Opatha (2013, p.4), described green or greening in four ways: "preservation of the natural environment, conservation of the natural environment, avoidance or minimization of environmental pollution and generations of gardens and looking-like natural places". Green concept categorization was done by (Opatha, 2013), in a bid to explain the different roles that every working employee in a green organization should embrace. The roles include preservationist, non-polluter, conservationist, and maker.

There is another green concept of GHRM or HRM views expressed by several authors. Such views expressed by Mandip (2012), where it was explained that GHRM is a way of using human resource policies in promoting sustainable usage of resources in the operations of an organization, is done with deep consideration of caring for the environment. In another view, expressed by Mathapati (2013) focusing on the workforce of an organization, he posited that green HRM creates a green workforce that appreciates, understands, and engages in green initiatives. These green initiatives were designed to achieve green objectives, following a green process through the existing HRM functions, such as recruiting, hiring, training, compensation and advancing the firms human capital. Besides, adoption of green HR practices by organizations will help the organization achieve its specific environmental objectives (Kane, 2011).

Similarly, Prasad (2013), also described 'green HR' as the contribution of HR policies and practices for an encompassing organizational agenda that aims to protect and preserve the resources in the environment.

From several definitions, the scholars posit that caring for the environment and making use of organizational functions, processes, and tools was the overall theme. Also, evident was that greening could also be an organizational agenda or strategy, thrust on the managers or the HRM department to implement. The green agenda can be implemented through some of the existing HR practices, such as recruitment, training, compensation, and management support. Adoption of the green agenda also helps to set green goals and objectives for their employees. It will also help the Department in becoming a green organization.

### **2.2.1 DEFINING GREEN HUMAN RESOURCE MANAGEMENT (GHRM)**

Although many organizations are set up to make money and become profitable, changing global trends have necessitated the change in trajectory also to consider caring for the environment. Organizations now understand they have a responsibility to all their stakeholders which includes employees, community, and shareholders. Having recognized their responsibilities, the only effort in addressing these gaps is by putting in place a workable strategic plan to satisfy the stakeholders or to tackle the myriad of environmental challenges in their communities. Maintaining environmental sustainability by an organization is most times saddled with either a particular committee or the human resource department of an organization. The maintenance role of managing the environment by HR is usually referred to as GHRM.

Green HRM has been defined severally by different scholars, amongst them is Deshwal, (2015) who described it as use of HRM policies in supporting sustainable utilization of organizations' resources, this also supports in sustaining the environment. He further adds that Green HRM is usually referred to as efforts of an organization on people management policies and practices to ensure a safer environment.

In the same vein, Mampra (2013, p. 6), "described Green HRM as the practices and policies of HRM for the encouragement of sustainable resource use in businesses and the promotion of environmentalism that would help boost the satisfaction and morale of the employees within organizations".

Zoogah (2011), also alluded that Green HRM is the practice of philosophies and policies of HRM to promote ecological usage of business resources and prevent any harmful environmental effect arising with the operations of the firm.

In summary, the definition of GHRM informs that, GHRM is the application of environmental management principles to human resource management processes to make the world a safer place for the future generations unborn. GHRM also helps to balance and optimize between the society, economy, and the environment (Boone & Modarres, 2015). Environmental sustainability seeks to be the new way of doing things across organizations, and this includes finances, environmental risks, processes, obligation, and opportunities (Boone & Modarres, 2015).

By implication, GHRM helps instil a culture of green or 'green organization culture' in the workplace. It is vital as it makes for easy management of the environment and the organization. Organizational culture is an essential ingredient for managing environmental sustainability (Bertels, Papania, & Papania, 2015). It embodies the values, symbols and activities of the organization, and it reveals the management's thought on environmental sustainability issues (Le Roux & Pretorius, 2016). HR departments utilize GHRM practices and the organization's policies to implement a seamless environmental, organizational culture while acting as a change agent (Garavan, McGarry, Watson, D'Annunzio-Green, & O'Brien, 2015).

One of the primary roles of HR is designing a sustainable HR strategy, where employees are taught different skills and ways to achieve the triple bottom line. The triple bottom line ensures the growth and sustainability of the organization for all stakeholders. Thus, the need for green human resource management (GHRM) strategies (Chaturvedi, Vijayalakshmi, & Nijhawan, 2015). Public sector organizations play a critical role in servicing their communities and making the cities liveable for them. This service can also include the integration of

environmental sustainability into their operations. It entails implementing a green strategy into their service objectives.

The above views have established the concept of green human resource management, and the study will have a look at GHRM roles of functions along with literature with a focus on GHRM issues.

## **2.3 GHRM FUNCTIONS / ROLES**

Several studies have focused on different GHRM roles or functions (Jabbour, 2011; Ones & Dilchert, 2013; Renwick, Redman & Maguire, 2013; Arulrajah, Opatha & Nawaratne, 2015; Millar, Sanyal & Camen, 2016). This study will focus on four of the traditional roles of HRM; these include green recruitment (GR), green training (GT), green compensation & rewards (GCR), and green performance management (GPM). This study also considered management support as an HR role due to the critical role it plays in making GHRM possible in an organization. The 'HR function' is the potential contributor that will bring about the much-needed organizational change. The HR function helps the alignment of an organization's policies to green goals, and these drive green practices that will be ingrained as part of the organizational culture (Mehta & Chugan, 2015).

### **2.3.1 GREEN RECRUITMENT (GR)**

Often, HR planning indicates the need to employ additional labour. There are several recruitment options an organization can decide to choose. Recruitment is the process of attracting individuals on a timely basis, sufficiently with appropriate qualifications to apply for job vacancies within an organization (Bhoganadam & Rao, 2014). This study focuses on green recruitment practices, one of the most critical HR functions amongst all HRM practices in the discipline. The recruitment function seeks to ensure that the organization has the necessary workforce resource to achieve its organizational goals. Due to the rapid change of organizations towards upholding environmental sustainability principles, this study explored the 'green recruitment concept from GHRM' and how it influences green behaviours among employees' of organizations. GHRM involves operationalizing HRM practices with environmental management. It is aimed at emphasizing the role of HRM in eliminating or reducing pollution and wastes from organizational processes. Therefore, GHRM is necessary to engender a change in the behaviour of workplace employees.

Green recruitment is the first step to implementing GHRM in an organization. It is the integration of environmental sustainability policies with HRM recruitment processes. Green recruitment is valuable as it helps to fill vacant organizational positions with a competent workforce who possess green consciousness and by employing green processes in filling the positions in the organizations. It is also significant as it reduces or eliminates environmental pollution, waste, and excesses of employees' behaviour in the organization, and by extension a reduced environmental impact of the firm in the environment (Jackson, Renwick, Jabbour, & Muller-Camen, 2011).

This study presents a review of related works of literature on green recruitment practices, its processes and how it influences green behaviours in organizations. The article also goes further to test recruitment processes construct empirically. It explains the concept of green recruitment, identifies the different recruitment or selection practices, and reviews its influence on organizational behaviours of employees by various scholars.

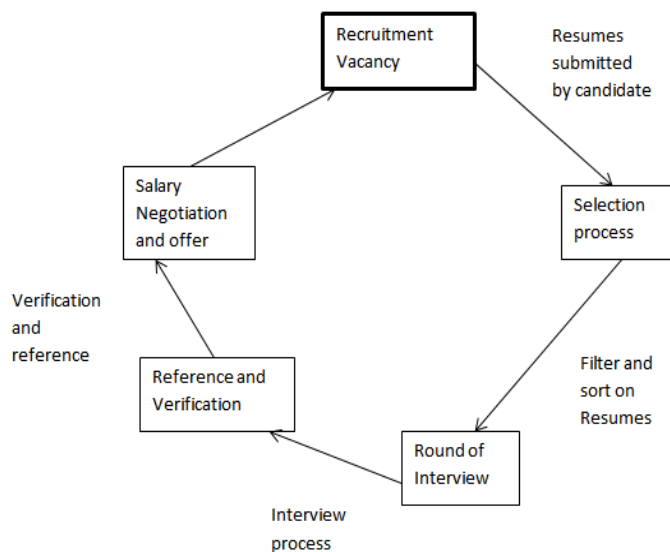
### **2.3.1.1 Defining the concept of recruitment**

Recruitment can be described as a process of making known specific criteria to job applicants (Gomez-Mejia, Berrone & Franco-Santos, 2014). This definition reveals it is a process that emphasizes on some specific job criteria, and employees will need to possess when applying for jobs. Recruitment can also be defined as a process of relaying information from the organization to the labour market about the available jobs on offer (Lad & Das, 2016).

In a separate, definition, Swanepoel, Erasmus, Schenk & Tshilongamulenzhe (2014; p. 299), defined recruitment as "HRM activities undertaken to attract people who possess the necessary talent, capabilities (knowledge, skills, experience, motivation, other attitudes and aptitudes) and potential to apply and fill vacant positions to become employees and work for the organization to help achieve its organizational objectives". This definition highlights the meaning of recruitment, which translates to getting capable personnel or human resources into different organizational positions to work together to achieve a common organizational goal. The process of recruiting or recruitment into an organization is a long process that winds up when the individual is finally settled and becomes a productive member of the organization. Recruitment processes have evolved from a traditional process to an automated or electronic process (e-recruitment).

### 2.3.1.2 Traditional recruitment processes

Historically, recruitment processes were done manually, meaning all recruitment processes was done either by hand or through paper-based processes. The traditional process starts through job adverts made in print media or over a radio or on TV appliances. Job applicants are invited to submit applications through paper-based submissions, after intense hours of screening and selection of the qualified applicants through numerous paper-based applications and curriculum vitae. The selected candidates are invited to come down to the venues for a face-to-face interview. Further screening is done through different tests or exams to whittle down the high numbers of applicants. The screening processes are repeated until the recruiters are satisfied with their selected candidates or choice. After final selection is made, offer letters of employment is handed to them to come to start work. On resumption, successful candidates are taken through a series of orientation or on-boarding programs to familiarize the candidates with the rules and code of conduct of the organization. From then on, the recruits start being an active-productive staff of the organization (Lad & Das, 2016).



**Figure 2.1: Recruitment process (Traditional recruitment process)**

**Source: Adapted from (Lad & Das, 2016, P. 546)**

Figure 2.1 above describes the recruitment process in a typical organization. Traditional recruitment processes were not environmentally friendly or green (as the case may be). The recruitment processes made use of too much paper, waste of precious working hours and needed essential energy sources are used up. However, the green benefits came as an afterthought when environmental sustainability became popular. Productivity, reduction of

costs, speed of processes and profitability was the initial motive for the introduction of technology to the HR processes. With technology, much waste can be prevented or removed. Globalization and pervasive technological innovations have changed the way recruitment was done. Organizations have adopted these technological innovations to improve their productivity and profitability, including how HRM processes are done. In the same vein, technology has influenced the way recruitment processes are done; recruitment has been more electronic or online now than ever before.

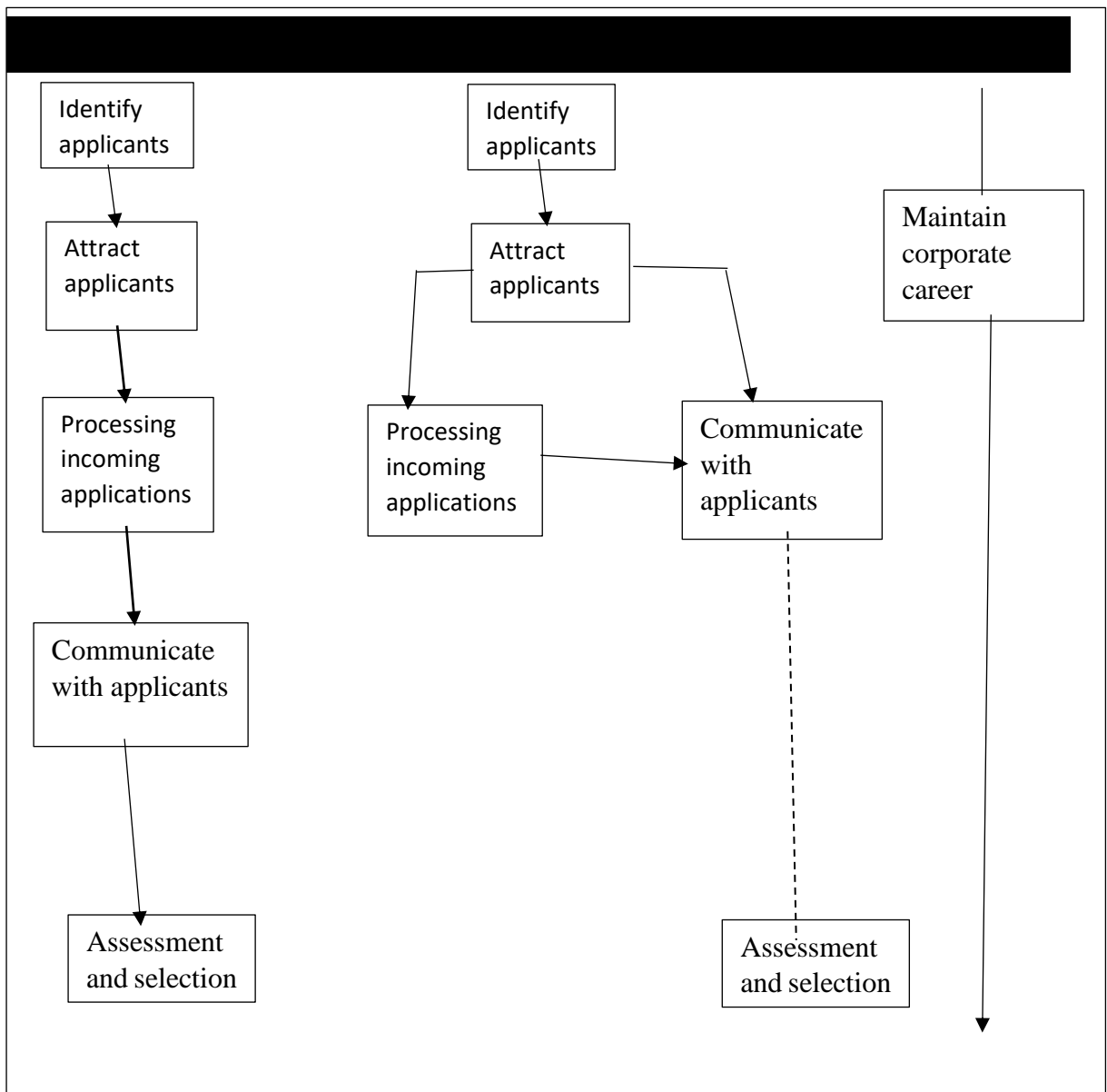
### **2.3.1.3 Electronic recruitment (Online recruitment)**

Electronic recruitment is the process whereby electronic technology is applied to traditional recruitment processes. E-recruitment is widely practised across many organizations today. Online recruitment is a formal way to source for clients or jobs online, as stated by (Las & Das, 2016).

Leonard (2012) also averred to this view by defining e-recruitment as using the world-wide-web to attract highly talented job candidates, screening of suitable resumes, and sorting through the application and selection process.

E-recruitment or online recruitment came to solve the inefficiencies associated with traditional recruitment process, i.e., problems of time-wasting involved in the hiring process, where tons of resumes are sorted through, online recruitment also solves the problem of extra-manpower and its overhead costs. Online recruitment comes to speed up and improve the recruitment process by influencing every stage of the processes.

The figure below compares traditional recruitment with e-recruitment:



**Figure 2.2: Comparison of the traditional recruitment process with e-recruitment process**

**Source:** Adapted from (Lad & Das, 2016, p. 547)

Some of the tools that came with the use of online recruitment were adapted to work well with green recruitment practices. Some of the tools include web/ job portal for the advertisement of vacancies, online interviews, curriculum vitae (CV), or resume online submissions, online interviews mediums, e-learning facilities for onboarding activities. E-recruitment facilitated the entry of green recruitment.

The recruitment process starts when firms make job adverts to the public. The adverts were to attract potential applicants to apply if interested; at this stage, applicants may come from both inside and outside the organization. After this is done, the next step is the selection process, where the process of selection could resort to 'selecting' or 'not selecting': at this stage, each applicant is considered and vetted case-by-case critically for the job position applied for (Jiarakorn, Suchiva, & Pasipol, 2015).

The selection decision is made concerning the set criteria of the organization. One-way organizations make their selection is through assessment tests. They were assessing candidates based on the type of work applying for and the criteria set by the HR managers (Jiarakorn *et al.*, 2015). There are quite a few tests available employers can adopt that. Examples include personality and temperament tests, paper and pencil integrity tests, situational exercises test and work sample test.

When recruitment and selection are made in consideration of the environment implies making use of resources and tools that do not cause harm to the environment in any way.

#### **2.3.1.4 Green recruitment (GR)**

According to Zoogah (2011), green recruitment can also be referred to as green staffing. Green staffing is the process of hiring individuals with environmental management (EM) skills, mind-sets and behaviours that also promotes EM. Job analysis that specifies environmental aspects such as reporting duties and responsibilities; identification and influencing of candidates with EM related experiences. These also include EM-centred testing (e.g., knowledge of risks, harmful substances to the environment and potential emissions), and interviewing that focuses on EM behaviours enable managers to identify candidates that fit environment-centred jobs (Renwick *et al.*, 2013). The selected candidates should possess personality and attitudinal attributes that prevent waste, show creativity and innovative ideas about protecting the environment.

Similarly, other scholars such as Obaid & Alias (2015), defined green recruitment (GR) as merely the process of employing people that possess the knowledge, skills, and behaviour of managing the environment into an organization. GR ensures the organization attempts to achieve its environmental goals by eliminating wastes and reducing its carbon-footprints as much as possible. GR means all the processes involved in recruiting a new employee are done carbon-free or online. Moreover, Wehrmeyer (2017), posited that the recruitment process could assist firms in having a compelling performance in the environmental sphere, by ensuring the newly recruited staff is aware of the green culture of the organization. The implication is that newly hired staff will always endeavour to maintain the pro-environmental management values as well as the performance of the organization. Implementing green recruitment processes is primarily done by the HRM of an organization.

The HRM of an organization has the responsibility to play the role of maintaining the sustainability culture in the organization (Harmon, Fairfield & Wirthenberg, 2010). The HR 'keeper of culture' department staff is about the only professionally trained employees' of an organization to manage the behaviours of executives, managers and employees through the utilization of the HR systems (Liebowitz, 2010).

Liebowitz (2010), view on green recruitment adopts the resource-based theory (RBV) in explaining his position on green recruitment. RBV means giving first preference to internal employees of the organization before new employees are considered for recruitment. Only when there is no qualified internal employee can a new external one be recruited for the new role. So, in the search to fill the new role, the recruitment advert must contain green specific messages that include the type of quality the applicant must possess strong teamwork and collaboration skills, applicant's cognizance for the environment (SHRM, 2011; Liebowitz, 2010).

Furthermore, green recruitment also entails showcasing the organization's environmental programs or reputation or environmental products online or at job fairs to attract new job applicants. There are several green recruitment initiatives listed by Liebowitz (2010), this includes: offering employees paid leave to volunteer in the community, organizing recycling teams among the firm employees, and advocating for frequent use of green technology at the office premises. The HR departments should also focus on recruiting across a diverse workforce for creativity and innovativeness among employees. These green recruitment options have been able to help recruit and retain several talented employees (Liebowitz, 2010).

Moreover, Tang, Chen, Jiang, Paille & Jia (2017), asserts that green recruitment and selection (GR&S) is an essential component of GHRM practices (Ahmad, 2015; Jackson *et al.*, 2011). Citing from previous studies, scholars have summarized the GR concept as green awareness, green employer branding and green criteria to attract new job applicants.

Green awareness involves the personality factors of the job candidate that enables the achievement of organizational environmental goals. Therefore, green awareness indicates green consciousness, green conscientiousness, and agreeableness of candidates. Employees that possess this kind of traits are known to actively enhance their environmental knowledge in the course of their operations; this has a positive effect on the environmental performance of their firms (Paille, Chen, Boiral & Jin, 2014). Therefore, organizations can attract, recruit, and select candidates that have green awareness. These green awareness traits can be tested with a series of tests to make sure recruited employees possess positive traits towards the environment (Mota & Teixeira, 2014; Tang *et al.*, 2017).

The second component of GRS is employer branding or reputation as regards the management of the environment, a GHRM practice (Ehnert, 2014). Employer branding is essential to be maintained, this is according to Willness & Jones (2013) study, job applicants prefer working for an environmentally friendly or conscious organization, and this gives them pride and allows them to align the organization values with theirs. Job applicants evaluate every organization's environmental information and use it as a form of criteria to assess how the organization treats its employees. They are attracted to organizations that show how green they are internally and externally (Jabbour, 2011).

The third component of GRS is green criteria. It involves putting in place a standard measure of assessing and selecting new employees. Recruiting firms should emphasize environmental aspects in job descriptions, job designs and employee specifications. It includes asking questions on environmental knowledge, values and beliefs (Renwick, Redman & Maguire, 2013).

The concept of green recruitment, according to Diana (2016), is changing the way recruitment is done. Reducing costs is considered green recruitment: costs can be reduced by automating processes and starting an online career website. An automated process helps conserve paper, which in turn conserve trees. By automating the recruiting process, job applicants can decide on their own, if it is a green organization or not. GR automation saves costs and adds to the firm's reputation. Electronic recruitment helps to conserve energy and pollution which is

associated with the traditional recruitment, where there is a need for paper manufacturing, transportation costs borne by the applicant saves recycling of paper products associated with printing and submission of curriculum vitae. Process automation saves energy, storage, handling, filing and reporting tasks. Cost savings are also recorded from paper-related costs associated with advertising, resume and onboarding processes.

Organizations through their HR managers can help reduce recruitment costs by adopting e-recruitment, reduce the printing of items, and increase recycling. Green recruitment practices include job portals for companies, resume scanners, use of telephone interviews, online and video interviews and software as a service (SaaS) e-recruiting software. Although some challenges were highlighted when the implementation of green recruitment was done more unqualified candidates, additional work for HR staff members, employees not seeking severe employment. Nevertheless, there are still some inherent benefits associated with green recruitment. They include reduced agency costs, improved employer branding, reduced paper wastage and processing costs, improved candidate experience, better ethics greener approach and improved interviewee and interviewer performance (Diana, 2016).

#### **2.3.1.5 Green selection process**

Green selection, according to Liebowitz (2010), means employee selection processes, that include careful screening of applications and taking time to scrutinize them for green skills. Such as team working skills and collaboration skills, and applicants who have the desire for protection of natural resources, reduction of pollution and adaptable to change. Also, job applicants can be screened for risk-taking and getting involved in experiments in order to find creative solutions to complex environmental problems. The HR department can also introduce behavioural- interview questioning that can assess the applicant's people skills and values. More emphasis should be paid to hiring employees with both technical skills and people skills. This way, employers can check if the applicant values align with the organization's (Liebowitz, 2010).

#### **2.3.1.6 Employee orientation or on-boarding**

During the firms' on-boarding process, new job applicants can be informed of the organization's core values and environmental programs. The new employees should be introduced to the organization's ongoing environmental programs to take them on tour to the (Kumar & Pandey, 2017). On-boarding also requires explaining the firm's core values, organizational culture and

environmental policy and how it is incorporated into the organization's performance appraisal and compensation plan (Kumar & Pandey, 2017).

Employee orientation or onboarding is also referred to as employee induction. Employee induction is a sure way to incorporate an organization's work culture into an organization. This way, the environmental sustainability culture can be integrated into the applicants work culture (Mburu, Obuya & Kamau, 2018). For instance, Toyota Company, in the USA, frequently adds their environmental policy and projects into their orientation programs (Liebowitz, 2010). Management of organizations also need to make aware of employees' the organizational values and environmental programs, are aligned with performance appraisal and compensation systems. It helps them to put in their best for the company (Liebowitz, 2010). Green work culture can then be integrated into the recruitment process of the organization. Therefore, it involves monitoring an organization's long-term sustainable requirements, equipping newly recruited employees with the organizations' environmentally sustainable programs, policies, work procedures (Paille, Chen, Boiral & Jin, 2014).

There are two main ways organizations can achieve an environmental oriented workforce; the first is through green recruitment; the other is green training. Green recruitment is said to be cost-effective and proactive. Green recruitment simply implies the integration of corporate environmental policy with the recruitment policy of the same organization (Kumar, Bhaskar, Nadeem, Tyagi, & Garza-Reyes, 2020). Employing environmentally conscious applicants or talent can be hastened by projecting the organization as a 'green employer of choice' (Jackson, Renwick, Jabbour, & Muller-Camen, 2011). Many organizations are increasingly growing aware of the attractive pull for 'talent' that is seen as a green employer (Arulrajah, Opatha, & Nawaratne, 2015).

Green induction can also be done to inculcate the new applicant in the organization's culture. There are two basic ways green induction can be implemented, the general induction and green induction on the job (Wehrmeyer, 2017). Some organizations practise the general green induction, for this type of selection is done for the different positions available, all necessary information is provided on the organizations' corporate environmental policy systems and practices. In other instances, other organizations use the job-specific green inductions for new employees', the type of information for this induction on the environment is job-specific.

For job descriptions, it needs to reflect the firms' environmental goals and objectives, which should outline the plans to achieve green goals (Mburu *et al.*, 2018).

Besides, the interview process, questions, in this case, can be designed to select green-conscious individuals in line with the organization's green agenda. The job descriptions, job title, and job reference must reflect environmental sustainability mandate. The organization also needs to make public their various environmental sustainability achievements in the job adverts while also requesting applications and CVs to include preferences for environmentally conscious persons or activities (Arulrajah, Opatha, & Nawaratne, 2015; Sridhar, 2019).

As regards employee selection in some organizations, the applicant's environmental concern and interest are considered when selection is to be done. During interviews, applicants are questioned on environmental related questions to answer (Wehrmeyer, 2017). These are essential green selection criteria that can be used when seeking for environmentally conscious individuals, not neglecting the other selection criteria concerning their specific job roles.

Green recruiting is a concept that harps on the idea that the environment is an essential aspect of the organization. Green conscious individuals are sometimes excited to work in green organizations. It makes it easy for the organization to do inductions for the new employees as they are aware of the basics of greenery, such as recycling, conservation, and watchful of the sustainable supply chain operations of an organization. Grolleau, Mzoughi, & Pekovic (2012), in their study of the influence of an environmental impact study on newly employed staff, showed that commitment to the environment, in turn, adds to an organization's profile. The study also highlighted that employee were concerned about the environmental strategy of the organization.

Dal Maso, Basco, Bassetti, & Lattanzi (2020) enumerated a few ways HRM practices can help support an organization's environmental performance. Employees can be recruited based on their environmental commitment. Ones & Dilchert (2013), also alluded that green recruitment can be achieved when personality factors are incorporated. These personality factors include openness, agreeableness, and conscientiousness to employee green behaviours. Schmitt (2011) refers to it as 'green jobs' and 'green tasks' to be added to new roles and positions. This approach, as well as using interviews shows a candidate's environmental knowledge, values and beliefs (Renwick *et al.*, 2013).

Moreover, Zibarras & Coan (2015), posits that the adoption of green recruitment practices can help engender a greener workforce. Several studies have established that organizations with excellent green credentials attract more job applicants (Olivier, Schure, & Peters, 2017; Ersoy, Aksehirli, & Management, 2015; Gully, Phillips, Castellano, Han, & Kim, 2013). Willness & Jones (2013) further explained that this is due to three reasons from the candidate's

perspectives. That is, they perceive an alignment between their values and those of the organization's, using the information of an organization's environmental performance as indicators of how the organization treat their employees—anticipating a feeling of belongingness and pride for the organization due to the excellent environmental reputation it has.

Green human resource management (GHRM) is the primary driver for an environmentally sustainable organization, and its successes can be attributed to employees' behaviours.

Jackson *et al.*, (2011) posits that implementing rigorous recruitment and selection of employees, performance management system and putting in place environment-centred training programs with employee development of technical and management competencies. The HR department is tasked to be the significant driver for green HR intervention (Green HR behaviour) within an organization. Green behaviour can be achieved if the HR policies, practices, and regulations are integrated along with the organizational goals and objectives of the organization (Mburu *et al.*, 2018). Having a green organization, where employees can affect change, will be brought about if they imbibe green behaviours.

#### **2.3.1.7 Influence of green recruitment practice with employee green behaviour**

The concept of green GHRM started in the 1990s; it went mainstream in 2000 (Govindan, Khodaverdi, & Jafarian, 2013). Several scholars Mondy & Noe (2005); Renwick *et al.*, (2013); Opatha & Arulrajah (2014), alluded that green behaviours can be achieved through GHRM. This is possible when specific HRM functions are made to function effectively. One of those functions is green recruitment. Others include green training, green compensation & rewards, green performance management and management support.

Previous studies and recent studies had converged in their agreement that green recruitment affect employee workplace green behaviour. The Dolan's 1997 study of MBA students in a United States university found that over half the number of graduates were prepared to take a reduced pay to work for an environmentally friendly and responsible organization (Turner, McIntosh, Reid, & Buckley, 2019). The implication of this is that job applicants would forgo a higher pay to work in an organization that is green or has a green culture. In a separate quantitative survey study conducted by Jabbour *et al.* (2010), the study focused on 94 Brazilian firms. It was revealed that organizations, during their recruitment drive showed a preference for and selected job applicants with green values and motivation over employees that do not possess green values or motivation (Jabbour *et al.*, 2010). Results also showed that the

organizations usually opted for employees that possessed green values and attitudes over those that do not.

Moreover, several studies from scholars such as Jabbour (2011), Adimuthu, (2017) Oaya, Ogbu, & Remilekun (2017), Aranganathan (2018), Astuti, (2018) Jia, Liu, Chin & Hu (2018), have in their empirical and conceptual studies alluded that green recruitment has had a positive and significant influence on employee workplace green behaviour. This perspective was also alluded to by Siska & Lenny (2019), in a quantitative survey of 100 randomly selected employees of PT TRU in Indonesia. The study sought to know the effect of green recruitment and green training on employee's performance, in an organizational citizenship behaviour for the environment (OCBE). The findings from the study found that GR had a positive and significant effect on OCBE and employee performance.

Furthermore, Oaya *et al.*, (2017) and Thakur (2020), also concurred that green recruitment processes and re-designed work helped organizations in hiring competent green employees that influenced green workplace behaviour at these organizations. In a Palestine middle east study (Masri & Jaaron, 2017), green recruitment was the most positive and influential GHRM practice among six other GHRM practices examined in the study. The least influential was green training. The study focused on empirical assessment of the impact of GHRM practices in manufacturing organization within the Palestinian context. The study employed the mixed methods approach in its methodology. The results showed that the Palestinian context was significantly different as green training was perceived as a financial constraint and instead preferred to employ those that already had green values (Masri & Jaaron, 2017).

The above studies are relevant as it reiterates the vital function of green recruitment in influencing workplace green behaviours in organizations. The central gap in the studies was that the more focus was on private organizations rather than public sector organization such as eThekwini municipality. Another gap was the context of the study, Asia, Europe, US, South America and to a lesser extent, Africa has had substantial studies commissioned on environmental sustainability and greening. Nevertheless, there is still little research in the South African academic sphere that have focused on green behaviour as a positive influence of green recruitment in a local government institution. Therefore, this current study will be a valuable addition to the growing GHRM research and understanding, how GR will be implemented on a public service local government institution without the usual motivation or structures associated with a private sector organization.

### **2.3.2 GREEN TRAINING (GT)**

The success of any environmental management program is dependent on the level of knowledge and skills available for the program. Therefore, knowledge, skills & behaviours are determined by the quality of training or education of stakeholders. Adequate implementation rests mainly on the level of information or the standard of training available on offer (Hahn, Pinkse, Preuss, & Figge, 2015). There is no doubt that the training and development of crucial stakeholder (employees) will hasten pro-environmental efforts and behaviours. These will equip employees with the required skills needed to carry out pro-environmental behaviours (Paille *et al.*, 2014) and the smooth implementation of a 'green culture'. There is a need to explain one of HR's critical practices- training.

#### **2.3.2.1 Concept of training**

Training, learning, and development are close concepts that are sometimes used interchangeably. Learning and development (L&D) were defined as a process of ensuring an organization possesses the required knowledge, skills, and way of keeping the workers engaged. This learning process involves the acquisition by individuals and teams of knowledge and skills through experience, learning events and programmes provided by the organization, guidance and coaching provided by line managers and others, and self-directed learning activities carried out by individuals (Armstrong & Taylor, 2014). Similarly, Hartell & Skogh, (2015, p. 8), defines learning and development as "the primary purpose of learning and development as an organizational process to achieve collective progress through the collaboration, expert ethical stimulation & facilitation of learning and knowledge that support business goals, develop individual potential, and respect and built on diversity". The components of L&D are learning development, training, and education. The focus of this study is training.

According to Armstrong and Taylor (2014), who differentiated between learning and training, by stating that learning entails how new knowledge, skills and capabilities are constructed, as opposed to training, which is a mode of learning usually employed by organizations to upskills its workers or individual in the organization (Cook, 2013).

Moreover, the European centre for the development of vocational training (Mortaki, 2012, p. 15) defines training as "an activity or program of activities designed to teach the skills and knowledge required for particular kinds of work. Training usually takes place in the workplace, whereas education takes place at educational establishments".

In the same vein, training was also defined by the Gillard (2017, p. 62), where it is described as "a planned process to modify attitude, knowledge or skill behaviour through learning experience to achieve effective performance in an activity or range of activities. The aim is to develop the abilities of individuals and satisfaction of the current and future needs of the organization".

Training has been defined severally by different scholars, but for the sake of this study, the definition of training by Armstrong & Taylor (2014, p. 284) will be adopted. Training is therefore defined "as the systematic application of formal processes to impart knowledge and help people to acquire the skills necessary for them to perform their jobs satisfactorily".

The above definitions point to the fact that training is targeted at upskilling specific individuals in certain environments or workplace, also aimed at changing attitudes and behaviours of employees for them to be able to achieve the organizational goal.

The organization usually must select a mode of imparting knowledge to its workforce. Most trainings across organizations are designed to impart knowledge and skills that will help its workers achieve the organizational goals or objectives. They are also aimed at changing employees' behaviours towards what the organization is trying to achieve. The importance of training is paramount, as it helps to explain why training is crucial in the HR sphere and is among the most critical HR practices. The importance can be attributed to the following: Training is meant to be acquired by different people, needing different skills, these skills have to be developed in time for them to meet their demands; the required knowledge and skills cannot quickly be done by self-directed learning; the required tasks are complex and sometimes specific, that people cannot afford to learn it on their own or speedily enough; and when there is a common need for the training by staff (Armstrong & Taylor, 2014).

The impact of training and development on organizations cannot be overstated. Kurita & Kurosaki (2011), investigated the impact of organizational training programmes on both the business and its finances on over some 45 Canadian firms. The results revealed that well-designed training programs do have an impact on business and have a high return on investments. Equally, ALDamoe, Sharif, & Ab Hamid (2013), found in their longitudinal study of 308 organizations, that the extensive training programs had increased the value of each employee by 6 %.

Moreover, another study by Aragon & Valle (2013), had established that organizations that take the time to train their employees or managers especially, perform better on the job, than

those that do not train their managers. The study indicated that having extensive training programs improves employee performances at the workplace (Aragon & Valle, 2013).

### **2.3.2.2 Workplace learning/training**

Workplace learning or training can also be described as experiential learning. It is a way of learning that requires doing and reflection for adequate understanding and application. There are different approaches to workplace learning, and these are enumerated as follows: induction learning planned learning, coaching, mentoring, e-learning, personal development plan and formal training. The focus of this study is workplace training (Armstrong & Taylor, 2014, p. 306). Training as defined by Bernardes, (2016), is a complementary role to play in accelerating learning, usually set aside for instances where there is a need for a direct expert-led approach, rather than being a comprehensive and pervasive development solution. He further argued that the present training model emphasizes more on subject-specific knowledge, rather than focusing more on enhancing core learning abilities. The training was also defined as the combination of various activities organizations use to improve or increase the knowledge and skills acquisition of employees (Bohlander & Snell, 2013, p. 274). There is a need to know why training should be taken seriously by organizations.

### **2.3.2.3 Justification for training**

In aligning with the views of Armstrong & Taylor (2014), they posited that organizations usually adopt training as a way of ensuring learning is achieved. These can be achieved through training of employees on self-directed learning skills, specialized individual skills, and skills in high demand, can also be focused on for development in the organization. Such skills could include induction and special IT skills. To buttress further the justification for training for employees of organizations, Ji *et al.*, (2012) did an empirical study where they looked at the influences of training on the firm's performance and sustainable development. The findings of the study showed that both direct and moderating effects of employee training on the firm's performance were sustainable. Daily, Bishop, & Masoud (2012) also alludes to this view, and their study found out that "all other facets of HRM-related implementation of green management principles are directly associated with proper training (Daily *et al.*, 2012).

### **2.3.2.4 Training structure**

There are different types of training structures that determine the types of training to be done in an organization. They include systematic training, just-in-time training, bite-sized training.

- **Systematic training**

Systematic training implies that the process of training is designed, planned, and eventually implemented towards meeting defined objectives or goals. Trainers design this type of training, and its impact is then evaluated. The industrial training boards first used this structure in the 1960s (Armstrong & Taylor, 2014). It has a four-stage model: identifying the training needs; decide what sort of training is needed to satisfy the needs identified; implementation of the training needs through the use of experienced trainers and evaluate the training to ensure its effectiveness.

- **Just-in-time training**

This type of training structure entails when the training is closely tied to the urgent and relevant needs of people due to their association with the following work activities. It is usually done close to the time the activity is relevant. The training is based on the identification of the requirement, priorities and plans of the participants (Armstrong & Taylor, 2014). The program takes account of any issue and ensures it delivers relevant and applicable content for the work situation (Armstrong & Taylor, 2014).

- **Bite-sized training**

This type of training involves creating opportunities or a particular skill needed and provided for in a short training session. It is usually a short and focused activity and most often done through e-learning (Armstrong & Taylor, 2014). It is helpful, in that it assists learners (employees) develop a needed skill or understanding, mainly due to its concentrated sessions without diversion in the workplace. Critics say it might allow the employee to be myopic in skills, as it tends to just one skill alone.

### **2.3.2.5 Forms of training/types of training**

Training can come in any of the following ways: manual skills training such as apprenticeships; IT skills, team leader or supervisory training; management training, interpersonal skills, such as leadership, team building and group dynamics; personal skills, such as assertiveness, coaching, communicating, time management; training in organizational procedures or practices, such as inductions, health and safety, performance management, equal opportunity or diversity management policy and practice (Armstrong & Taylor, 2014, p. 309).

Successful implementation of an environmental policy requires adequate training. That is, activities of management that aimed at employees to learn and acquire environmental skills to

accomplish the company’s environmental goals (Jabbour, 2011). Through this training, employees become aware of their respective roles in achieving the environmental objective of the organisation. Besides new technologies and new ways of doing things are springing up every day. Through proper training, employees will feel encouraged, empowered, and accountable for any environmental outcomes (Jackson, Schuler, & Jiang, 2014).

### 2.3.2.6 Green Training (GT)

Green training is a component of GHRM, it was defined by Deswal (2015) as the use of HRM policies in supporting the sustainable use of resources in an organization, and this is done to be environmentally sustainable. Green training simply means environmental training. It merely involves training and development programs (workshops, regular or coaching sessions) aimed at helping employees develop and acquire knowledge in environmental management (EM), green skills and attitudes (Prasad, 2013).

However, there are several scholarship views on the green training concept, some of them are included in the table below.

Table 2.2 Green training & development practices perspectives and its authors

<b>Authors</b>	<b>Practices</b>
Cook & Seith, 1992	Providing environmental training to the organizational members (employees & managers) to develop the required skills and knowledge
Renwick et al, 2008 and 2013. Jackson et al, 2011.	Providing training to learn or adapt environmentally friendly best practices (e.g. reducing long-distance business travel & recycling).
Renwick et al., 2008 & 2013	Providing training to the staff to produce a green analysis of the workspace.
Renwick et al., 2008 & 2013	Applying of job rotation to train green managers of the future

Opatha, 2013	Imparting right knowledge and skills about greening (to each employee through a training program exclusively designed for greening).
Opatha, 2013	Conducting training needs analyses to identify green training needs of employees.
Opatha & Arulrajah, 2014	Analysing and identifying the environmental training needs of employees to make them more environmentally concerned.
Opatha & Arulrajah, 2014	Conducting a severe and systematic training program which is given to each employee to give needed knowledge, skills, and attitudes for proper environmental management.
Opatha & Arulrajah, 2014	Providing opportunities to everybody to be trained in environmental management aspects.

### 2.3.2.7 Green training concept

Green training means to impart the right knowledge and skills about greening to each employee through a training program exclusively designed for greening (Opatha & Arulrajah, 2014). The scholars describe GT as a mode or way of imparting specialised environmental knowledge to employees. Ramus in (2002), described environmental training to establish a culture where employees feel accountable for environmental outcomes using the HRM practices for achieving environmental goals. The author sees it as a way of introducing a culture of accountability and responsibility at the workplace. The mediating effect and impact of using GT were harped on by Sakr, Sherif, & El-Hagggar (2010). They posited that when employees are presented with better training, then they will have a better perception of environmental management systems (Sakr *et al.*, 2010).

The environmental training contents are designed for employees to increase capacity and knowledge in EM. There are a couple of training methods that can be adopted by the management of organizations when they intend to implement GT. One is the regular session (class) training which can either be one-on-one or with a trainer with other trainees that are there to listen to him or her. The other method can be either web-based or online-based form of training or the use of interactive media tools. Green training contents can include, aspects of

safety, energy conservation, management and waste reduction and recycling. All of these should be the focus on GT. The online GT materials and case studies can be used rather than printed course materials to reduce paper usage (Prasad, 2013).

Furthermore, green HRM according to Deshwal (2015), was described as the use of HRM policies to support the sustainable use of resources in an organization, these deeds are carried out with the management objective to be environmentally sustainable. It also refers to the management activities and policies engaged in and is targeted towards saving the environment. Green management was defined as the management of the organization's communications and interaction with its impact on the environment (Lee & Ball, 2003). These green activities include green recruitment, such as video recruitment or conducting online video interviews. The aim is to reduce or cut travelling costs and deploying green rewards to employees for using less carbon: the use of bicycles or car-pooling for reduced pollution for transport.

In a greening survey conducted in the US in 2014, 54% of the surveyed US organizations affirmed they had implemented environmental management into their operations, 74% of the surveyed organizations had online web-presence, while 60% had incorporated employee wellness and fitness programs for their employees. Environmentally friendly HR processes afford better efficiency, reduced costs and helps to develop an environment where employees are engaged and available to help the organization succeed in its environmental goals (Deshwal, 2015).

In summary, use of online learning or web-based training should be adopted extensively, across the organization, these should not be limited to environmental management training only, but also including all other functional pieces of training as well.

### **2.3.2.8 Influence of green training on employees work behaviour**

Green training is a component of GHRM, as alluded to by Jabbour *et al.*, (2010, 2011), green training has a way of influencing employees' behaviour in the workplace. According to Arulrajah, Opatha & Nawaratne (2015), organizations providing environmental training to its employees (non-managerial and managerial) to develop their skill requirements, a knowledge base is an essential green HRM function. The training programs will help the corporate organization's implement their environmental plans adequately. Environmental training includes encouraging recycling and waste management, advocating for flexible schedules, telecommuting, reduction of long-distance (Jackson *et al.*, 2011) travels. These also include seminars or workshops organized by organizations to increase employee performance.

Renwick *et al.*, (2013), cited in Hossen, Begum & Sultana (2018) identified three factors that influenced green training as:

- Informing about environmental management training,
- Analysing training needs to find out the type of training that is environmentally friendly,
- Provision of training to employees about how workplace space is environmentally friendly.

In addition, Jackson *et al.*, (2011) and Renwick *et al.*, (2013), also suggested green training and development practices such as training staff to produce a green analysis of the workspace, application of job rotations to train them as green managers of the future. There is also a need to provide specific training on environmental management in the areas of safety, energy efficiency, waste management, recycling and developing interpersonal skills (Jackson *et al.*, 2011; Renwick *et al.*, 2013).

Nevertheless, green training sometimes does have negative influences. The challenges may be due to the way it was implemented; training programs are not always successful in some organizations. This view was supported with the Jabbour (2013), study, where it was found that the environmental training had, by some employees, did not have any impact or significant difference, as against those that did not have green training. Several factors led to the negative influence of green training, and these include inadequate training needs analysis, poor trainee readiness, reduced application of acquired knowledge to the job and poorly developed knowledge transfer systems across the organizations and cynicism on the part of the employee (Jackson *et al.*, 2011).

Furthermore, green training involves conducting several pieces of training on the environment for all employees, giving all employees the same opportunity to be trained on environment issues. Training on the environment was used effectively by all employees, and frequent conduct of evaluation of employee performance after environment training (Jabbour, 2015).

Studies that focused on positive influences of green training posits that GT has a positive and significant influence on OCBE, that influences employees' voluntary behaviours (Pham, Phan, Tuckova, Vo, & Nguyen, 2018). Zhang, Luo, Zhang, & Zhao (2019), also confirmed this position through their empirical study that looked at promoting green behaviours in China. The findings also revealed a significant favourable influence on extra-role behaviours (voluntary

behaviours). Further results from the over 145 administered questionnaires showed that information (used as a mediating variable) also have an impact on GT, as it influences both extra-role and in-role behaviours (voluntary and expected behaviours). The study showed that GHRM practices were more influenced by voluntary green behaviours than expected green behaviours. The findings also allude with Dumont *et al.* (2017) and Saeed *et al.* (2019).

Green training and development studies revealed that green practices help build green skills, competence, and attitudes among employees of organizations. GT&D was evident with Tang *et al.*, (2018), empirical study which established that. GT also improves and enhances awareness of environmental activities, and management of environmental knowledge. Environmental values and knowledge are essential drivers for environmental action of employees. GT helps employees produce green knowledge that can help achieve their individual and organisational environmental goals. Green culture climate indicates where employees act, work and get engaged in environmental activities.

In a separate study by Karande & Bihade (2018), a mixed-methods study that administered questionnaires and interviews on over 100 executives across three Indian multinational organizations, the study tested the level of green practices among the organizations in order to replace the HR practices with effective green HR practices. The study found that the three organizations had a low level of implementation, as there was a need for different training and development programs or workshops, seminars. These training can be targeted to influence employees to develop green skills and improving their awareness. The modules at the organizations were centralized, not practical or real-life experiences, as such real-life changes could not be affected. Several modules could be included, this ranges from recycling, waste management, employee safety and energy efficiency. All training modules were not online-based; most were manuals or book-based, as such paper-reduction was not in practice (Karande & Bihade, 2018). The scholar also noted that there was no identified strategic person spearheading GHRM at the three organizations.

Similarly, few studies reviewed by (Koppes, 2014) showed that employees' readiness for training was better when employees were highly motivated and psychologically ready for learning. Consequently, practical green training can be achieved if employee training needs are done and considered before implementation (Obaid & Alias, 2015). The green training perspectives were also supported by the views of Pinzone, Guerci, Lettieri & Redman (2016), with their empirical study of the national health system (NHS) of England, the study reported

that green competence building practices and green organizational behaviour were positively associated.

Dumont *et al.*, (2017) also showed in their study that extra-role green behaviours among a Chinese subsidiary of an Australian multinational organization were positively associated between GHRM, green training and employee's internal roles. Lastly, Chaudhary (2019) also found that green training and green involvement was partially implemented (even though it had the highest implementation score) among the five GHRM practices tested for in the study of Indian automobile industry among 91 employees.

The above-reviewed articles by Obaid & Alias (2015), Pinzone *et al.*, (2016), Dumont *et al.*, (2017), Karande & Bihade, (2018), Tang *et al.*, (2018), Chaudhary (2019) Saeed *et al.*, (2019), all revealed that GT wholly influences employee workplace green behaviours (either voluntary or expected green behaviours). It further emphasizes that green training between two continents and three countries, England in Europe, India and China in Asia, were positive and influential on employees' green behaviours in both private sector organizations and a public health sector organization. This study, therefore beams its search light on the African continent, particularly a local government public service institution in South Africa. The result from this study will prove, there is a positive and significant influence on green workplace behaviour of employees. The study will also be a significant contribution to understanding the South African green training practice dynamics in a public service organization.

### **2.3.3 GREEN REWARDS & COMPENSATION (GRC)**

Green rewards and compensations can be argued as one of the most influencing factors of employee's behaviour of an organization in the environment (Walls, Berrone, & Phan, 2012). Without a doubt, organizations are faced every day with the challenge of adequately engaging employees in green sustainable behaviours (Cantor, Morrow & Montabon, 2012; Wolf, Blahna & Romolini 2013). For easy implementation, designing a green rewards philosophy may influence the adoption of green sustainable behaviours. Green behaviour can be engaged in HR management practices. HR activities entail organizational activities that are intended to enact positive organizational, social and sustainability outcomes (Jackson *et al.*, 2011; Renwick *et al.*, 2013). Before proceeding further to discuss the green rewards concept, it is expedient to describe and explain the concept of rewards & compensation.

### **2.3.3.1 Rewards & compensation concept**

Rewards & compensation is increasingly being linked with organizational performance across several companies. Multinational organizations like Sunoco or Google in America have been known to have used several rewards options to increase their organizational performances (Huber & Hirsch, 2017). It is also a strategy for influencing organizational behaviours towards the organizational objectives; (Armstrong, 2021). Rewards & compensation has several functions these include: aiming to compensate people according to the values they bring to the organization or for the value they create; in order to develop a performance culture; for motivation and engagement; for retaining and attraction of scarce talents, rewarding rightly to convey a message about what is vital in terms of expected behaviours and outcomes; and supporting the development of a specific set of performance culture (Armstrong, 2021). Rewards & compensation can be used to develop a specific set of organizational culture or organizational behaviour. Having understood the functions, rewards & compensation can be used strategically to achieve several goals or objectives as desired by the organization.

Reward & compensation can then be defined as all forms of monetary and non-monetary benefits employees receive as part of an employee-employer relationship (Armstrong, 2021). Davis, (2015) quoted Herzberg in the 1966, study which described both intrinsic (internal) and extrinsic (external) benefits given to employees for doing their jobs. In alluding to the definition, compensation is one of the most significant HR functions that influence performance or employee's behaviour in an organization (Walls *et al.*, 2012). According to Walls *et al.*, (2012), rewards & compensation is also the most basic function of the HR department. So, the HR department develops a reward philosophy or approach on how to manage the organization's rewards. The rewards philosophy consists of the approach, guiding reward policies, and the types or combination of rewards to be used in the organization. Rewards philosophy contains guiding principles such as: operation of the reward system justly, fairly, equitably and transparently on stakeholders and interests, developing policies and practices that support realizing the organization's goals; recognition of every employee's values & contributions; creation of a competitive employee value proposition; offering to pay a competitive rate that is enough to attract and retain employees; maintaining an equitable rate of payment and developing a higher performance culture and devolving more responsibilities towards line managers that rewards employees (Armstrong, 2021).

### **2.3.3.2 Reward & Compensation Management**

Reward & compensation concerns the formulation and implementation of strategies or policies that reward people fairly, equitably, and consistently in line with their contributions to the firm. The strategy or policy of rewarding employees of an organization, for the value and contribution to the firm. It involves the designing, implementation, and maintenance of rewarding systems (reward processes, practice, and procedures) which is targeted to motivating the stakeholders and organization (Armstrong, 2021).

### **2.3.3.3 Strategic reward**

Strategic reward refers to the extent the reward management philosophy on firm innovations and developments should go to support a business initiative. The integration of the business, the level of priority placed and the pace for its implementation. Three primary objectives reward strategies propagate performance, competitiveness, and fairness (Armstrong & Stephens, 2014). The strategic rewards are based on the understanding of the needs of the organization and employees and how they find ways to satisfy them.

Also, White, (2014, p. 8) defines strategic rewards as “a means of enhancing company performance and securing competitive advantage through alignment of pay strategies, systems, practices and processes to the organizational strategy”. It is, therefore, a management targeting tool that ensures the organization achieves its strategic objectives or goals. Examples of such reward strategy was where the company “Diageo: Release the potential of every employee to deliver Diageo's performance goals”. Another reward strategy example involves the firm “Tesco, where its staff were rewarded for their contribution in a way, for them to also benefit directly from the success they help to create”. Rewards strategy of an organization may be one that rewards safeguarding the environment; this way, any behaviours towards this will attract the assigned rewards systems-package.

The selected reward systems or types drive strategic rewards that an organization can employ. The organizational strategy mainly drives this, this drives the business strategy, and then, the business strategy drives the rewards strategies or ‘total reward’ strategy (Armstrong & Stephens, 2014). The total reward is a combination of both financial and non-financial rewards made available to the employees of organizations.

#### **2.3.3.4 Types of reward & compensation**

Compensation represents both intrinsic and extrinsic rewards employees receive when doing their jobs. Natural compensation means, it will reflect employees' internal psyche or mind-sets concerning their job performance. Extrinsic compensations relate to both monetary and non-monetary rewards (Ersser, 2019).

- **Intrinsic compensation**

According to Armstrong & Stephens (2014), intrinsic compensation means the critical employees state of mind that makes him or her want to perform their jobs. Job characteristics theory describes these critical psychological states according to this job theory. Employees experience enhanced psychological states when their job tasks are rated high on five core dimensions of 'skill variety, task identity, task significance, autonomy, and feedback.' A market survey conducted by people3 posited that enhancing intrinsic compensation may help to reduce the excessive turnover of employees. Examples of these enhancements include improvement in technologies, offering learning & training opportunities for employees, and challenging technical workplace environments (Ersser, 2019).

- **Extrinsic compensation**

Extrinsic compensation includes both financial and non-financial rewards.

- **Financial rewards**

This refers to all monetary remuneration or incentives for any job done. It consists of job-based pay, person-based pay, employee benefits, pension & financial recognition schemes. Job-based refers to pay based on the type of job engaged in. In comparison, person-based pay refers to rewards based on the efforts or contribution of the individual (Armstrong & Stephens, 2014). To manage the types as mentioned above of remuneration, 'pay-determination,' 'base-pay management', and 'contingent pay' are done. Pay-determination means deciding the amount to pay based on the value of the job through a job-evaluation or market price of the job. Base-pay management implies that when pay structures are tied to defined jobs at different levels or grades in line with internal and external pricing policies, it also allows for a gradual progression in the pay. Contingent pay requires management and planning of pay structures while aligning it with individual performance, contributions, competence, skill, or length of service. This type also allows for a gradual progression in the play structures (Armstrong & Stephens, 2014).

- **Non-Financial rewards**

It refers to rewards focused on the internal satisfaction of employees. Individual needs vary from: the need for recognition, achievement, personal growth, and right working conditions. Examples of non-financial rewards include offering fulfilling jobs, an opportunity for career upskilling & progression, provision of a conducive high-quality work environment, and a quality work-life balance. This type of reward could either be extrinsic (recognition or praise) or intrinsic (feelings, interest in challenges faced at work) (Armstrong & Stephens, 2014).

Green rewards is another crucial function of green HRM; green rewards sustain an organization's environmental objectives and performance. Green rewards are mainly used to motivate all employees (inclusive of managerial and non-managerial staff) across the organization on environmental sustainability initiatives. Green rewards surely add some significant contributions to green HRM. It can be done in two ways: financial or non-financial. Some organizations choose financial, while others choose non-financial. Financial rewards include incentives, bonuses, and cash for excellent environmental performance. Non-financial rewards imply giving awards and recognitions, honours, and prizes for worthy environmental performance (Arulrajah *et al.*, 2015).

Green rewards are rewards used to compensate for any type of environmental sustainability behaviour to motivate for the perpetuation of that behaviour. Several firms have increasingly subscribed to environmental sustainability rewards & compensation regimes, which are usually geared towards influencing the behaviour of employees. For example, the German public company regulators demand all organizations registered under them design a rewards structure to develop environmental sustainability orientations for their organizations (Friedl & Springer, 2011). Organizations like the American company Sunoco already have in place sustainability metrics, which is used in the assessment of employee's performance (Walls *et al.*, 2012). Also, Evonik, a German sportswear company, has integrated environmental sustainability behaviour orientation measures in its compensation systems (WBCSD, 2010). There is a general increase in corporate organizations' adoption of greening strategies in their businesses (WBCSD, 2010; Kiron, Kruschwitz, Haanaes, & Velken, 2012).

These have prompted different variants of rewards and compensation across the board, all in a bid to encourage environmental behaviours among individuals or employees of organizations. Examples of green rewards are discussed below.

### 2.3.3.5 Types of green reward & compensation

Extant research is focused on the type of reward and specific pro-environmental outcomes Ioannou, Li & Serafeim, (2016), Kolk & Perego (2010), Maas & Rosendaal (2016), Rodrigue, Magnan & Cho (2013). The types of rewards frequently used includes:

- **Compensation and reward for environmental services (CRES):**

This type of reward was widely used in Kenya to cater for the employees of the national wildlife park (Yanda, Yatich, Ochola, & Ngece, 2010). This type of reward was used for reimbursement of land farmers of crops and livestock farmers. (Yanda *et al.*, 2010) also alluded that it was extended to landowners to motivate them into conserving the wildlife and wildlife corridors on their lands. CRES is seen as a better and flexible environmental management method that has been widely accepted across some developing countries (Wunder, 2015, 2009). Some of the benefits attributed to CRES are a source of alternative income for farmers, conflict resolution tools, and resource-filled perspectives. These perspectives include poverty reduction, economic planning perspectives, rural empowerment, social justice perspectives, business perspectives, farmers & ecosystems perspectives. However, there are still some reservations about CRES, and these stem from possible land dispossession from the poor indigenous people (Lee, Willis, & Tian, 2018).

- **Executive rewards or incentives:**

There are two types of executive incentives: monetary and non-monetary incentives. The success of a rewards or compensation regime is dependent on the scale of deployment to employees across the organization. The rewards designed for executives; comes in the form of bonus payments, stock options, to the individuals. The non-monetary incentives include recognition awards; pay raises, promotions, rewards, prizes, position performance appraisals, and tax exemptions, access to low-carbon corporate car fleet. These also include paid vacations, time-off, gift certificates, opportunities to attend sustainability events/ rallies, and daily raise (Renwick, Reman & Maguire, 2013). According to Walls, Berrone, & Phan (2012), they stated that long-term pay has a positive and significant impact on the prevention of pollution, this result is significant for organizations operating in high pollution sectors or industry. Other firms that provide compensation for their CEOs showed higher performance in environmental sustainability initiatives. Equity-type compensations which are targeted at maximizing longer-term value, provides for this possibility. The management of the organization aligns the interests of the managers with the stakeholders while allowing the stakeholders to express their

interests through activism (Kock, Santalo & Diestre, 2012). Rodrigue *et al.* (2013), also posits to the view that executive compensation has some positive impact on pollution prevention in the environment.

However, studies have shown that executive compensation has some limitations, as it only impacts on executive contracts (Haque, Ntim, & Environment, 2018). Furthermore, providing incentives only to the executives or middle management usually undermines carbon emission performance and leads to the underachievement of the expected environmental target (Walls, Berrone, & Phan, 2012). However, research studies on regular employees (non-executives or non-management employees) financial compensation for positive environmental performance only caters to their survival (Yu & Ramanathan, 2015).

Deployment of non-financial performance incentives, the characteristics, the advantages, and disadvantages have been extensively reported by HR literature, academics, and HR practitioners (Glomsrod, Wei, & Energy, 2016; Balde, Wang, Kuehr, & Huisman, 2015). Some scholars such as Temminck, Mearns, & Fruhen (2015); Jackson, Schuler, & Jiang (2014); Leonidou, Leonidou, Fotiadis, & Zeriti (2013) wrote to highlight the kind of relationships between employees and their supervisors. Also, some of the benefits derived from non-financial performance incentives; these include encouraging strategic behaviours of employees, cost efficiency, the immediateness of impact, employer-branding, employee retention, and positive employer reputation. The disadvantages include lack of credible assessment process, lack of cultural fit, tax and small print, fraudulent nominations, maintaining momentum, negative impacts attributed from broad economic conditions (Wells, 2011). In terms of the effect of non-monetary environmental performance incentives, few articles focused on the identification and existence of the different forms it exhibits (Renwick *et al.*, 2013). Scholars have therefore posited that their level of effectiveness is determined by the extent of the organizational-wide support it enjoys. It also encourages cross-communication across different levels in the organization, engenders innovation, creativity, and learning (Temminck *et al.*, 2015; (Jackson *et al.*, 2014; Leonidou *et al.*, 2013).

Some organizations have different ways of recognizing environmental performance among different levels of the organization. The comprehensive implementation across the different levels in the organization increases the success rate within the organization. For instance, the Xerox company uses recognition rewards company-wide for developing environmentally friendly packaging materials or products, developing reusable products or materials and packaging, and for marketing, the company's recycled Xerox copier papers (Opatha, 2013).

Xerox also has a recognition award program called ‘Earth Award’; this is recognition for developing waste reduction, re-use, and recyclable innovative products. These types of incentives encourage recycling, waste management, supports flexible scheduling, telecommuting, and reduction of long-distance business travels (Jackson *et al.*, 2011). Other specific examples include: ‘pollution prevention pays’ by 3M, ‘waste reduction always pays’ by Dow, and ‘Save Money and Reduce Toxics’ (SMART) by Chevron (Arulrajah *et al.*, 2015).

Renwick *et al.* (2013) also enumerated several other green reward package practices frequently used include, including green pay- tailored to reward any green skill acquired by employees and other forms of financial rewards such as cash, bonuses, and premiums. Other non-financial also includes sabbaticals, leave, and gifts. Recognitions also include awards, dinners, publicity, external roles, regular praises) and feedback. These also extend to rewarding green initiatives and performance with promotions and career progress, issuing tax breaks for environmental management initiatives (Renwick *et al.*, 2013). Also listed below are some notable green reward management practices (Arulrajah *et al.*, 2015). The table below shows some of the green reward practices and their authors.

Table 2.3. Green reward & compensation practices perspectives and its authors

Authors	Practices
Renwick et al., 2008 & 2013	Rewarding employee environmental performance as either suitable/excellent or extraordinary.
Renwick et al., 2008 & 2013; Opatha, 2013	Monetary compensation for excellent environmental performance
Renwick et al, 2008 & 2013; Opatha, 2013.	Non-financial rewards for employee’s excellent performance in the environment.
Bhushan and Mackenzie, 1994.	Team excellence awards for better performance in the environment.
Bhushan and Mackenzie, 1994.	Introducing rewards for innovativeness for initiatives on the environment/performance.
Jackson et al., 2011	Providing incentives to encourage environment-friendly activities and behaviours like recycling and waste management.
Renwick et al. 2008 and 2013	Rewards for acquiring green skills.

### 2.3.3.6 Influence of green reward & compensation on employees’ behaviour

GR& C is one of the essential functions of GHRM; it meant to recognize and hold the intention of the employees to the organization (Ahmad, 2015; Jackson *et al.*, 2011). The main goal of the GR&C is the motivation of employees to continue with pro-green behaviour they started. This view was also supported by Masri & Jaaron (2017), they argued that GR&C positively

affects environmental performance in manufacturing organizations, however, in their study they confirmed that many GR&C was not in use by the manufacturing organizations. Opatha & Arulrajah (2014), posited two ways of implementing GR&C. They affirmed that it could be done through financial and non-financial incentives. They argued further that it is crucial to awarding employees with non-financial rewards such as praise, awards, and recognition for green accomplishments. Jackson *et al.* (2011), argues that non-financial rewards have better motivational value than financial rewards when it comes to greening.

Moreover, Renwick *et al.*, (2013); Tang *et al.*, (2018), also posited that a combination of both financial and non-financial rewards works best for greening. Sharma & Gupta (2015) & Tang *et al.*, (2018) both conceptualized non-financial rewards that can influence green behaviours. These include green travel benefits to employees, green financial incentives, and tax cuts. Other listed examples include bonus pay for employees exceeding targets, green team excellence awards, rewards for innovative environmental suggestions.

According to Dumont *et al.*, (2017), there is a positive relationship between green training, green performance, and green reward management and employee is in the role and extra-role green behaviours. Although the empirical study by Chaudhary (2019) in the Indian automobile industry showed a significant correlation between green rewards and green behaviour, there was ample evidence to show there was a lack of poor GHRM practices at the organizations. The result indicated an unfortunate practice of GHRM functions from the selected organizations in the Indian automobile industry.

In contrast, Merriman & Sen's (2012) US study of middle management found that non-financial compensation attached to green projects were not enough to attract the senior managers to engage in green projects. Similarly, Tang *et al.* (2017) and Handgraaf, De Jeude & Appelt (2013) revealed that there was a preference for social and recognition awards over monetary rewards. They were quick to add that disbenefits also influenced employee green behaviours but cautioned that such warnings should not be too harsh, as it may discourage employees (Renwick *et al.*, 2013). Jackson *et al.*, (2011), were also of the opinion that poor (weak) pay rewards may not push employees towards attaining the environmental goals.

Karande & Bihande (2018), argued further that the green compensation adopted by an organization should include special categories of rewards for employees that exhibited initiatives and efforts to conserve the environment. It was reported that there is a dire need for this green HR practice (GR&C) across the three organizations surveyed in India in 2016. Not

enough attention was paid to these HR practices (Karande & Bihande, 2018). Tying compensation and rewards to environmental goals helps organizations to focus their efforts to achieve their green goals. The study by Berrone & Mejjia in 2009, on 469 US firms that operated in a high polluting industry. The findings proved that the firms that had a culture of giving their executives green high compensation rewards performed better in the environment (had better environmental performance) than non- environmentally sustainable organizations. The study also revealed that the firms had successfully prevented pollution because of their long-term history of green reward & compensation package (Walls, Berrone, & Phan, 2012).

Although there is difficulty in balancing incentives and environmental behaviour performance, this is due to the challenge of evaluating accurately environmental performance and environmental behaviour (Ahmad, 2015). Another, survey done in the United Kingdom by the CIPD and KPMG revealed that 8% of firms in the UK rewards green behaviours with several types of rewards. That is financial or non-financial incentives (Arulrajah *et al.*, 2015). It provides proof that green rewards awareness and adoption is improving, and effective in motivating employees to engage in green behaviours (Jackson *et al.*, 2011; Kane, 2011).

Furthermore, Zhang *et al.*, (2019), the study focused on promoting green employee behaviours in China. The study administered 150 questionnaires across several sectors of the Chinese economy. The study's findings reveal that green rewards only influence voluntary behaviours, and consequently, no significant impact on in-role behaviours.

Green rewards & compensation studies reviewed here spans across Asia with Zhang *et al.*, (2019), Karande & Bihande, (2018), Tang *et al.*, (2018), and Opatha & Arulrajah (2014). In Europe there is Renwick *et al.*, (2013), Jackson *et al.*, (2011), and Kane (2011) and in the United States of America, there is Berrone and Mejjia (2009) and Merriman & Sen's (2012). There are a few studies on green reward & compensation done in the African context. This buttresses the need for African scholars to reduce the research gap with empirical green reward and compensation studies within the African context. GR&C will aid in the implementation of GHRM in African organizations. This research is focused on filling that gap, with its focus on Africa, particularly a South African public service organization – 'eThekweni municipality'. The study will impact by creating more awareness and knowledge on how to design a balanced green rewards package for the public service workers as a form of motivation for them to adopt pro-environmental behaviour, as a poorly designed rewards package may be detrimental to employees' behaviours (Jackson, 2011).

### **2.3.4 GREEN PERFORMANCE MANAGEMENT (GPM)**

Social or business organizations are increasingly adopting environmental sustainability initiatives or programs to the benefit of their businesses (productivity or profitability) or to the community they operate from. The adoption of environmental sustainability initiatives has been unbalanced, to say the least. According to Ameer & Othman (2012), it was argued that there was misalignment between business profitability and environmental sustainability across organizations. To address the misalignment, there is a need to monitor and assess these environmental issues critically regularly. Thus, indicating a need for green performance management processes, a green benchmark, green sustainability metrics, and green feedback mechanism. Essentially, a way to measure greening or environmental sustainability initiatives by organizations either within the organization or beyond (community) the organization. Green performance management (GPM) is derived from the word performance management, one of the main functions of the human resource (HR) department. Performance management is a traditional HR function usually performed by the human resource staff of an organization on every employee of the same organization. The aim was to understand the employee's behaviour and redirect it towards the organization's objective. The main goal of performance management is to influence 'employee's behaviour,' which is the focus of this research study. The performance management concept will be defined and explained; this is followed by the discussion of the green performance management concept and how it influences green employee behaviour.

#### **2.3.4.1 Performance management concept defined**

Performance is defined as behaviour that comes with getting results. Armstrong & Taylor, (2014), defines it as "as a measure of both behaviours and results, behaviours emanate from the performer and transform performance from abstraction to action. Not just the instruments for results, behaviours are also outcomes in their own right - the product of mental and physical effort applied to tasks - and can be judged apart from results". Armstrong & Taylor, (2014), highlighted the importance of behaviour, as there is more to success or failure than when the focus was on achieving. The concept of performance shows that assessment and rewards of any performance of employee; some factors must be considered, such as outputs (results) and inputs (behaviours).

In the same vein, Cerasoli, Nicklin, & Ford (2014), describe the performance as an essential outcome, based on three points.

1. Knowledge on facts and things (termed declarative knowledge).
2. Knowledge concerning the way things are done and the skills to do them (termed procedural knowledge and skills).
3. Motivation to act, to expend effort, and to persist (termed motivation).

Armstrong & Taylor (2014) also defines it as a defined systematic process step of improving organizational performance, this is achieved by monitoring and developing the performance of individual employees or teams in the organization (Armstrong, 2021; Armstrong & Taylor, 2014). It can also be described as a way of getting useful feedback to understand and manage the performance of employees within a framework of planned goals, standards, and competencies. It has five essential elements: agreement, measurement, feedback, positive reinforcement, and dialogue.

Furthermore, Collings, Scullion, & Caligiuri (2018), posits that when employees of organizations fail in their jobs, part of the organization also fails. Managing the performance of employees aims to remove that possibility or at least to reduce it. Pulakos & O’Leary (2011) also argued that PM has the primary process of getting the job done in organizations. It is a tool used in driving employee’s behaviour in order to achieve strategic organizational goals; it is also used to identify ineffective performers for employee development programs or other personnel actions (Armstrong & Taylor, 2014). The scholars attempt to explain that performance management can also be used as a ‘tool to influence workers behaviours.

PM is based on the understanding of the word performance; this is better explained with some behavioural theories. The behavioural theories include goal theory, control theory & social cognitive theory.

- **Goal theory**

This theory was developed by Latham (2012), it highlights four main mechanisms that connect goals to performance outcomes: 1. Focusing on directing attention to priorities; 2. Stimulation of efforts; 3. Challenging people to bring knowledge & skills to work their chances of success; 4. The more challenging the goal, the more people will draw on their full repertoire of skills. The theory supports the argument of PM on setting and agreeing to objectives against which performance can be measured and managed (Armstrong & Taylor, 2014).

- **Control theory**

This theory uses feedback as a tool to shape employees' behaviour. When feedback is received on how behaviours and duties are undertaken, they will appreciate and are expected to take corrective actions. Feedback is well pronounced as one of the main backbones of performance management processes (Armstrong & Taylor, 2014).

- **Social cognitive theory**

The theory was propounded by Bandura in 1986 cited in Talbot & Boiral (2015). The main crux of the theory was on self-efficacy. The belief by individuals or employees that they either can or cannot achieve a goal is a determining factor of performance. Therefore, there is a need to strengthen the self-belief of employees; this is another critical focus of performance management (Armstrong & Taylor, 2014).

Performance management aims to develop employees' capacity to meet and exceed expectations while achieving their full potential and benefit their organizations. PM also aims to assist employees to contribute to the realization of the organizational goals by aligning individual objectives with those of the organization. It also helps provide individuals with positive and constructive feedback while recognizing their career achievements. It can also be used to generate ratings that inform rewards decisions in an organization (Armstrong & Taylor, 2014). To buttress further Shields (2007, p. 24) highlighted four roles or purpose of performance management:

- Strategic communication - to employees of what constitutes a good job.
- Relationship building - the regular reviews and evaluations bring together managers and their subordinates, which creates strong working relationships.
- Employee development - it helps employees to develop with the regular feedback on employees' strengths, weaknesses, areas of improvement and agreement on a personal development plan,
- Employee evaluation - it evaluates employees' performance using a performance appraisal to make informed work decisions in sharing jobs, deployment, promotions, or performance-tied rewards.

Performance management is a traditional function of the HR department, thus goes through a natural management cycle. This process corresponds to Deming's 1986 model cited in

Adawiyah, Mohd Shariff, Saud, & Mohd Mokhtar (2011), the plan - do - check - act model. The process involves performance planning, managing performance, performance reviews, and performance assessments.

#### **2.3.4.2 Performance planning**

According to Armstrong & Taylor (2014), performance planning is the first stage where the definition of roles of employees, expectations, and objectives is in line with the organizational objectives. The individual is made to know the required knowledge, skills, and abilities (KSAs) of specific job roles or duties. These also include what must be accomplished as per targets and goals in the various departments (Armstrong & Taylor, 2014). Performance planning provides opportunities for individual objectives and those of the organization; these are aligned and harmonized together to monitor and measure (organizational performance and personnel development plans). Performance agreements are also defined and developed at this stage. This is derived from previous performance reviews of former or older employees, which then leads to analysis and presentation of future needs. These agreements include mode of measurement, the indicators, and the level of competency to be attained. It may also include the personal development plans, the forms of training needed, and the activities to be engaged in to achieve all the organizational objectives (Armstrong & Taylor, 2014).

#### **2.3.4.3 Managing annual performance**

Management of performances should be a regular and continuous practice all year round, and not regarded as a special event by managers. It indicates good management practices that involve planning and setting directions, monitoring, and measuring performance and acting of the feedback. The four main points to note when managing performance are: monitoring performance, provision of continuous feedback, provide coaching to enhance the development or sustain the performance standard, and dealing with under-performers (Armstrong & Taylor, 2014).

#### **2.3.4.4 Performance reviews**

This stage is where formal evaluation is done at this stage, where all the prior five elements (an agreement, measurement, feedback, positive reinforcement, and dialogue) of PM are combined. It involves actual concrete assessments of the individuals. PM reviews bring together the managers and employee to come together to design how to improve performance in the future better, as well as resolving any brewing conflicts that affect performance. PM

reviews should not be sudden or spontaneous; individual employees can often be asked to do a self-assessment of their performances and then become change agents to improve their performance results. Managers likewise should assist individual employees on how to improve their performance through coaching, and support and guidance (Armstrong & Taylor, 2014).

There are 12 rules to adhere to when doing a performance review; they include: be prepared; work to a clear structure; create the right atmosphere; providing useful feedback, productive use of time; showing recognition with praise; allowing democracy by allowing individuals to drive the talk; invite self-assessments; discuss performance and not employee personality; encouragement of analysis of performance; do not criticize unexpectedly, and agree with measurable objectives and a plan of action. PM thrives on top managerial support, so there is a need for managers to employ a gradual introduction of the system to employees in training (Armstrong & Taylor, 2014).

#### **2.3.4.5 Performance assessment**

Performance assessments are usually done after a performance review meeting has been done. These assessments can be done through an overall assessment, rating assessment, or visual assessment. These kinds of assessments are explained below.

- **Overall assessment**

Assessment is a general analysis of the performance guided by what was agreed to in the performance agreement. The aim of the overall assessment is not to judge employee's performance but to have an agreement on how to improve performance. Managers analyze in order to review the performance of their employees; this way, the best and worst performances are highlighted and made known to the respective employee for necessary adjustments. There is usually a framework that is used for the analysis. That is, the 'what' and 'how' basis. The 'what' looks at what has been done and achieved concerning the organization's objectives? The 'how' focuses on the kind of behaviours that made it possible for the achievement to be made. The main criticism against this form of assessment is the inability to distinguish between performances that are in-between or in the middle. It only caters to performances in the two extremes. Another critique is its overgeneralization and superficial nature, and it is one of the reasons some people opt for ratings (Armstrong & Taylor, 2014).

- **Rating**

Ratings are a summary of the views of the performance of employees on a specific scale. The rating scale serves to either inform on the performance of employee(s) to make judgments or decisions on pay-or accurately to summarize the records of employee performance, whether doing well or poorly. The scales of rating assessments are defined before being used. Ratings can be defined as alphabetically (a, b, c.) or numerically (1, 2, 3.). The alphabets and numerical definitions may also be assigned descriptions (a = excellent, b = good, c = satisfactory), or verbally (e.g., Exceptional performance exceeds expectations and consistently makes an outstanding contribution that significantly impacts and influences the role). For proper efficiency, definitions need to align with organizational culture. The main critique against this type of assessment is its highly subjective nature, and it makes it challenging to ensure consistency between the manager's ratings. Another criticism is that the assessment is prone to inflation, to avoid employee confrontations. Employees sometimes confront managers on the rating given to during assessment (Armstrong & Taylor, 2014).

- **Visual assessment**

Visual assessment is the alternative to the rating assessment. It was designed in the form of a grid or matrix. Each employee and manager have an agreement on where to be placed on the grid. The grid has both vertical and horizontal axis; the vertical axis represents the behaviour or inputs of the individual when engaging in his or her duties. The behaviour or inputs. The behaviour is usually benchmarked against an organizational framework competency where acceptable and unacceptable behaviours are well-defined according to the competence. The horizontal axis represents the level of performance of the individual. It shows the outputs delivered by the individual. Therefore, after an assessment is done, the employees are assigned on the grid, depending on the behaviour style and output (Armstrong & Taylor, 2014).

#### **2.3.4.6 Web-enabled performance management**

Web-enabled PM is a situation whereby the performance management process is enabled for online processing. It will make it easier for managers and employees to capture role profiles and performance agreements, monitor plans, and progress. Managers will also be able to gain access to performance documents and appraisals. All gathered data can be employed in doing comprehensive performance reviews, record subsequent performance agreements from the reviews. The essence of online performance management is to ensure simplification of the PM processes and work paperless (Armstrong & Taylor, 2014, p. 341).

- **360 - Degree feedback**

Three hundred sixty degrees feedback is also referred to as multi-source feedback. For this type of assessment, feedback on performance is by multiple people that have had contact during a transaction with the employee. These may include managers, subordinates, colleagues & customers. The analysis takes the form of ratings over several performance dimensions. There are instances where feedback is mainly done from bottom-up, from subordinates to managers; this type is a 180- degree feedback. The 360-degree feedback is usually deployed using questionnaires for data gathering, and measurement is done from different perspectives or different topics. Examples include leadership, teamwork, communication, organizational skills, drive, decisiveness, and adaptability. Feedbacks can either be presented anonymously or by their managers (Armstrong & Taylor, 2014, p. 348).

The above are some of the several performance management assessments that can be used to measure and refocus behaviours of employees of the organization towards the organizational objectives or goals. The integration of performance management with environmental sustainability ethos can be referred to as green- performance management.

#### **2.3.4.7 Green performance management (GPM)**

Green performance management can be defined as a way of measuring all GHRM practices. It implies creating an abstract vision of green workplace, either on employees training or values, setting up measurement benchmarks for employee's performances and attaching rewards and incentives for employees that uphold the environmental vision (Milliman and Clair, 2017). Other scholars simply describe it as a system that attempts to measure and monitors employees' environmental performances (Jabbour, Santos & Nagano, 2010). Employing GPM in an organization does indicate a deliberate effort to achieve environmental change. Moreover, there are several approaches these can be actualized. These include adopting an organization-wide performance indicator on resource supplies and acquisitions, regular measurement of usages and wastages, and monitoring and controlling emissions. The setting of environmental targets and implementation of environmental management policies and conducting regular employee audits in the organization (Milliman & Clair, 2017).

The function of measuring employee green performance is a crucial function of ensuring HRM remains green. There cannot be any real progress on environmental sustainability in an

organization if performances are not monitored adequately. Performance evaluation can either be done separately or apart with the organization's scheduled performance evaluation process. The criteria to be used for measurement must align with the organization's criteria for performance in the environment. Scholars such as Arulrajah, Opatha & Nawaratne 2015, advocated for putting in place an environmental management information system (EMIS) according to Milliman & Clair, (2017) and periodical environmental audits (Milliman & Clair, 2017). The setting up of EMIS will aid the effective monitoring of energy & resource usage, pollution, and regulatory requirements that the organization faces, Milliman & Clair (2017) further argued that EMIS implementation should not be limited to reporting purposes only but should also include appraisals of manager's performance and employees. The firms must align their corporate environmental objectives with the performance management system. The organizations also must be proactive to include environmental issues, incidents, and environmental responsibilities. There is a need to communicate environmental concerns and policy widely for the success of the performance evaluation system of the company (Wehrmeyer, 2017).

For instance, some organizations have used green performance standards to tackle their environmental issues. Firms like Amoco in the US, where they had organization-wide environmental policies that deal with how waste management, environmental audits and reducing wastes, also measuring performance standards and putting in place green information systems for comfortable environmental management performance. The Union Carbide Corp. has included a green audit program, and employees were given opportunities to raise any environmental issue, get feedback and information on the firms' environmental performance (Milliman and Clair, 2017).

Besides, Jackson *et al.*, (2011) and Renwick *et al.*, (2013), posited that establishing green performance standards, indicators, green performance indicators and appraisals is not adequate, but should include communication of green policies, projects, green performance indicators across all employees in the firm. There is also a need for constant engagement and dialogue on green matters for targeted environmental performance.

Managers need to set green targets and goals for their departments, regular assessments of green issues, monitoring the use of environmental policies and communication of their scope of operations (Jackson *et al.*, 2011; Renwick *et al.*, 2013).

Moreover, attempting to measure people's performances in an organization can be challenging. Therefore, the green PM will require adapting an organization's systems with environmental performance standards, goals, and indicators. There needs to be a link between organizational objectives aligned with green goals and the respective tasks to be done to achieve the goals (Mehta & Chugan, 2015). For instance, India's Infosys has adopted a green performance-based system in its contracts management. This adoption has drastically ensured each project team to integrate their designs and withhold performance fees if the projects do not meet goals 10 (green goals). There is a loss of 25% fees for non-conformity of contracts. From 2017, each allocated contract at Infosys must include a 100% renewable energy source, plus energy consumption must be reduced by 50% and must have a net-negative water consumption by 2018 (Poulter *et al.*, 2017).

Furthermore, the GPM system attempts to measure and monitor employees' performances as regards environmental management (Jabbour, Santos & Nagano, 2010). Some specific aspects of GPM, such as giving feedback and metrics balancing, has been prominent going according to some scholars (Jackson *et al.*, 2010; Zibarras & Coan, 2015). Moreover, there have been different arguments positing the ineffectiveness of some PM evaluation methods. The difference of opinion is since several firms are structured differently and therefore, cannot adopt a uniform evaluation method, this makes it arbitrary (Marcus & Fremeth, 2009). There is a need to use a systematic method of selecting which GPM method to use. In the process of adopting a systematic method for GPM, management is required to divide into four areas of activities: putting place green targets for employees, creating wide publicity of the green performance indicators, measuring all green outcomes for employee's, and using dis-benefits (Milliman and Clair, 2017; Renwick *et al.*, 2013).

#### ❖ **Putting in place green targets for employee's**

All organizations have goals and objectives that devolve to all departments and by implication, all employees. In that wise, green target are set from the green goals or objectives of the organizations (Millar & Clair, 2017).

#### ❖ **Creating Green performance indicators**

To achieve the green goals or objectives set, the management of these firms create different performance criteria to achieve the goals for all employees. Green performance indicators

imply setting performance standards, performance appraisals. These criteria range from environmental responsibilities, environmental incidents, setting carbon reduction limits and extensive communication of the environmental policies and targets. Ahmand (2015), posits that for managers and employees, their main concern is performance appraisals, this aspect shows the effectiveness of their performance, as well as how it is compensated. Therefore, performance indicators should be spelt out by organizations.

❖ **Measuring (evaluating) all green outcomes for employee's**

Prompt and regular evaluation of all green activities and outcomes shows how crucial environmental management is. Measuring employee's green outcomes leads the employees to sit-up and always strive to be responsible and achieve more. Identifying green outcomes motivates managers and employees to be accountable for environmental performance.

❖ **Dis-benefit (denying due benefits)**

Dis-benefit is a way of dealing with underperformance; hence, it comes to GPM goals or managers that fail to meet up with the green objectives or the firms (Renwick *et al.*, 2013). These measures are aimed as corrective measures to employees to exhibit environmentally behaviours or to put in more effort to achieve the green goals.

Summarily, the presence of green performance management or measurement usually signals a firm intention to implement meaningful environmental change in the organization. Different approaches can be employed in evaluating environmental performance. These approaches include the adoption of corporate-wide performance indicators used for measuring resource supplies or acquisition. Another approach is measuring the amount of usage of wastes and emissions, implementation of environmental management systems that tracks how resources flow, conducting audits on employees' opportunities in order to identify problems and feedback about the organization performances in the community, deciding on a particular GPM metrics (Milliman & Clair, 2017).

GPM metrics is a necessity for HR management of employees of organizations; therefore, there is need for more studies to gain an understanding of the best combination to adopt to achieve efficiency and effectiveness to make employees accountable. Having a useful GPM appraisal adds credibility, reliability, validity, fairness, feedback, and continuous improvement of employees' performance in the environment (Jackson *et al.*, 2011). The critical issues that

require in-depth research are metrics balancing & focus on environmental outcomes, distribution of job responsibilities across employees in the organization, moving from measurement to monitoring environmental performance. Metrics are used for activities such as setting performance goals, providing recognitions, determining compensation and influence of career advancement (Jackson *et al.*, 2011).

The table below shows existing and new green performance practices under HRM:

Table 2.4: Green performance management. Source: (Arulrajah, Opatha & Nawaratne, 2015, p. 8)

<b>Authors</b>	<b>Green performance practices (GPM)</b>
Wells et al, 1993; Carpenter, 1994; Schwalm,1994; Milliman and Clair, 2017	Establishing an environmental management information system (EMIS) and environmental audits.
Wehrmeyer, 2017	Incorporating corporate environmental management objectives and targets with the performance evaluation system of the organisation.
Milliman and Clair, 2017; Renwick et al, 2008; Renwick et al, 2013	Installing corporate-wide environmental performance standards.
Renwick et al, 2008; Renwick et al, 2013; Opatha, 2013.	Integrating green criteria in appraisals or evaluating employee's job performance according to green-related criteria.
Opatha, 2013	Including a separate component for progress on greening in the performance feedback interview

Renwick et al, 2008;  
Renwick et al, 2013

Setting green targets, goals and responsibilities. Providing regular feedback to the employees or teams to achieve environmental goals or improve their environmental performance. Introducing or formally evaluating *all employees*’ green job performance (as far as possible).

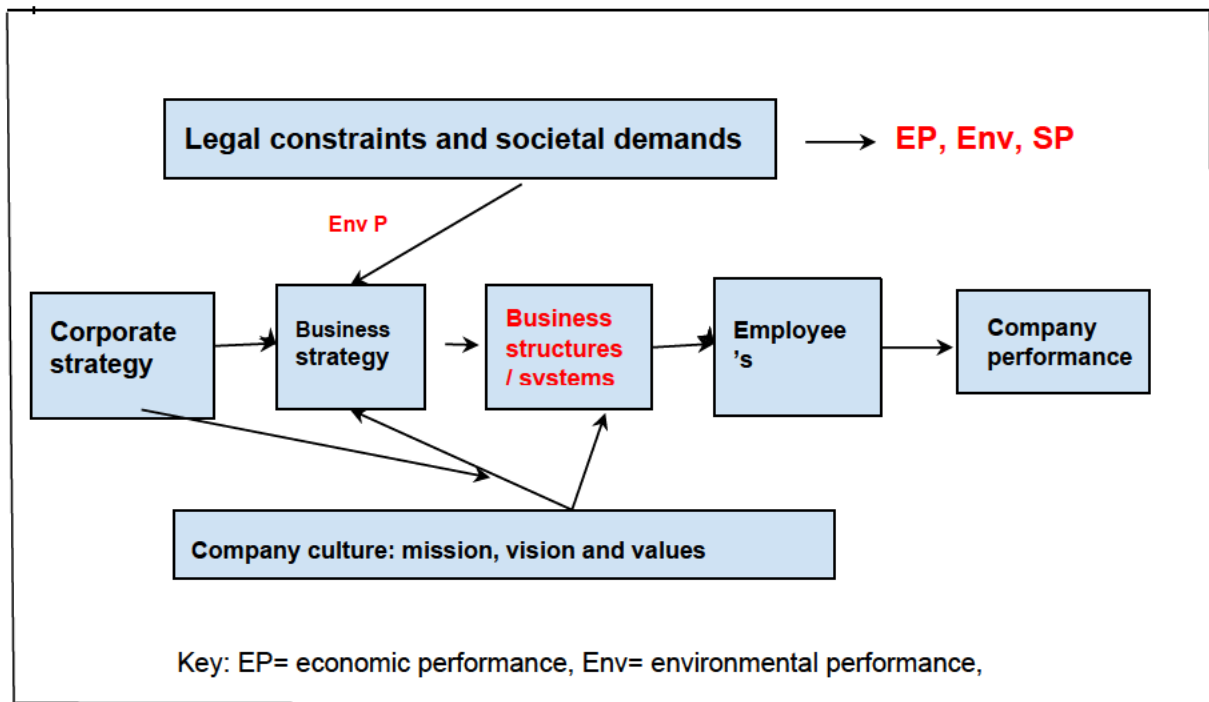
#### **2.3.4.8 Comparison of Green (sustainable) performance metrics**

##### **Principles of sustainability in business**

Principles of sustainability in business imply what is obtainable when business and sustainability are merged. According to Ameer & Othman (2012), they posit that having sustainability principles integrated around a business helps “business to reduce unnecessary risks, avoid waste generation, increase material and energy efficiency, innovate new, environmentally friendly products and services and obtain performance index from the local communities” (2012, p. 1). Businesses will be able to deal responsibly with clients and other stakeholders, be environmentally conscious, have increased energy efficiency, more innovations are encouraged, and the creation of environmentally safe products and services. The principles also involve consultation with host communities before any project or program is initiated; this is to seek acceptance of the projects/programs.

The figure indicates the areas that need to be focused on when developing a sustainable strategy.

- Legal constraints and societal demands
- Corporate strategy, business strategy, Business structure/ systems, employee’s behaviour, Company performance
- Company culture: mission, vision, and values



**Figure 2.3.** Assessing the sustainable performance of an organization

Source: Adopted from Szekely & Knirsch (2005).

#### 2.3.4.9 Green performance management metrics

Due to the dynamic evolution of environmental sustainability issues and problems across organizations, there is a need for more in-depth knowledge that will aid the management of these environmental issues. Standard performance measures can allay these difficulties. These measures can be set up by policies that will enable organizations to create and set targets, benchmarks on an annual basis. There are several ways to measure the green performance of organizations. They include:

- Surveys
- Award schemes
- Investor's criteria
- Benchmarking
- Sustainability indexes
- External communication tools
- Accreditation processes
- Standards and codes
- Sustainability indicators

- Metrics for sustainability performance
- Non-quantifiable sustainability initiatives

### ✓ **Surveys and Sustainability performance**

Surveys are statistical data information collected about a program, project, or phenomenon on a company. It can be done internally or externally. Stakeholders determine how the program, a project is perceived. Surveys on an organization's environmental performance can be conducted by:

- Industry
- Business lobbies (World business council on sustainable Development, WBCSD)
- Non-governmental organizations (NGOs)
- Professional associations (CSR Europe, ISR Compass)
- International organizations (United Nations, OECD)
- Academic institutions.

However, surveys have been reported as a tool that is not objective enough, as it only shows peoples perspectives, leaving out the necessary data to make an adequate assessment of the sustainable performance of organizations. Another critical point to note on surveys is that there are no methodical guidelines for conducting a sustainable survey for an organization.

### ✓ **Award Schemes**

These are due to recognition given to individuals or companies for different efforts or interventions made towards environmental sustainability. Different bodies or organizations can give the award recognition to organizations or individuals that have made a mark or initiatives that are aimed at reducing environmental degradation or pollution in the environment.

Several international or local institutional initiatives go out to identify these businesses that go out of their way to make our environment sustainable for us. In the light of these, the award programs attract full entries from a wide range of sectors: education, manufacturing, finance, energy, retail, real estate and government. Award programs initiatives have thus increased over the last few years, as the categories have gradually increased, from small businesses, medium

and large business. Even the public sector is not left out as every type of organization is catered for considering their capacities and resources.

However, the growth has caused problems for sponsors and entrants alike, and they are somewhat unsure of the quality and validity of the programs. The organizing of the award schemes also faces its challenges in the area of duplicity or prevalence. Therefore, the awarding authority (RSA) has set an accreditation committee to look into these emerging issues of environmental award schemes.

#### ✓ **Investor's criteria**

Investors usually demand information on the environment and how the organizations performed in their respective communities. Their investments are seen and used as corporate social responsibility (CSR) (IISD.Org, 2013). There has also been a rise in investment on CSR; this was confirmed by 61% of fund managers and analysts interviewed. In Europe, the CSR retail investment market is estimated to be in the region of 12.2 billion, while in the same Europe, the CSR investment institutional market is worth about 336 bills. European financial community sees a link between non-financial risks and shareholder value. There are some notable different countries in Europe: Sweden gives a premium investment to organizations that intend to be responsible, while it is just 57 % Spanish organizations, 50% to the Dutch and Italian organization. CSR investments do its evaluations through surveys administered on the organizations, and the data is passed to data analyst and investors. The surveys are designed for participants to rank organization according to four criteria: Negative screening, positive screening, engagement and shareholder activism (IISD.Org, 2013).

Negative screening involves screening out some organizations because of the nature of their businesses or products, or their inability to meet specific criteria (i.e. social, ethical, or environmental). Such organizations are tobacco companies, nuclear companies.

Positive screening means including organizations into the investment portfolio based on their adherence to the environmental codes or policies in the society, the environment or ethically. Examples include human rights organizations and companies that have good working conditions for its employees.

Engagement this is the case when investors meet with organizations' boards or management to discuss ways or modalities of how they can adopt environmental sustainability behaviour at

the workplace. Examples are a lack of policy on climate change and organizations adoption of lower pricing of medications in developing countries.

Shareholder activism indicates the powers of shareholders of a company to influence resolutions that support CSR investments. Examples are voting against resolutions to approve an organization's report and accounts that do not report on its environmental performance.

#### ✓ **Benchmarking**

Benchmarking involves the comparison of performance against an existing one. It is comparing an organization to the point of reference. The point of reference could be either internal, external or to a standard or indicator. Benchmarking was initiated by the Japanese, where they had to carefully select the best process out of several processes (Ou & Kleiner, 2015). Benchmarking is all about processes; it is a series of steps taken to make a product or service. It can be a flowchart or conversely; any structure that cannot be a flowchart is not a process. A corporate culture of an organization cannot be flowcharts. However, some organizations positive efforts at sustainability cannot be regarded as processes, examples Procter and Gamble's supply chain's 3M's pollution prevention exercise. Although they may be critical to the organization's sustainability efforts, these are not processing. It is vital to know that processes can be benchmarked, while competencies cannot be benchmarked. Before benchmarking can be implemented, a business process re-engineering (BPR) must be done. BPR- requires selecting an individual process and carefully studying it, it is examined with BPR techniques: detailed flowchart, process analysis to identify each step; the number of resources involved in each step (process), the amount of waste generated, the amount of energy consumed, and the number of people involved (Ou & Kleiner, 2015). The BPR process analysis also identifies the steps that do not add value in terms of customer and stakeholder perceptions.

#### ✓ **Sustainability indexes**

These are surveys of sustainable companies compiled over time to guide investors in making their decisions. There are some widely recognized sustainability indexes like the: Dow Jones sustainability index (DJSI), established in 1999, and the FTSE4Good launched in 2001 (Montiel & Delgado-Ceballos, 2014). With the indexes enables quick identification of best-in-class companies and as a result of this have a rough estimate of non-financial risk.

#### ✓ **Accreditation Processes - Standards and codes**

Several organizations adopt and adhere to different international standards and codes. There is also the use of assurance providers for different reasons: to meet legal compliance requirements, to build trust and credibility, for certification, to restore confidence in the stakeholders and improve management process systems. There are several notable sustainability standards and codes that organizations can adopt. The international standard organization (ISO), a member agency of the United Nations has created several international environmental standards and codes (ISO 14000 series) to measure companies' environmental performance (Manghani, 2011).

Many organizations now subscribe and monitor these standards, there are three main, this is due to their criteria, that is assessments of products, process and personnel development and to secure their positions in the fast-changing climate of environmental legislation and stakeholders' expectations. Few standard codes are listed below and what they certify: AA1000, SA8000, and ISO 14001 (Dubois & Dubois, 2012).

- ❖ **AA1000** Assurance Standard: assesses an organization's disclosure and its associated sustainability performance. Its main goal is to ensure the quality of sustainability, accounting, auditing, and reporting.
- ❖ **SA8000** Is a global supply chain-labour certification. It is significant because it is a standalone certification solution for managing some aspects of CSR. It is also a global standard for delivering auditable compliance for manufacturers and purchasers in the supply chain.
- ❖ **ISO 14001**: Is the most frequently adopted standards by companies. It is the globally recognized standard code for environmental management, developed by the ISO in 1996.

#### ✓ **Sustainability Indicators**

These means identifying some aspects of sustainability or resource that impacts on the economy, society, and the environment. The challenge, however, is the presentation of such data (indicators or metrics) collected for informed decision making. Below are some of the sustainability indicators listed: GRI sustainability ratio indicators: This is the global reporting initiative (GRI), it distinguishes between the three types of indicators:

- ❑ **Productivity/efficiency ratios**: this type of ratio links values to impact. Efficiency ratio tracks financial performance. Examples include:

- Labour productivity: turnover per employee
  - Resource productivity (e.g., sales per unit of energy consumption, GDP per unit of material input)
  - Process eco-efficiency (e.g., Production unit per unit of waste, net sales per unit of greenhouse gas emissions in tons of CO<sub>2</sub> equivalent)
  - Functional eco-efficiency of products or services (e.g., fuel efficiency of a plane/car)
- **Intensity ratios:** This ratio shows the impact per unit of activity or unit of value. A reduced-intensity ratio indicates performance improvement. Often environmental performances are monitored with intensity ratios such as:
- Emission intensity (e.g., tons of CO<sub>2</sub> emissions per unit of electricity generated)
  - Waste of intensity (e.g., amount of waste per production volume)
  - Resource intensity (e.g., energy consumption per function input service).
- **Percentages:** This type of ratio shows the difference between similar issues with the same physical unit in the numerator and denominator. Examples of such percentages used for sustainability performances are:
- input/output ratios (e.g., process yields)
- Losses (e.g., non-product output per materials input)
  - Recycling percentages (percentage of waste recycled per total waste)
  - Fractions (e.g., percentage of renewable energy, a fraction of recycled materials, fraction of hazardous waste)
  - Quotas (e.g., percentage of women in upper management)
  - Financial performance ratios (e.g., return on equity, return on operating assets).
- Eco-efficiency indicators

These indicators show the extent and level of eco-efficient strategies of an organization. (i.e., strategies aimed at reducing or minimizing the impact on the environment, while simultaneously increasing shareholder values). The World Business Council for Sustainable Development (WBCSD) description of what it takes to achieve eco-efficiency. This is when “the delivery of competitively priced goods and services that satisfy human needs and bring a

quality of life, while progressively reducing ecological impacts and resource intensity” (AccountAbility, CSRNETWORK. (2004, p. 14).

Furthermore, the WBCSD indicated that the target level is reached when economic activities are at a level” at least in line with the earth's estimated carrying capacity" (Stefan Schmidheiny, Changing course, 1992). The major criticism against the use of eco-efficiency indicators is that there are no agreed rules or standards for recognition, measurement, and disclosure of environmental information, either within the same industry or across industries. Also, there are no rules for consolidating environmental information for a company or a group of firms, for the information to be useful or in line with a company's financial items (UNCTAD, a manual for the preparers and users of eco-efficiency indicators, 2004).

#### **2.3.4.10 Influence of green performance management on employee’s green behaviour**

Green performance management (GPM) is a derivative from GHRM. The main objective of GHRM is to maintain an organization environmental performance. It is to sustain green behaviours, attitudes, and green culture in the organization’s operational process, which hopefully translates into reduced environmental damage. Environmental performance can be described as a means of evaluating the success of a firm involved in the implementation of environmental objectives or goals or reduces the damaging effects on the environment and its operational processes (Wong, Tan, Ng, & Fong, 2013).

To ensure the sustenance of green workplace behaviours (WGB), organizations need an extensive organizational green metrics on several sustainable work practices. Such as resource acquisition, usage, waste management and even installing an environmental management information system (EMIS) Arulrajah *et al.*, 2015; Jackson & Seo, 2010). Integration of GB or green culture into the organization would require reframing the organization objectives into green objectives, responsibilities and monitoring green behaviours and evaluating achievement of the environmental goals by using green metrics to measure using the key performance indicators (Sharma & Gupta, 2015).

There have been several previous studies into GPM; these include metrics balancing and delivering feedback to employees (Jackson *et al.*, 2011; Zibarras & Coan, 2015). Ahmad (2015) was all about looking into the employee’s performance appraisal. He focused on how evaluation of managers green outcomes can influence their environmental performance

behaviour positively. Renwick *et al.* (2013), argued that disbenefits could also influence green performance behaviour; therefore, it must be applied appropriately for effectiveness.

Recent empirical studies showed that GPM had a positive influence on employee GB. The study by Pinzone, Guerci, Lettieri & Redman (2016), a UK public health sector survey that sought to support the UK health sector in their environmental sustainability journey. The findings from this study found that there was a positive relationship between green performance management and collective voluntary employee behaviours towards the environment. Dumont *et al.*, (2017), a Chinese subsidiary of an Australian multinational organization, the survey questionnaire was administered on 388 employees aiming to find how GHRM practices impact green employee behaviours, with psychological green climate and green values as the mediating variables. The findings revealed that there was a positive relationship between perceived GHRM and employee voluntary (extra-role behaviours) and tasked-related (in-role green behaviours) green behaviours.

Masri & Jaaron (2017), in their study on the manufacturing industry in Palestinian, the study used a mix-method survey and interview on 90 survey respondents and 17 participants. The study aimed to assess GHRM practices in the manufacturing industry in Palestine. The findings showed that GPM is positive and significantly correlated to employee green behaviours. The findings believed that appraising employee's environmental activities helps increase their green ability, knowledge, and skills. In a similar vein, Tang *et al.*, (2017), focused on developing a scale of measurement and validity for GHRM practices, one of such is GPM. The Chinese empirical study concluded that balancing metrics that measure environmental outcomes and distribution of responsibilities to employees across the organization will guide and influence employee behaviours towards greening.

Furthermore, another empirical study by Karande & Bihade (2018), conducted among 100 executives across three organizations: Tech Mahindra, Infosys, and Syntel, in Pune, India. The study investigated the level of green HRM function practices among selected organizations in India. The study found that performance evaluation process, green practices should be adopted in the organization's key performance index and keep performance areas (KPI and KPAs) so that it can be considered in the employees' appraisal process (Ahmad, 2015). The report showed the need for a more rigorous and focused implementation by the firms (Karande & Bihade, 2018).

Pham, Tuckova & Jabbour (2019), the study looked at greening the hospitality industry and how GHRM practices influence OCBE in hotels. The empirical study surveyed 203 employees and conducted eight in-depth interviews. The findings revealed that GPM combined with two other GHRM practices (green training & green employee involvement) had a positive effect on employee green behaviours (Pham *et al.*, 2019). The results indicated that GPM might not be implemented with other GHRM practices.

Chaudhary (2019), focused on examining the implementation of GHRM status and understanding how the various GHRM practices influence employee's green behaviours (either tasked or voluntary) in the Indian automobile industry. Survey questionnaires served a total of 91 employees. The findings from the study showed that, although there was a low implementation of GHRM practices, it also proved that GPM relates positively to green employee behaviours. Furthermore, this result showed that GPM was significant and influenced more the voluntary performance of employees, than task-related green behaviours at the Indian automobile industry (Chaudhary, 2019).

However, there are still some inherent challenges with implementation of GPM. It includes balancing metrics that are focused on environmental behaviours and environmental outcomes, distribution of responsibility amongst employees in various departments of the organization and using such metrics to monitor environmental performance.

Besides, the various studies reviewed were generally done looking at private organizations, tourism institutions and health institutions. This current study will focus on a public sector service institution. Another noticeable gap of the above studies was the exclusion of African scholarships; most were from the United Kingdom, United States of America, China, India, Malaysia, Palestine. This current study is designated in South Africa.

Considering the above challenges, and the noticeable gaps, the current study will focus on adopting a best-practice model framework for implementing green performance management at a public service organization. The framework will address the challenges while filling the contextual (public service sector and South Africa focused study) gaps.

### **2.3.5 MANAGEMENT SUPPORT**

With the increasing environmental degradation within the last two decades (Kock, Santalo & Diestre, 2012; Nejati *et al.*, 2014; Yang & Zou, 2014), management of several organizations

has been faced with mounting pressures from various stakeholders to adopt environmental sustainability measures to curtail it. Even though, several firms have spontaneously adopted some control measures, both internal or external measures, such as internal compliance behaviours, self-regulation, third-party certifications, industrial covenants, and comprehensive environmental management systems (EMS) (Sandberg & Holmlund, 2015; Dahlmann, Branicki, & Brammer, 2019). One thing is clear; there is a need for concerted efforts from management of organizations, to effectively manage its environmental performance. Management responsibility (green talk) must lead to improved actual environmental actions (green walk) (Martins & Gomes, 2019; Walker & Wan, 2012).

Managerial support is not an HR function, but it is considered as such because of the severity of issues of environmental degradation and environmental sustainability. The support and commitment of management to any program put in place by the organization is vital for the successful implementation of such programs. For instance, the early 21<sup>st</sup> century 1980s to early 1990s witnessed the dominance of strategic human resource management (SHRM) approach to resolving human resource management HRM issues. SHRM was all about linking organizational policies with practices in order to achieve set outcomes (in performances or market outcomes). These outcomes were measured on the back of the organizational performance rather than employee performances (Govindan *et al.*, 2013). SHRM can be described as a specific approach to managing people, and the approach was used by the management of organizations to improve organizational performance and used in measuring the impact of HR strategies on organizational performance (Tummers, Kruijen, Vijverberg, & Voeselek, 2015).

Presently, there is a new approach that has evolved; this approach is being referred to as green human resource management (GHRM) or sustainable human resource management (sustainable HRM). GHRM or sustainable HRM harps on HRM organizational practices, financial outcomes, and people management policies (Manika, Wells, Gregory-Smith & Gentry, 2015). The outcomes could impact the individuals or groups, organization, its employees', people, their relationships, as well as the impact on the ecological / environmental (Stankeviciute & Savaneviciene, 2018).

Management support is evident in an organization when the management introduces the concept of GHRM initiative. According to the GHRM definition by Ehnert (2014, p.74), "this is the pattern of planned or emerging human resource strategies, these practices intended to

enable an organizational goal achievement while simultaneously reproducing the HR base over a long-lasting time. Controlling for self-induced side and feedback effects on the HR systems on the HR base and thus on the company itself". Also, GHRM is an HRM initiative introduced from management taken to increase and achieve the organizational goals or objectives (Ehnert, 2014). HR practitioners are always faced with improving efficiency and developing organizational and human capacity. Therefore, HR managers of organizations do need to acknowledge the interrelationship between the environment and organizational resources (Kramar, 2014). Therefore, any program that does not have the management backing or commitment is most likely to fail. GHRM is an environmental policy that needs the backing of the corporation. Management's ability will increase everyone's effort to make the program a success. Management support could be in the form of supportive organizational policies, initiatives, programs, and reward systems. They also ensure that they put in place an environmental framework that ensures the successes of the environmental management policies. According to Russell & McIntosh (2011), Cox, Higgins, Gloster, Foley, & Darnton (2012), Osbaldiston & Schott (2012), and Robertson & Barling (2013), these practices includes:

- Supportive environmental corporate culture by aligning the green agenda with organizational values and assumptions,
- Putting in place robust environmental leaders with crucial change agents,
- Engaging employees and encouraging employee involvement through the provision of environmental information,
- Rewards and employee participation in decision making,
- Choosing the appropriate form of change suited for the organization,
- Management role-modelling environmental behaviours,
- Leader's pro-environmental behaviours also inspire employees' pro-environmental behaviour.

The support of the management of organizations will be evident when there is an increased effort to improve profitability, performance, productivity and pro-environmental attitudes and behaviour at the workplace. They have a critical role to play in setting an enduring culture, attitude in an organization hoping to become environmentally sustainable. Top management and line manager's ability to articulate and implement pro-environmental initiatives will increase employee's uptake of the initiatives. (Cairns, Newson & Davis, 2010). For instance, a comparative study by Schelly, Cross, Frazen, Hall & Reeve, (2011) on energy consumption in

schools reported that charismatic leaders were instrumental in successfully reducing to 50% their consumptions in energy. Also, at the organizational level, management support of different initiatives helps in quick achievement of such initiatives. The support ranges from leadership by example, having in place dedicated coordinators, targets, written plans backed up with actions.

In summary, through management support employees acquire and learn new behaviours and attitudes. Employees will primarily take responsibility for environmental sustainability practices if there is adequate support from their supervisors and line managers. Schwartz *et al.*, (2010) and Jones, Jackson, Tudor & Bates (2012), both posited that leaders encourage organizational cultural change and recognition from employees. Evidence of management efforts will be a provision of environmental infrastructure, such as installing recycling bins (Wu, DiGiacomo & Kingstone, 2013), bicycle facilities (Cairns *et al.*, 2010), and infrastructures like provision of bus services. Other evidence of management support includes direct support from line managers or supervisors to green initiatives, and this is very important (Cairns *et al.*, 2010), provision of clear leadership (Jones *et al.*, 2012, Schelly *et al.*, 2011; Schwartz *et al.*, 2010).

Robertson & Barling's (2013), the study of 139 Canadian and US firms, shows a positive influence between pro-environmental behaviour of employees and green transformational leadership. The results were also alluded to by (Anderson, Jackson & Russell, 2013, pg. 152, 153). Several empirical studies (Ones & Dilchert, 2013; Anderton & Jack, 2011) on organizations have observed that when executives, managers and supervisors participate in green initiatives of organizations, employee's commitment to environmental sustainability behaviours improve. These positions have been adopted through the creation of new roles and positions for the managers, such as Chief Sustainability Officer, Green Champions, across UK organizations (Ones & Dilchert, 2013). These types of management roles help drive positive change to the organizational efforts to become environmentally friendly (Parker, 2011).

Wagner's (2011), longitudinal study finds it plausible that German manufacturing firms are very active with environmental management, could be attributed to their sizeable managerial support of green activities and this reflects in staff satisfaction, recruitment /retention (Jackson *et al.*, 2011, p. 102-103). Similarly, some UK organizations also seem to have effective organizational green practices; this is attributed to supportive senior managers and staff open to pro-environmental practices. This is despite some UK firms not having appropriate reward

or promotional programs and adequate staff engagement on pro-environmental initiatives (Zibarras & Ballinger, 2011).

Some GHRM constraints include supervisors not 'on board', HR systems not aligned with the organization green projects or initiatives, and inadequately trained employees on EM projects (Kane, 2011).

### **2.3.5.1 Management support influence on employee's workplace green behaviour**

Managerial support is essential for having a green organizational behaviour. To put into perspective, Cantor, Morrow & Montabon (2012), reported a significant relationship between organizational support for EM and environmental participation in EM. The views were also corroborated with Zhang *et al.*, (2013) study, which found that an organization's behaviour will have a negative influence on an employee's environmental behaviour, that is when the attitude is low, it impacts on the employee's norms will equally be weaker. Forbes & De Silva (2012) also feels that work conditions for staff are essential for instilling EM behaviours among employees. Graves, Sarkis & Zhu (2013), believes financial and non-financial work incentives are essential, while Cantor *et al.*, (2012) states that resources will help push green behaviour among employees.

Management support has been used interchangeably in different terms. They include top management support (Sharma & Gupta, 2015), management involvement (Zibarras & Coan, 2015; Zhang *et al.*, 2019), leadership & followership dyads (Robertson & Barling, 2013), supervisory support behaviours (Tuan, Yoshi, & Tuyet-Mai, 2014b), and transformational leadership behaviour mediated by GHRM (Jia *et al.*, 2018). All terminologies mean organizational support or managerial or management support. For the benefit of this study, the researcher will use the term management support (MS).

Several studies had researched the type of support different organizations give to their programs to achieve their organizational goals or objectives. MS can be in any form of support from the organization. These include training support, financial support, environmental support, operational support, infrastructure support, endorsement of change, and the institutionalization of punishment systems. Others include communication of environmental agenda or goals across the organization and promotion of employee empowerment (Emerson, Meima, Tansley & Welford, 2016). These forms of support go a long way in determining the success or failure of programmes in organizations. Sharma & Gupta (2015) described it as the

main component to a successful environmental management program; this was also corroborated by (Hahn, Pinkse, Preuss, & Figge, 2015).

Previously, Leonidou *et al.*, (2013), had examined the relationship between environmental policy and direct supervisory support behaviours in the promotion of employee-led environmental initiatives. They found that organizations and supervisors' engagement were essential factors that influence employee creativity in the environment, the result also indicated that in the absence of the supervisory support, there would be fewer environmental initiatives from the employees (Leonidou *et al.*, 2013). Similarly, the study was re-examined by Tuan *et al.*, (2014b) in Vietnam using a questionnaire survey on 212 mid-level and low-level employees of a manufacturing organization. The study also sought to know how supervisory support behaviours and environmental policy influences employee environmental actions. The study looked at the type of supervisory support employees received from their managers at the workplace that were likely to promote eco-initiatives. The findings from the study found that supervisory behaviours must be continuously reviewed for it to influence employee willingness to promote environmental sustainability initiatives. It also found that encouraging environmental innovation, competence building, communication, rewards and recognition and management goals and responsibilities had a significant influence on employees to promote and engage in green behaviours (Tuan *et al.*, 2014b).

Furthermore, Robertson & Barling (2013) conducted a study with 231 dyads, that was eventually reduced to 181 pairs of leaders and subordinates. The study aimed to investigate the leader and follower dyads across the United States and Canada. It sought to test how the leaders of green organizations influence employees into green engaging in green behaviours. The findings demonstrated that there was an increase in employee commitment and awareness towards the environment, which was because of management support. This result agrees with (Dolores Lopez-Gamero, Claver-Cortés, & Francisco Molina-Azorin, 2011; Sharma & Gupta, 2015). In the same vein, Ones & Dilchert (2013) posited that several international organizations have now formalized their management executive management roles, such as chief sustainability officers. Parker (2011) also alludes that EM leaders help push their employees and set examples on how to drive greening in the organization.

Recently, Zhang *et al.* (2019) examined how GHRM promotes green employee behaviours in China, using the TAM perspective. The Chinese empirical study investigated how five GHRM practices influenced green employee behaviour (EGB) in the workplace. One of the practices

was manager involvement. The findings of the study revealed that all identified GHRM practices, including management involvement all, contributes significantly to tasked workplace behaviour and voluntary workplace behaviours. Also, that management involvement had more considerable influences on tasked green workplace behaviours.

Lastly, Jia *et al.*, (2018) looked at the continuous mediating effects of GHRM on employee's green passion via transformational leadership and creativity. The study's hopes to achieve a positive transformational leadership associated with employee's green creativity. The other was transformational leadership mediated by GHRM is positively associated with green creativity. The study was conducted in China on 120 respondents. It found that transformational leadership had a positive effect on green creativity, and GHRM also mediated transformational leadership behaviour. It also revealed that GHRM had a completely mediating role in the relationship to transformational leadership.

The reviewed articles strength lies in highlighting the importance of managerial support for greening organizations and having a green policy that guides the implementation of green culture. The articles also proved that managerial support has a significant influence on employee workplace green behaviours. Therefore, the studies further strengthen the argument that management support is essential for the success of GHRM practices in organizations.

All reviewed GHRM articles were from Asian, Western-Europe, South American, and North American studies. Therefore, African scholarships focused on GHRM is still scanty. This study will be an excellent addition to the growing Africa scholarship studies.

Still, on the gaps, only a few GHRM studies have looked at South African local government institutions and how to promote GHRM practices within them. This current study aims to contribute by emphasizing the role of GHRM practices in influencing green workplace behaviour among employees in the organization. Understanding what management support entails may be beneficial to actualizing the greening culture in the organization.

#### **2.4 GREEN HUMAN RESOURCE MANAGEMENT (GHRM) & ITS RELATIONSHIP WITH OTHER HRM INITIATIVES**

GHRM reflects the HRM aspects of EM (Renwick, Redman & Maguire, 2013), plus the focus of the role of the HRM department in preventing pollution, environmental degradation through operations of organizations (Renwick, Redman & Maguire, 2013).

Although GHRM perspectives include other HRM practices, such as strategic HRM, high-performance HRM (HIPO) and high commitment (HICOM) HRM, it is still distinct in some ways. These ways include:

Mishara, Sarkar & Kiranmai (2014), stated that GHRM shows an organization's objectives towards the protection of the environment as well as some certain HRM practices that focus on sensitive aspects in our environment and the impact the organization's activities have on the environment (Boiral & Paillé, 2012).

Strategic HRM does not consider the local environment but focuses more on the organization's strategic goals such as high productivity, digitization of operational processes (fourth industrial revolution 4IR (Hauff, Alewell, & Hansen, 2014).

High performance (HIPO) implies that having a high performing organization requires putting in place several interventions or policies that may collectively impact the performance of the organization positively. Examples of such interventions may include ensuring employees have a sense of job security, core intensive training for the employees (Kehoe & Wright, 2013).

High commitment (HICOM) refers to several organizational practices that also tends to improve employee commitment that influences employee behaviours and capabilities and focus, and these usually translates to the increased competitive advantage of the organization's performance (Pavlov, Mura, Franco-Santos, Bourne, & Control, 2017).

GHRM adds to an organization's performance, improved processes and the local operating environment of the firm. In other words, the benefits cuts across the internal stakeholders and more importantly, the external stakeholders. Alternatively, general HRM practices are mostly centred on making a profit and improved organizational performance. GHRM can, therefore, improve employee behaviours, capabilities, motivate then increase their commitment and involvement in environmental programs. The influence will give a sense of pride and motivate the employees to work harder. These friendly environmental practices may translate into an improved organizational reputation, reduced stakeholder pressure and of course, benefit the future unborn generations in the long run.

Ahmad (2015); Dal Maso, Basco, Bassetti, & Lattanzi (2020), opined that previous studies of GHRM, have failed to address the gaps (decision-makers inability to define HRM practices successfully within organizations). There is a need for an environmental performance indicator

(appraisal tool) that will be applicable to measure GHRM across organizations (Tang *et al.*, 2018).

#### **2.4.1 Benefits of integrating green human resource management (GHRM) for organizations**

Having conceptualized what GHRM is, it is essential to discuss; therefore, the benefits that can be derived from its implementation across an organization. Arulrajah & Opatha, (2016), highlighted the following benefits for organizations, according to several scholars listed below:

- “For the protection of the natural environment (ecological lessons such as global warming, climate change, energy crisis, pollution) and to make the workplace conducive, safe, healthy and meaningful for employees and the organizations (Alvesson & Willmott, 2012).
- To train, teach and motivate (through non-financial or financial) employees in the conduct of their operations in an environmentally responsible mode (Alvesson & Willmott, 2012).
- Provision of environmentally friendly products, operations and services (companies face increasing pressures for eco-friendly products, operations and services) to manage corporate environmental programs successfully (without failure) and to overcome implementation challenges of corporate environmental programs (Milliman & Clair, 2017).
- Support for environmental activities of organizations for success (Wehmeyer, 2017).
- Providing proactive corporate environmental management system to employees this is because employees are the primary ingredients for an efficient and proactive corporate management and to train, recognize, reward, and motivate employees in proactive corporate environmental management (Stead & Stead, 2015).
- Achieving sustainability (To attain environmental sustainability requires attention paid to the technical aspects of systems and also the HR factor) and incorporating environmental management efforts (Hahn, Pinkse, Preuss, & Figge, 2015).
- To innovate eco-friendly areas in terms of products and behaviour (employee eco-innovation) (Jackson *et al.*, 2014).
- To see an increase or an improvement in corporate environmental performance (Dolores Lopez-Gamero *et al.*, 2011).

- To improve specific corporate environmental performance by certain HR functions such as training, employee empowerment, and environmental management system (EMS) rewards (Paille *et al.*, 2014).
- To become a green employer (Arulrajah *et al.*, 2015; Stringer, 2010).
- To develop sustainable firms or organizations (Dal Maso, Basco, Bassetti, & Lattanzi, 2020).
- To contribute to implementing all the stages of the environmental management system (ISO 14001) in the companies (Jabbour *et al.*, 2010).
- To sustain corporate environmental performance or to ensure sustainable environmental performance for a long-time frame (Jabbour, 2011).
- To encourage employees to get involved (employees) in green organizational activities and to develop green abilities and provide employees with opportunities to be involved in corporate environmental management initiatives and efforts (Jackson *et al.*, 2011; Renwick *et al.*, 2013).
- Maintaining green behaviour amongst employees of the organization, so they give a maximum contribution to their roles; i.e. preservationist, conservationist, non-polluter and maker (Opatha & Arulrajah, 2014).

From the preceding, one can deduce that an organization should engage in green HRM. GHRM enables workplace employee's exhibit green behaviours. Green behaviours can help reduce and eliminate waste, reduce costs of governance and operations of the organization. Organizations that are active with GHRM implementation also tend to be innovative in churning out environmentally friendly products and services (Arulrajah & Opatha, 2016). It also includes improved organizational productivity, talent acquisition, increased employee retention rates, boost in the organization's reputation, customer loyalty and market expansion, leading to enhanced organizational competitiveness. All of the above benefits are not achievable without a system structure or process in place at the organization.

In order to practice green HRM in any organization, the HRM function helps to make this possible with a suitable mechanism or process. It emphasizes the need for a workable green HRM model.

## **2.5 GREEN EMPLOYEES' BEHAVIOUR**

### **2.5.1 Employee behaviours**

Behaviours are said to be a function of the individual, the environmental (this includes knowledge, skills, abilities, talent motivations) competency required by the organization he/she finds himself (Hunter, 2016).

Employee behaviour can be described as the reaction of employees to specific issues or situations in the work environment (Steen & Schott, 2019). Although there may be several elements that can determine an employee's behaviour, it is most times, mostly dependent on the existing internal or external organizational culture (Steen & Schott, 2019).

Employee behaviours can also be regarded as organizational behaviours. Organizational behaviour (OB) research is targeted at individual behaviours within an organization. OB is the study of how employees interact at the workplace. The main aim of studying OB is to seek an effective way to manage employees. Effectively managing employees will help to increase employee productivity. Managing employees and increasing their productivity is the primary function of the HR department. The HR staff is about the only professional in an organization saddled with the task of implementing behavioural change on employee behaviours (Islam, Muktar & Siengthai, 2012).

However, several factors affect or influence employee's behaviours; this includes, leadership, corporate work culture, personnel culture & personal life, employee's beliefs, job responsibilities, work relationship and mode & manner communication. These factors are briefly explained below, according to the Management study guide article on employee behaviours (Steen & Schott, 2019):

- **Leadership**

Managers or leaders play a critical role in influencing the employee's behaviour at the workplace. The leaders have a responsibility to set an agenda or directives for team members. Leaders act as guides to teams' day-to-day operations, also assisting them to acquire essential skills to upgrade their knowledge. This is done with strict adherence to the organization's rules and regulations.

- **Corporate work culture**

Employee's comfortability, confidence in the workplace is essential. The rules and regulations at the workplace should be the same across the different levels at the workplace. Employees are meant to encourage and expected to adhere to the code of ethics of their organization. The management is expected to be transparent, accountable and just at all times. The corporate work culture will engender good work ethics from employees at all times.

- **Job responsibilities**

Employees expect to be assigned jobs that are equal to their capacity or jobs that will not overburden them. They are also expected to be encouraged to improve and get trained to upgrade their skills.

- **Effective communication**

There is a need for effective communication with team members, and this affects employee behaviours once they feel left out; they lose interest and performance drops. Also, grievances need to be identified and addressed promptly.

- **Family and personal life**

Employee's individual personal life involving families can spill over to affect their work behaviours. Problematic backgrounds, erratic family life may result in irrational behaviours at the workplace. Employees that have family issues or strained relationships usually conflict with the work culture.

- **Relationship at work**

Work relationships are mostly necessary. Many work responsibilities are shared in teams. People need to share experiences, talk and discuss how to work issues. A workplace that does not allow interaction with fellow workers may lead to frustration and stress, thereby affecting their work behaviours.

Moreover, organizations usually expect their employees to follow a prescribed set of behaviours. These behaviours are derived from the policies and regulations governing the sector or industry concerned. For instance, this study is focused on the public sector, a municipality in South Africa. Therefore, the public sector has an acceptable set of behaviours expected from the municipality, and in return, the municipality expects its employees' also to behave in a prescribed way.

Moreover, organizations perform different functions across departments, each with its own set of rules or regulations and have different ways they motivate their employees to behave acceptably. The departments may include marketing & sales department, operations department, communications & corporate department, production department, finance department, supply-chain & logistics department, research & development department and human resource department (HR). One of the focus of this study is on HRM functions. Therefore, the HR department expects its level of organizational behaviours from its employee according to the organization's laws, regulations, policies and the type of motivations (extrinsic and intrinsic) they offer for an expected behaviour (Osbaldiston & Schott, 2012).

In terms of employees' behaviours, the HR functions include, among other things to regulate work behaviours in the organizations. Besides, this study is also focused on changing behaviours of employees in the workplace to one that embraces environmental sustainability. For the achievement of this, there is a need to develop a GHRM model for practice.

Several studies (Masa'deh *et al.*, 2017; Osbaldiston & Schott, 2012; Michailides & Lipsett, 2013; Young *et al.*, 2015) have emphasized a gradual focus on behaviours of employees of organizations from one of 'no-environmental consciousness' to one of 'higher consciousness of the environmental degradation (Young *et al.*, 2015). Recently, research has continuously emphasized the extent of progress that is focusing on employees' behaviours in an organization is a sure way to have a pro-environmental workforce.

Previous pro-environmental behavioural researchers, such as Steffen, Rockstrom, Cornell, Fetzer, Benneett, & De-Wit, (2015a) focused on using employees' behaviours to increase the organization's environmental performance. Another critical study that promoted environmental sustainability behaviours was the Lo, Peters, & Kok (2012); Gregory-Smith, Wells, Manika, & Graham (2015). The scholars conceptualized an environmental behaviour framework (Baseline framework model) that evaluates environmental behaviour in large organizations. At the same time, it also suggested that changing employee behaviours as the primary strategy to be pro-environmental in behaviours. In the same vein, Osbaldiston & Schott (2012), did a meta-analysis on the different types of pro-environmental behaviours which can be categorized under four HR practices: recruitment, training, compensation & rewards and performance management. Also, these behaviours can be regarded as used by organizations to attain environmental sustainability. These behaviours include recycling behaviour reviews, and energy consumption reviews Staples, Webster, & Lv (2020), environmental sustainability

commitment, demonstration and goal-setting strategies, information on how to take care of the environment, positive motivation for some exhibited behaviours, and subtle coercion, personal insights on environmental damage, feelings of remorse, and intrinsic satisfaction. These types of environmental behaviour or interventions are regarded as green employees' behaviour.

### **2.5.2 Green employees' behaviour**

Harris & Helen (2012) posited that to achieve a sustainable environment, behavioural change has to be present, in which all members of an organization are required to exhibit a positive behaviour change. Green employees' behaviour is environmental sustainability behaviours expected from employees of organizations. These types of behaviours are behaviours that uphold the ethos of safeguarding the environment. Green employees' behaviours have been defined by Ones & Dilchert (2012a), as any measurable contributory behaviour that adds to the environmental goal of the organization. This implies that green behaviours exhibited by the employees are what makes up an organization's environmental reputation or culture (Ones & Dilchert, 2012b; Andersson, Jackson & Russell, 2013). Green behaviours have been categorized into voluntary green behaviours or required green behaviours (Norton *et al.*, 2015).

Voluntary green behaviours are behaviours that individuals willingly engage in, that upholds the ethics of environmental sustainability. They are also referred to organization citizenship behaviour (OCBE) (Rae, Sands, & Gadenne, 2015).

While required green behaviours (tasked behaviours) are specific green behaviours that employees of individuals engage in that contributes to core organization and environmental goals of the organization, these required behaviours can be measured and evaluated for task performance (Schmit, Feley, Esen, Schramm & Tomassetti, 2012; Norton, Zacher & Ashkanasy, 2015). The required green behaviours are specified by organizations that attempt to increase their environmental participation or environmental capacity performance. This is done by introducing green jobs and tasks. The green behaviours are aligned to the job of employees of the organization. These types of green behaviour include adherence to the organizational environmental policies, the adoption of responsible alternative methods of operations, production of sustainable alternative processes. The behaviours will contribute to the bottom line of the organizations.

Alternatively, the voluntary green behaviours are the behaviours employees engage in that exceeds the organization's expectations and are not remunerated. This includes prioritization of environmental interests, going the extra mile, initiating programs centred on the

environment, lobbying and activism and encouraging others (Bish & Kabanoff, 2014; Norton et al., 2015).

Moreover, Opatha & Arulrajah (2014), surmised in their article that there are about three dimensions in which employees can exhibit their green behaviours: the first of which is green organizational green behaviour; this refers to the extent employees exhibit positive actions aimed at helping the firm achieve environmental sustainability goals. These positive behaviours are not categorized as required from the organization, but voluntary actions from the employees' themselves (Opatha & Arulrajah, 2014).

These kinds of behaviours include:

- Preference for natural water to refrigerated water (this will reduce electricity consumption)
- Minimizing paper usage by printing on both sides of paper, when writing or printing (reduce consumption of electricity and saving trees)
- Opting to join carpooling services, or walking, or train or bicycle services rather than using one's own car (saving fuel consumption & air pollution)
- Switching off computers completely rather than hibernating or logging of (reducing electricity & air pollution)
- Preference for natural light or energy saving bulbs when working (reduces energy consumption)
- Having in place plants in the workspaces to absorb pollution
- Buying organic foods for office parties
- Use of reusable items like jugs, cans, bottles, etc. rather than throwing them away.
- Reporting to the appropriate authorities for any possible harm to the environment.

Furthermore, the second dimension of employee green behaviours (EGB), by Opatha & Arulrajah (2014), is described as 'green interpersonal citizenship behaviour', this is where an employee decides to assist a fellow employee perform positive green actions. Again, this is not directed by their firm, it is all voluntary work done out of willing personal relationship. These types of actions include, stimulating others to be green, posing responses to questions on green issues asked by fellow employees, and tacitly passing on the green knowledge to others.

The third dimension is referred to as the 'green official behaviour'. This simply means as the name implies, the extent of engagement of the employee as directed by the organization. This is the official duties assigned by the supervisors or managers of the employee and not a voluntary task. The duties will specify the procedures to be followed by the employee to reduce wastage or remove wastes (Opatha and Arulrajah, 2014).

In summary, employees' green behaviours are wide ranging, it cuts across all behaviours that employees of organizations engage in the workplace, which generally tends to conserve or safeguards the environment. The behaviours could either be required by the management or voluntary. It is the duty of management (HR) to identify all these behaviours and incorporate it in the organization's policies to achieve their environmental goals and objectives. After incorporating it in their policies, measures and resources should be put in place for its successful implementation.

First, we described how HR functions have evolved over time from mere administrative tasks to strategic functions that requires careful planning with adequate implementation of roles and function for profitability of the firm, to optional projects regarded as corporate social responsibilities CSR and now HRM has an additional role of environmental management or environmental sustainability commonly referred to as Green HRM.

Several organizations now understand the benefit of adopting green HRM policies and processes. Previous research studies have confirmed that adoption of GHRM methods and processes could be problematic if not properly implemented. Green goals must be set; the goals must align with organizational goals for it to be successful. The employees must engage in green behaviours for proper and successful implementation of their green policies. Goal and target setting with commensurate rewards will likely influence employees successfully (Unsworth, Dmitrieva & Adriasola, 2013). Recent studies that focused on GHRM influence on employee green behaviours are discussed in the following section.

### **2.5.3 Influence of GHRM practices on employee's green behaviour (EGB)**

Several organizations now understand the benefit of adopting green HRM policies and processes. Previous research studies have confirmed that adoption of GHRM methods and processes could be problematic if not properly implemented. Green goals must be set; the goals must align with organizational goals for it to be successful. The employees must engage in green behaviours for proper and successful implementation of their green policies. Goal and target setting with commensurate rewards will likely influence employees successfully

(Unsworth, Dmitrieva & Adriasola, 2013). Recent studies that focused on GHRM influence on employee green behaviours are discussed in the following section.

Temminck, Mearns & Fruhen (2015), a UK study looked at how to motivate employees towards encouraging sustainable behaviours. The study surveyed 547 employees from the two public institutions (environmental and educational institute) in the UK. The result found that, employees who had environmental concern will usually engage in self-reported OCBE related behaviours. The study also revealed that employee's perception of an organizations support for environmental efforts were positive and had impact on their engagement in voluntary behaviours.

In the same vein, another UK study done by Pinzone *et al.* (2016), investigated the role GHRM practices play in facilitating employees' collective engagement in protecting the environment by engaging in OCBE. The data sample was administered on hospital sustainability managers at the National health service (NHS). 82 questionnaires were returned. The study found that green competence building, green performance management and green employee involvement positively influenced collective OCBE. The study also found that collective affective commitment to environmental management change positively affects the level at which employee perform collective OCBEs.

Furthermore, Dumont *et al.* (2016), investigated how GHRM influenced tasked or OCBE employee green behaviours. The sampled data was collected from a Chinese subsidiary of an Australian multinational enterprises, using both quantitative and qualitative methods. A total of 390 questionnaires and FGDs was administered. The results found that GHRM affects significantly both employee tasked and voluntary green behaviours, however this occurs through a social and psychological processes (i.e., individual green values & psychological climate) at the workplace.

In a similar mixed-methods study, Pham *et al.*, (2019) study looked at greening the hospitality industry, and how GHRM practices influence OCBE in hotels. The study, a survey of 203 employees and 8 interviews participants found, that there was (i) direct effect of GHRM on OCBE, (ii) the interaction between GT, GPM and employee involvement enhances employee's voluntary green behaviour, (iii) that green training is seen as a key practice to boost voluntary green behaviours at the workplace.

While still in Asia, another study looking at the hotel industry in Thailand by Kim, Kim, Choi & Phetvaroom (2019), the study administered questionnaires on 276 employees across 4 hotels

in Thailand. The study confirmed that, GHRM enhances employees' organizational commitment, their environmental behaviours and hotels environmental performance.

However, the study by Fawehinmi, Yusliza, Mohamad, Faezah & Mohammad, (2020), which also looked at the impact of GHRM on employee green behaviours through mediation of environmental knowledge of academics in public research universities in Malaysia. The study administered 425 questionnaires, the results revealed a contradiction, in that GHRM has no significant or direct relationship with employee green behaviours, unless with a mediating variable. Furthermore, the findings showed that environmental knowledge of employees is impacted by GHRM practices.

Moreover, the study by Mohammad, Bibi, Karim & Durrani (2019), the study investigated the impact of green passion on GHRM and OCBE. The study, a survey of 210 top and mid-level managers of FMCG firms across Pakistan. The results revealed that GHRM influences green passion and OCBE positively. It also added that green passion is also significant as it mediates the relationship between GHRM and OCBE.

Similarly, Chaudhary (2019) examined the status of GHRM practices implementation in the Indian automobile industry. This was aimed at understanding how GHRM influences both tasked and voluntary green behaviours. A sample of 91 employees from various hierarchies in the organization were administered questionnaires. The findings from the study showed a low-level implementation across the organizations selected for research. Even though, all the five GHRM practices were found to be positively significant to influence the tasked and voluntary employees' behaviour, only GT and green employee involvement were highly significant.

Lastly, Masri & Jaaron (2017), focused on the empirical assessment and impact of GHRM practices in manufacturing organizations within the Palestinian context. The study employed a mixed-methods approach, 90 survey questionnaires and 17 interviews were administered and conducted in gathering data. The results revealed that total implementation of GHRM practices is at a moderate level, but showed it was a positively significant relationship between 6 GHRM practices and environmental performance. The results showed that the most influential was GR, where the least influential was GT. The Palestinian context was different in terms of training because training is perceived as having financial constraints. Manufacturers use economically viable practices than engaging in GT and management of organizational culture, this may also affect the outcomes on green behaviours.

The influence of GHRM practices on employee green behaviours is widely acclaimed across several contexts such as the UK, China, India, Pakistan, Malaysia, Thailand and even Palestinian. The influence on green employees tasked & voluntary behaviours result is widely acknowledged with the studies of several GHRM scholars (Saeed Afsar, Hafeez, Khan, Tahir & Afridi, 2018; Dumont *et al.*, 2016; Zhang *et al.*, 2019; Pinzone *et al.*, 2016; & Mohammad *et al.*, 2019). The few dissenting studies to the result remain (Kim *et al.*, 2019 & Fawehinmi *et al.*, 2020). The dissent itself was not absolute, as the influence can be restored with some mediating variables such as environmental knowledge (Fawehinmi *et al.*, 2020) and environmental policy (Kim *et al.*, 2019).

The several reviewed studies showed some similarities & differences in terms of concept and context. Conceptually, GHRM practices and its influence on employee green behaviour or performance has been widely debated. Some studies focused on OCBE, some on tasked behaviours, while many examined both type of behaviours. Some studies employed the quantitative approach, some qualitative approach while few used both quantitative and qualitative approach. The major conceptual gap is their level and rate of implementation, some of the studies were done with a mediating variable. In some studies, GR, GPM, GR&C, GT were considered while leaving out management support, while in some instance; employee involvement replaced other HRM practices. The current study will therefore be right to focus on the implementation and promotion of GHRM practices, as well as developing a best practice model for GHRM operations in a municipality.

Contextually, the influence of GHRM practice and employee green behaviours have been widely done in Western Europe, South East-Asia, and Middle East Asia. The visible continent not captured in the GHRM studies map is Africa. Similarly, GHRM studies have been done in different organizations and climes, these includes; the manufacturing sector (Masri & Jaaron, 2017), Agricultural sector (Zhang *et al.*, 2019) tourism section (Kim *et al.*, 2019; Pham *et al.*, 2019), automobile sector (Chaudhary, 2019), health sector (Pinzone *et al.*, 2016), financial services sector (Zhang *et al.*, 2019), academic sector (Fawehinmi *et al.*, 2020; Mtembu, 2017) but none had been on a local government institution such as the municipality. Therefore, this study will add to the scanty GHRM studies from Africa and fill the gap of focusing on a local government institution (municipality).

## **2.6 GREEN HUMAN RESOURCE MANAGEMENT AT ETHEKWINI MUNICIPALITY**

The South African nation is faced with a debilitating climate change challenge, as the country is in one of the most vulnerable regions of the world when it comes to projections of climate change (Rogerson, 2016). The impact on municipalities will also be bad, due to inadequate capacity and funding constraints (Rogerson, 2016). Still on impact, the tourism industry and the local economic development of municipalities were in dire straits. That is why there were concerted efforts from all angles to help minimize or reduce the impact, such efforts include: capacity building workshops, local government partnerships with private organizations, and policy legislation instruments to deal with the issues (Rogerson, 2016). Some of the strategies also include: EBA- ecosystem-based adaptation, community ecosystem based and MCPP- municipal climate protection program launched in 2006 at eThekweni municipal (Roberts, 2010).

These strategies were necessitated by the several environmental challenges and concerns being faced within the Durban communities. The challenge ranges from air pollution and biodiversity challenges - Durban city is in a global diversity hotspot that is impacted negatively by steady urban growth. Other concerns were the manufacturing companies in Durban had caused a significant environmental challenge for the local communities and a negative impact of rapid development on riverine coastal ecosystems (Roberts, 2010). Therefore, these environmental concerns have forced eThekweni municipality and other private institutions to seek for other ways and interventions to become environmentally sustainable.

Even though, there were several studies such as, (Simon, 2012; Friedrich & Trois, 2016; Lervik & Sutherland, 2017; Mokwena, 2009; Naidoo, 2013; Roberts, 2010; Roberts & O' Donoghue, 2013) that was aimed at mainstreaming environmental management initiatives, none had focused on pro-environmental behavioural adoption (the focus of this study). To attain increased environmental awareness among employees at eThekweni municipality, there is need to imbibe a green organizational culture. Adoption of green organizational culture can be well managed by the HR department, environmental management by the HR department is referred to as green human resource management (GHRM). GHRM involves integrating human resource activities and practices with environmental sustainability ethos (Mandip, 2012; Opatha, 2014).

GHRM had increased prominence around the nineties (90s) and the year two-thousands (2000) by these scholars (Zoogah, 2011; Hahn *et al.*, 2015; Jackson *et al.*, 2014). It emphasized the engagement of employees and employers of organizations in helping to reduce environmental degradation. In other words, managing employee's workplace behaviour towards a pro-environmental one (Wehrmeyer, 2017). From then on, there were substantial increases in GHRM research studies that explored and investigated different aspects of the GHRM field, such scholarship studies includes: Ahmad, (2015), who investigated GHRM policies and practices, Prasad (2013), looked at sustainable growth through GHRM, Jabbour (2011), explored organizational cultures and GHRM, and Zibarras, Judson & Barnes (2012), explored environmental behaviour in the workplace, and Mtembu (2017), who looked at achieving environmental sustainability in organizations, a case of academic higher institutions.

### **2.6.1 Policy frameworks guiding environmental management/climate change in South Africa at the municipal level**

There are several policies or frameworks set up to guide the implementation of environmental management or climate change across South Africa. Some of these policy documents include:

- Signatory to the Kyoto protocol,
- Trilateral agreement with Brazil and India: with a commitment to combating climate change and advancing the goal of sustainable development in the countries,
- The Republic of South Africa constitution (Act 108 of 1996) provides an overall legal framework for government responses to the challenges of climate change and related environmental problems. The promotion and protection of the country's natural environment and the rights of South African citizens to access and enjoy a healthy natural environment is one of the key provisions contained in the Bill of Rights section of the country's Constitution. For instance, Section 24 of the Bill of Rights contains the following environmental rights:
  - To an environment that is not harmful to their health or wellbeing; and
  - To have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that:
  - Prevent pollution and ecological degradation, promote conservation, and secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development.

South Africa also has a white paper, which tends to promote renewable and clean energy development in 2002. The white paper is aimed at redirecting the country's portfolio (Mukonza

& Mukonza, 2014) from relying on coal as a source of energy to renewable energy sources. Stakeholders have continued to argue that government and regulatory authorities are insufficient and efficient enough to deter violators or to ensure compliance.

### **2.6.2 Policy & structures available at the local government level (eThekweni municipality)**

These are the policy statements from the local government that guides municipal authorities in aligning their policies with what is stated in the IDP. “Implement environmental policies, plans, and programmes of the national and provincial government, ensure proper alignment with the Integrated Development Plans (IDPs) as well as the provincial implementation plans. Also, they are to ensure that IDPs compliance with the national environmental management act of (1998)” (Mukonza & Mukonza, 2014, p. 12).

### **2.6.3 Environmental Sustainability management at eThekweni Municipality**

eThekweni municipality has the largest city and port by the east coast of Africa. The city covers an area of 2,300 square kilometres, with a population of over 3.5 million people (eThekweni municipality IDP, 2014). The local government structure responsible for managing the city is known as eThekweni Municipality, and this municipality has become a leader in the field of local-level environmental management. As far back as 2004, eThekweni municipality was noted for her efforts in climate protection and pro-environmental governance frameworks on climate change (Taylor, Cartwright, & Sutherland, 2013). Her environmental management efforts are championed by a full-fledged department referred to as the Environmental planning and climate protection department (EPCPD) (Dodman, Bicknell, & Satterthwaite, 2012). They oversee and coordinate all climate governing activities of the municipality. The department already boasts of several environmental projects. Such projects include biodiversity conservation projects like the; Bufferlsdraai community reforestation projects, the Giba-Gorge Environmental Precinct and the Roosfontein nature reserve. Other projects include the community adaptation projects, green roof projects, extension of expanded public works program into the working for ecosystems program and the working on fire program. The program employs people to remove alien plants and manage fires (Lervik & Sutherland, 2017).

EThekweni municipality already had structures, policies and programs in place that is focused on making the environment green. Durban solid waste (DSW) helps manage their wastes, and

they presently operate about three landfill sites, 23 recycling centres, six transfer loading stations. Two out of the three landfill sites have facilities that convert and sends its electricity gas plants for energy supplies (Durban Solid waste, 2012).

Moreover, there are several other environmental studies or research / practical interventions that may have been commissioned, to look at climate change impact or putting in place policies that will make eThekwini greener or environmentally compliant. The study by Friedrich and Trois (2015), examined the projection of eThekwini municipality's greenhouse gas (GHG) emissions. The study based its calculations on country-specific emission factors such as the several ways (processes) they manage their wastes; either through upstream, downstream, or operational. The waste management processes were done through; transported, landfilled, recycled, composted or anaerobically digested (Friedrich & Trois, 2015).

Another study also made a comparison of the several environmental or climate preservation interventions between the 'city of Johannesburg' and eThekwini municipality. Johannesburg's reat Vaya bus rapid transit system uses a fleet that uses low-sulphur diesel engines that reduces GHG emissions by at least 1.6m tons of CO<sub>2</sub> (City of Johannesburg, 2010b). These also include rehabilitation of degraded ecosystems, such as seasonal & coastal wetlands, waterways and coastal dunes, public space 'parks', plus tree and shrub plantings for shade and carbon sequestration (Ernstson, Van der Leeuw & Redman, 2010). The project is also similar to the eThekwini municipality 's Durban metropolitan open space system (D'MOSS): this comprises of a protected 74,000 ha of networked land & water. The 'EBA' a green infrastructure is aimed at maintaining its environmental ecosystem in place. This is done through carbon sequestration, water quality maintenance, flooding, and erosion control (Carmin, Anguelovski & Roberts, 2012; Roberts, Boon & Deidrichs, 2012).

#### **2.6.3.1. Recycling at eThekwini municipality**

Recycling waste at eThekwini started with paper and plastics usually dropped by the kerbside on major highways in 2007 by the DSW, it has since grown and extended to other types of industrial and household wastes, now collects general waste materials (Friedrich & Trois, 2015). Recycling at eThekwini is done in three ways; this includes kerbside collection, buyback centres and drop off centres. There is a specially designed drop off centres which serve as refuse garden drop off sites. These centres receive recyclable materials cited across the municipality. The buyback centres are incentive-based, so they are in low-income areas for income generation. There are also chain networks that buy the recyclable materials from

collectors, who sells them to transport owners for onward selling to DSW. All waste materials collected are sent to a central and private material recovery centre where separation is done manually and sold. Sometimes garden waste is also generated, composed, and used for landfilling (Friedrich & Trois, 2015).

In summary, the eThekwini municipality already has several structures in place to tackle and prevent the impact of climate change. All their efforts seem to be focused on preserving the environment physically and sustainably while neglecting an attitudinal change in behaviour. GHRM can help bring about this attitudinal change at the local government level. There are some private organizations that are making efforts to become green, therefore public organizations such as eThekwini municipality could get involved and successfully make their employees adopt a green culture. This will encourage a green behaviour among people, it will also boost eThekwini's image brand, it may also improve the overall performance in service delivery to the communities, and lastly it will improve the socio-economic status citizens of eThekwini municipality.

## **2.7. THEORETICAL FRAMEWORK**

This section describes the theories underpinning the study, which is to develop a best-practice green workplace behaviour model for employees of eThekwini municipality, Durban South Africa. The leading theory underpinning this study is the AMO theory by Applebaum, (2015). The proposed conceptual framework was also presented in the below section.

### **2.7.1. AMO Theory**

The AMO theory stands for ability-motivation opportunity; the theory proponents were (Applebaum, 2015). The theory is usually applied to explain an organizations performance using HRM practices. It assumes that 1) employees have the required abilities and skills to perform and do their jobs effectively, 2) employees are motivated to put extra effort into performing their tasks, 3) employee are provided with an opportunity to use their skills and are encouraged to express themselves. It also assumes that the HR practices partake in developing employees' behaviour or culture in the organization (Boxall & Purcell, 2011). Primarily, it is believed that employees' performance improves when they have the capacity, when they are adequately motivated with the right incentives and if the organization gives them the right tools and work environment to work in (Boselie, 2010; Boxall & Purcell, 2011). Boxall & Purcell (2011) also argues that neither of these factors exists in exclusivity. This means that neither

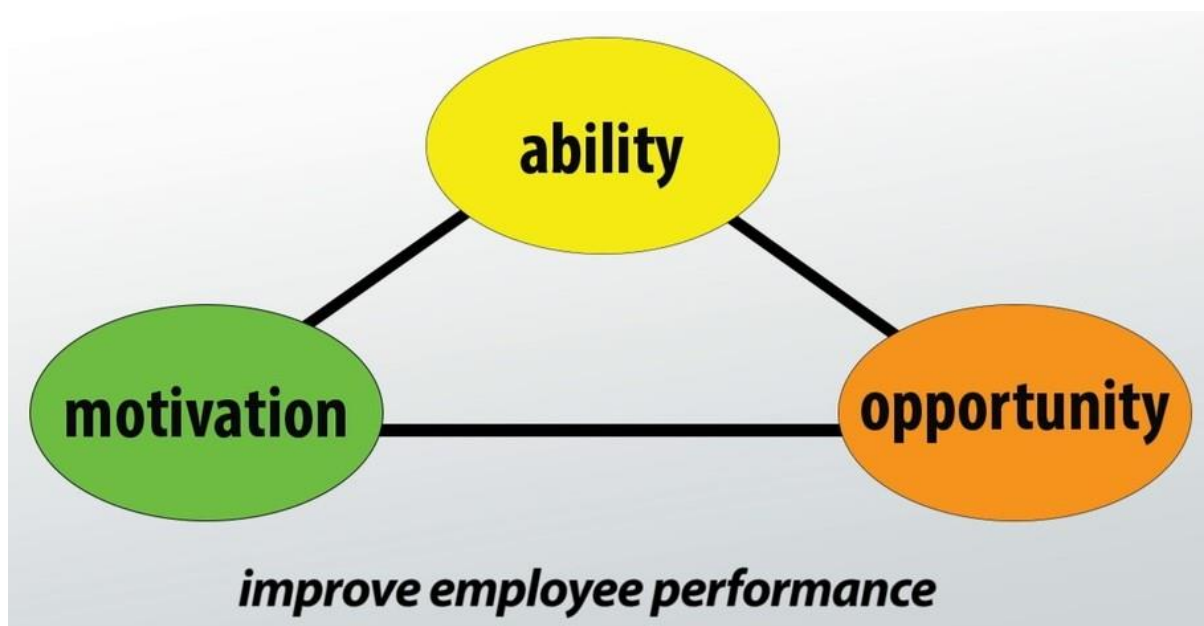
ability, nor motivation or opportunity can single-handedly influence employee behaviour performance, but with at least two or more of the factors (Witherspoon, Bergner, Cockrell, & Stone, 2013).

The theory has evolved over the years, scholars have argued and proved that AMO not only influences organizational HRM practices but also influences employees' subjective perceptions of the HR practices (Cushen, Thompson, & Employment, 2012; Boxall & Purcell, 2011; Ehrnrroth & Bjorkman, 2012). This perspective is said to be more apparent when explained through a managerial lens (Bos-Nehles, Van-Riemsdijk & Kees Looise, 2013). Therefore, this view suggests that HRM practices alone do not guarantee effective performance but acknowledges the HR managers capacities to implement the practices (Ozcelik & Uyargil, 2015).

There are several GHRM studies have considered the HRM practices as a joint strategy that is used to work together to influence employees' behaviours thereby improving the organization's environmental performance (Bos-Nehles *et al.*, 2013; Jiang *et al.*, 2012; Renwick *et al.*, 2013 Mohtar & Rajiani, 2016; Jia, Liu, Chin & Hu, 2018; Pinzone *et al.*, 2019). In terms of application, AMO has been widely accepted model used to explain performance, but only a handful had tested the model empirically (Marin-Garcia & Tomas, 2016; Keller, Cafferkey & Townsend, 2019). This limitation has been attributed to the comprehensive test mainly through the qualitative methodology, which tests global variables only (Currie, Burgess, & Hayton, 2015).

The AMO theory is still lacking a valid agreement between the psychological AMO model and the HRM sphere of AMO model. The confusion stems from the fact that there is no adequate explanation on what makes up the individual traits that constitute the (A) ability and translates to improved performance (Keller *et al.*, 2019). The confusion was also transferred to the inconsistent categorization in the use of variables among several scholars (Keller *et al.*, 2019). Several different authors have used the same variables under different dimensions. For instance, Lertxundi & Landeta (2011) and Sarikwal & Gupta, (2013) had used information sharing under the motivation dimension, this same variable was also used several times by (Bello-Pintado, 2015; Tian, Cordery & Gamble, 2016), under the opportunity dimension. Besides, Innocenti, Pilati & Peluso, (2011), also used the same variable under the ability dimension.

In contrast to the limitation, there are also inherent benefits to the AMO model, Bos-Nehles *et al.* (2013) and Kellner *et al.* (2016), was able to prove that context plays an important role as far as the AMO theory is concerned. Bos-Nehles *et al.* (2013) study proved that (A) ability has a direct influence on employee performance, but M & O motivation and opportunity do not have a direct effect. The result is also in congruence with Keller *et al.*, (2016) and McDermott, Conway, Cafferkey, Bosak & Flood, (2019) study, that alluded that all performance is usually because of contextual dynamics.



**Figure 2.4. AMO theory**

Source: Applebaum *et al.* (2015)

- **Ability**

Ability is about having the required knowledge skill and abilities (Fu, Flood, Bosak, Morris & O'Regan, 2013). It helps to increase an employee's capacity to impact the other components. Examples of these practices include recruitment & selection practices and formal training (Kroon, Van De Voorde & Timmers, 2013; Loosemore & Lim, 2017; Raidén, Loosemore, King, & Gorse, 2018).

- **Motivation**

Motivation refers to altering employees' desire to work assiduously or perform. This can be achieved by influencing the internal and external employee motivation. Examples of motivation include reward & compensation and performance management (Munteanu, 2014; Raiden *et al.*, 2018).

- **Opportunity**

Opportunity refers to the way the work environment and structures help the employee to achieve the organizational goals. The basis for this opportunity variable is the job design theories (Kroon *et al.*, 2013) and empowerment literature (Kroon *et al.*, 2013). The opportunity factor also considers the individual character along with the environment. Examples of opportunity include managerial support, organizational culture, policies, green goals.

- **Improved employee performance**

Improvement in the performance of employees is the result of the combination of the three dimensions (ability, motivation and opportunity), leading to improved performance of employees. The AMO theory allows several HRM practices to be bundled and categorized together into three dimensions of performance; the relationship of these dimensions determines the performance output in the organization. It is also used to explain the behavioural process (Boxall & Purcell, 2011).

### **2.7.2. GHRM & AMO theory**

The three dimensions of AMO, when merged with EM, is now termed as green- ability, green-motivation, and green opportunity (AMO) translates to green employee behaviour (environmental performance) The proposed conceptual framework was adapted from Applebaum et al. (2000) and combined with researcher's own (Own, 2020).

- **Green ability (GA)**

This refers to HR practices that improve an employees' ability in the organization. GA can be done through GR and GT. GR involves organizations engaging in green activities. That is, online recruitment processes, online on-boarding, employing workers that have green values and green projection of the organizational values and projects. While on the employee side, it is all about identifying and opting to join environmentally friendly organizations. GT involves training employees on how to safeguard and engage in environmentally sustainable tasks in the course of the job duties. The combination of GR and GT GHRM practices influences green employee behaviours (Own, 2020).

- **Green motivation (GM)**

This refers to HR practices that attempt to motivate employees to engage in green activities and behaviours that safeguard the environment. Green motivation could be in the form of two green HRM practices, that is GR&C and GPM. GR&C refers to rewarding both extrinsic and intrinsically any behaviour by the employee of the organization engages in. GM may be through monetary and non-monetary ways. GPM is another GHRM practice under the green motivation dimension that deals with evaluating all green performances using green performance indicators & green appraisals and rewarding them based on those indicators. Employing GPM introduces objectivity; this motivates the employee to engage in green behaviours in the organization (Own, 2020).

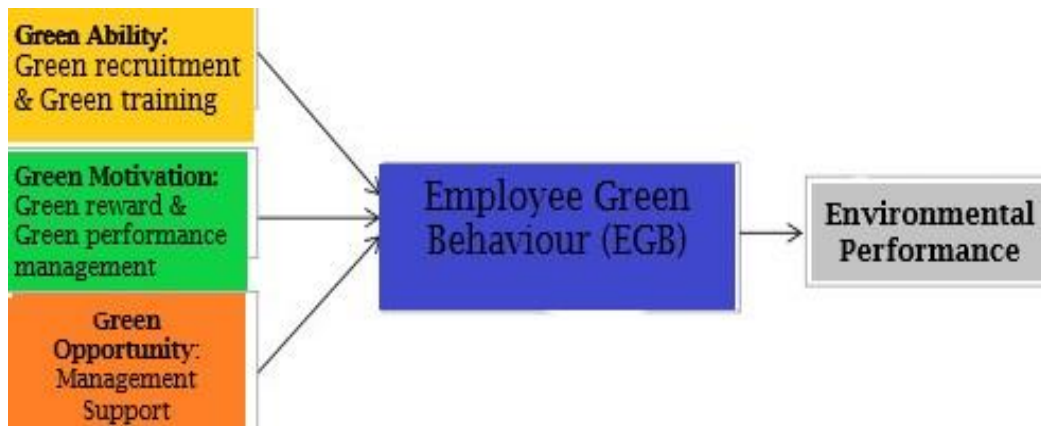
- **Green opportunity**

This involves putting in place green goals, green structures, a green culture environment that works within green legislations or regulations. The GHRM practice responsible for this is green management support. An organization that has in place all components of the green opportunity dimension will achieve environmental behaviour (Own, 2020).

- **Improved Environmental performance (IEP)**

IEP refers to the ultimate greening goal. All implemented green practices (GR, GT, GR&C, GPM, and MS) influences employees to engage in green behaviour in the organization. In turn, these green behaviours capitulate into environmental performance for the organization. All green activities and behaviours at the organization are geared towards attaining environmental sustainability goals (Own, 2020).

This current study addresses the above weaknesses by testing the AMO theory empirically using both quantitative and qualitative methods. Besides, this study will advance the benefits of the HRM-AMO model, by clarifying the GHRM variables, an attempt at standardization of GHRM practices. Moreover, this study will also simultaneously correct the conceptual confusion associated with variables and the categorization under different AMO dimensions. The IEP will be achieved by combining each green variable, and this was done by adding a green context to the HR practices and focus on the result, which is employee green behaviour and environmental performance. Lastly, this current study will also propose a best practice GHRM - AMO conceptual framework.



**Figure 2.5. Proposed conceptual framework.**

**Source: Own:** (Ajadi, 2020).

The table summarises all the HR processes and their involvement in green HRM practices.

Table 2.5 Summary of some five HR roles and processes involved in GHRM

Source: Adapted from Renwick, Redman & Maguire (2008, p.40).

<b>GREEN RECRUITMENT</b>	<b>GREEN PERFORMANCE MANAGEMENT</b>	<b>GREEN TRAINING</b>	<b>GREEN REWARDS &amp; COMPENSATION</b>	<b>MANAGEMENT SUPPORT</b>
<p>Green job descriptions for employees (and green goals included in managerial job descriptions)</p> <ul style="list-style-type: none"> <li>- Graduate perceptions of Green practices (applicants use green criteria)</li> <li>- Green job candidates</li> <li>- Recruitment of employees who are 'Green aware' becomes part of the interview schedule</li> <li>- Green employer branding (green employer of choice)</li> <li>- Green aspects introduced to the induction process (familiarization)</li> <li>- Becoming a green employer may produce other HR benefits, like increased staff motivation and/or engagement, reductions in labor turnover, and increasing workforce health</li> <li>- Online process of recruitment should be done online from adverts to final selection to the job</li> </ul>	<p>Green performance indicators into the performance management system, and appraisals (PMA)</p> <ul style="list-style-type: none"> <li>- Communication of Green schemes to all levels of staff through PMA scheme, establishing a firm-wide dialogue on green matters</li> <li>- Managers are set green targets, goals and responsibilities</li> <li>- Roles of managers in achieving Green outcomes included in appraisals</li> <li>- Writing &amp; integrating green criteria in appraisals</li> <li>- Appraisals assess number of green incidents, use of environment responsibly, &amp; successful communication of environmental policy</li> <li>- Penalties for non-compliance on targets in environmental management (EM)</li> </ul>	<p>Introduce training on EM, &amp; processes/material use</p> <ul style="list-style-type: none"> <li>- EM training needs analysis</li> <li>- Integrating training on instruction and generation of eco-values</li> <li>- Development of employee skills and competence building in EM</li> <li>- Socialization in Green values/management</li> <li>- Use of Green teams in EM</li> <li>- Train staff to produce a green analysis of workspace</li> <li>- Job rotation to train green managers of the future</li> <li>- Integrating training to increase staff knowledge</li> <li>- Training in EM aspects of safety, energy efficiency, waste management, and recycling</li> <li>- Safety representatives to give data on green courses</li> <li>- Establish development of Green personal skills</li> <li>- Re-training of staff losing jobs in relevant polluter industries</li> <li>- All organizational trainings should be done through e-learning mediums</li> </ul>	<p>Green pay/reward system</p> <ul style="list-style-type: none"> <li>- Tailor packages to reward green skills acquisition</li> <li>- Use of monetary-based EM rewards (bonuses, cash, premiums)</li> <li>- Use of non-monetary based EM rewards (sabbaticals, leave, gifts)</li> <li>- Use of recognition-based EM rewards (awards, dinners, publicity, external roles, daily praise)</li> <li>- Develop negative reinforcements in EM (criticism, warnings, suspensions for lapses)</li> <li>- Develop positive rewards in EM (feedback)</li> <li>- Establish PRP for all to gain green stewardship / citizenship (esp. seniors)</li> <li>- Link suggestion scheme to rewards system</li> <li>- Link participation in Green initiatives to promotion/career gains (managers advance through supporting staff in EM)</li> <li>- Use green tax breaks</li> <li>- Line have rewards to motivate employees in EM</li> </ul>	<p>Putting in place green/ environmental sustainability policy to guide and regulate all green initiatives</p> <ul style="list-style-type: none"> <li>-Support for all green initiatives</li> <li>- Ensure green awareness campaign is frequent and aggressive all year round.</li> <li>- Ensuring the greening policy is integrated with the HR recruitment process</li> <li>-Ensuring green policy is integrated with the performance management with a green appraisal for regular evaluation</li> <li>- Ensures green policy is integrated with the training function</li> <li>-Ensuring the green policy is integrated with HR reward system package</li> <li>-Put in place a feedback mechanism to ensure successful green implementation</li> <li>-Have a budget for green initiatives or projects.</li> </ul> <p>Being flexible.</p>

## **2.8 CHAPTER SUMMARY**

This chapter has reviewed existing literature on five different human resource practices: green recruitment, green training, green rewards & compensation, green performance management, and managerial support. These concepts were discussed at length, and the discussion also includes how they influenced green behaviour at the workplace. The concept of employee green behaviour works of literature was also reviewed to understand what green behaviours entail while stating the different types of green behaviours available. The review section also included a spotlight on the eThekweni municipality, its policy structures, and its green environmental practices they are currently engaged. The final review of the literature was a focus on the existing green HRM theory, models, and framework. This was done to explain the concept and reasons for some of the reasons for engaging in green behaviour. The conceptual framework was also included in this chapter.

The next chapter will focus on discussing the research processed adopted and employed in conducting this study.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The previous chapter focused on reviewing and identifying gaps in the literature with respects to GHRM as practised at eThekwini municipality. This chapter discusses the research methodology. A research methodology is used to gain deeper insights and understanding the scope of GHRM and its effectiveness in the study. The primary purpose of the research methodology chapter is to show why a particular research design was adopted and the theoretical justifications that underpin the selection of the methods adopted in the study, it also helps to understand the strengths and weaknesses of the selected research methods. This section beamed its light on the adopted data collection method, the selected sampling technique in sampling design and the reasons for its adoption, establishing the validity and reliability of the study, and the data analysis technique suited for the study. The research method for this study is, therefore aligned with the research objectives and questions. Therefore, the chapter presents a restatement of the research objectives.

### **3.2 Research objectives**

The main objective of this study is to develop a best-practice model on workplace green behaviour for employees of eThekwini municipality in South Africa. The specific objectives of the study are presented below:

1. To investigate the influence of green recruitment on employees' green behaviour
2. To ascertain the effects of green training and development intervention on employees' pro-environmental outcomes.
3. To ascertain the most effective type of reward system in place to enhance good pro-environmental behaviour for the organization.
4. To examine the influence of environmentally sustainable key performance areas on employees' green behaviour.
5. To investigate the relative influence of green behaviours and the above-listed GHRM practices on workplace green behaviour.
6. To examine the influence of managerial support on green workplace behaviour.

### **3.3 Research questions**

From the following objectives, the study raises the following questions:

1. How does green recruitment influence employees' green behaviour?
  
2. How do green training and development interventions influence employee pro-environmental outcomes?
  
3. Which is the most effective type of reward that can enhance good pro-environmental behaviour for the organization?
  
4. How does the environmentally sustainable key performance areas influence employees' green behaviour?
  
5. How do green HRM practices influence workplace green behaviours?
  
6. How does managerial-support influence employee workplace green behaviour?

### 3.4 Research philosophy

Research philosophies largely influence research, the different philosophies on offer guides on how research is undertaken. A research philosophy or worldview governs how research is done or carried out. It may be the experience of the researcher or the discipline that determines how research is carried out (Cresswell, 2014). For the natural and scientific enquiry, the object is the focus of study. The object is manipulated to fit into the situations, while in the Social and management research enquiry, a phenomenon or construct is used (Creswell, 2014). Worldviews or philosophies helps to develop knowledge-based on researchers' own experience. The table below shows the four worldviews available.

**Table 3.1 Philosophical worldviews that influence research studies**

Four Worldviews	
<b>Post-positivism</b>	<b>Constructivism</b>
<ul style="list-style-type: none"> <li>● Determination</li> <li>● Reductionism</li> <li>● Correlational</li> <li>● Normative</li> <li>● Theory verification</li> </ul>	<ul style="list-style-type: none"> <li>● Interpretivist</li> <li>● Understanding</li> <li>● Multiple participant meanings</li> <li>● Social and historical construction</li> <li>● Theory generation</li> </ul>
<b>Transformative</b>	<b>Pragmatism</b>

<ul style="list-style-type: none"> <li>● Political</li> <li>● Critical theory</li> <li>● Emancipatory</li> <li>● Change oriented</li> <li>● Interventionist</li> </ul>	<ul style="list-style-type: none"> <li>● Consequences of actions</li> <li>● Problem-centred</li> <li>● Pluralistic</li> <li>● Mixed models</li> <li>● Real-world practice-oriented</li> </ul>
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**Source: Creswell (2014, p. 36)**

The table above shows the worldviews and the research approaches that go with it.

- a) Post-positivism philosophy is related to a quantitative approach.
- b) The constructivist philosophy aligns with a qualitative approach.
- c) The transformative is tied to the lives and experiences of a different set of people.
- d) The fourth worldview pragmatism is related to real-world practice (Creswell, 2014).

### **3.4.1 Pragmatists Philosophy**

Pragmatism is of the view that ideas or concepts are worthy of their work are put into practice. Alvesson & Willmott (2012), stated that concepts and ideas are relevant only if they are put into action. Pragmatism is used for problem-solving and for prediction. They do not believe ideas should be left to describing or representing alone. They view that all ideas should be judged based on their practical uses. The focus of pragmatist researchers is finding the best ways to answer the research questions. They believe there are several ways to solve problems and undertake research. The pragmatist researchers always find the best method, even if it means to combine different methods in research (Saunders, Lewis & Thornhill, 2019; Creswell, 2014).

This study adopted the pragmatist philosophy as it aims to find solutions to the problem of environmental sustainability. The research wants to conduct an empirical study to develop a best practice model of green behaviour for employees at eThekweni municipality. The integration of both green behaviour initiatives with HR functions and practices at the municipality.

### **3.4.2 Pragmatist methods**

The pragmatist worldview was adopted for this study; hence, the study attempts to focus on green practices at the municipality. Green HRM practices involved are recruitment, reward and

compensation, training and development and performance management policies. Also, it involves how work is structured and its consideration of the green policy, their workflow at the municipality, and their environmental management philosophy. Besides, the researcher also collected data to back up employee’s perception of the green policy at the municipality, their reactions, whether they bought into it immediately it was initiated or not, the level of management support and if the support from management was robust and sustainable. To obtain the required information, the researcher used both questionnaire and interview schedule. That is, closed questionnaires and semi-structured interview questions were used to gather the necessary data for the study. The researcher also developed a conceptual framework from the data gathered in the study.

### 3.4.3 Pragmatist ontological views

The ontological standpoints of the researcher for this study align towards reality (Saunders et al., 2019). It, therefore, combines both objectivity and subjectivity. Objectivism in this sense means entities, things or elements existing outside of social actors. That things sometimes happen barring any outside external influence. For instance, objectivists will view organizational culture as something the organization possess, which can be manipulated or changed as required.

In contrast, subjectivism posits that objects, things or elements exist as a result of perceptions or is a consequence of actors in society. As individuals interact with one another, social actions are constantly being revised. For subjectivists, they see organizational culture as what the organization is (perceptions), being a consequence of continuous social enactment (Saunders et al., 2019).

This study adopted both the objective and subjective standpoint as it aims to take a snapshot at a certain point in time. The employee workplace green behaviour at eThekweni municipality, also found out why some of the green HR policies do not stand the test of time from participants themselves.

Table 3.2 below compares four research philosophies obtainable in management research. The comparison was between ontology, epistemology, axiology, and methods of data collection.

**Table 3.2. Comparison of the four philosophies with their ontology, epistemology, axiology & data collection methods.**

	Pragmatism	Positivism	Realism	Interpretivism
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<b>Ontology</b> –How researchers view reality	External, multiple views chosen to enable answering of research questions	External objective and independent of social actors	Is it objective? Exists independently of human thoughts and beliefs or knowledge of their existence (realist)	Socially constructed, subjective, may change multiple
<b>Epistemological view: what is acceptable knowledge</b>	Either or both observable phenomena & subjective meanings can provide acceptable knowledge depends on the research questions	Only observable issues can provide for credible data, facts, focus on causality & law-like generalizations, reducing phenomena to simple elements	Observable phenomena provide credible data, facts, and insufficient data means inaccuracies in sensations (direct realism). Focus on explaining within a context or contexts	Subjective meanings & social phenomena. Focus on the details of the situation, a reality behind these details, subjective meanings, motivation actions.
<b>Axiology: How researchers view the role of values</b>	Values play a significant role in interpreting results; the researcher adopting both objective and subjective points of view.	Research is undertaken in a value-free way, the researcher is independent of the data and maintains an objective stance	Research is value-laden; the researcher is biased by worldviews, cultural experiences, and upbringing. The views will impact on the research	Research is value bound, and the researcher is part of what is being researched, cannot be separated and so will be subjective
<b>Data collection methods</b>	Mixed/multiple method designs, quantitative & qualitative	Highly structured, large samples, measurement, quantitative, but qualitative options are also open.	Methods chosen must fit the subject matter, quantitative or qualitative	Small samples, in-depth investigations, qualitative

Source: (Saunders *et al.*, 2019, p. 140)

### **3.5. Nature of research design**

Research is different; this is dependent on the form of answers a researcher expects to answer the research questions and objectives (Saunders et al., 2019). The research rationale, research questions and objectives of a researcher usually lead to one of exploratory, descriptive or explanatory studies.

#### **3.5.1 Exploratory studies**

Exploratory studies, as the name implies, is used to open-up and gain new-insights in a topic of interest. It is meant to find out all about a new area of study, or an unknown study. There are different ways a researcher can conduct an exploratory study. These include literature reviewing, carrying out in-depth interviews from experts in certain areas of study, and focus group discussions. The exploratory nature of the interviews is most times unstructured and rigorous, as it places more value on the individual contributions from participants of the research in order to have more information about a study. The data most times reveal several patterns about the subject of interest, and subsequently developed into theory or hypothesis are formulated for further research to be conducted (Sekaran & Bougie, 2013). Exploratory researchers often employ a qualitative method for their study, and some quantitative researcher also makes use of this method.

#### **3.5.2 Descriptive studies**

Descriptive studies are undertaken to give a vivid description of events or give an accurate description of a variable. It is usually employed to describe the characteristics of an event, element, or a group. For instance, a class study takes the percentage of the number of males and females, different age brackets and gaps and the percentage number of seniors to junior students present in the class. “The goal is to give an accurate profile or to describe relevant aspects of the phenomena of interest from other perspectives” (Sekaran & Bougie, 2013, p. 122). Often, researchers combine it with either exploratory research or analytical research (Saunders et al., 2019). Descriptive studies have been known to be inadequate for research, and more conclusions need to be drawn from such studies. Hence, the need for combination with the other types of studies; descriptive-exploratory studies, descriptive-explanatory studies (Saunders *et al.*, 2019, Sekaran & Bougie, 2013). Depending on the purpose of the study, both quantitative and qualitative methods can adopt this study.

### **3.5.3 Explanatory Studies**

This type of study focuses on finding causal relationships in a study. The primary purpose is to study a phenomenon, situation, or a problem critically in order to find a relationship between the variables in the study (Saunders *et al.*, 2019). For this type of study, the data are subjected to different statistical tests such as correlation, multiple regression. That can be used to look for relationships between variables in a study (Saunders *et al.*, 2019). This type of study is often used in quantitative research, although, it can also be used in a qualitative study.

### **3.5.4 Descriptive-explanatory studies -adopted study for the research**

This researcher adopted the descriptive-explanatory studies for this study. This is because the researcher will first, give an accurate profile of the HR department of eThekwini municipality: this will include, the gender of the sampled employers, the number of employees at the HR department and see if green HR adoption rates vary among employees in the HR department or their educational qualifications, work experience and I.T. skills. The analytical study will, therefore, investigate causal relationships when green HR is implemented across the four HR identified HR roles and if it has any impact on employee's behaviour at eThekwini municipality.

## **3.6 Research Design**

The research design is the link that connects the data gathered to the conclusions drawn from the findings and aligns it with the research objectives of the study (Yin, 2014). That same year, Creswell (2014), also described the research design as a plan of action that helps a researcher to move from the philosophical assumptions of a study to a detailed data gathering and data analysis method. Also, Creswell (2014), added that the researcher would have decided on what to study basing his or her decisions within three choices of inquiry: qualitative, quantitative, and mixed methods. A much more straightforward, but holistic definition was given by Bryman, Bell & Harley (2019), where they described a research design as a 'procedural framework'.

Using the Creswell's (2014) and Saunders *et al.*, (2019) descriptions or approach on research designs, here they both categorized them under three main types of inquiry Quantitative, Qualitative and Mixed methods of inquiry:

**Table 3.3. Categorizations of the three main types of inquiry (quantitative, qualitative and mixed methods).**

<b>Quantitative</b>	<b>Qualitative</b>	<b>Mixed methods</b>
<b>Research strategies-</b> Experimental designs, non-experimental designs, such as surveys	<b>Research strategies-</b> Narrative research, phenomenology, grounded theory, ethnographies, case study	<b>Research strategies-</b> Convergent, Explanatory sequential, exploratory sequential, transformative, embedded, or multiphase mixed methods
<b>Research philosophy-</b> usually associated with <i>positivism</i> , in some cases some of the data may be done qualitatively and be partly an: interpretivism philosophy	<b>Research philosophy-</b> Associated with an <i>Interpretive philosophy</i> -usually used when there is need to make meaning out of a phenomenon and in-depth understanding. Can also be used within a realist and pragmatist philosophies.	<b>Research philosophy-</b> two philosophies often lead to mixed methods: <i>Realist philosophy</i> (critical realist): realists they believe that there is an external objective reality in the world. Furthermore, <i>Pragmatist philosophy</i> -they believe the nature of the research question, research context and research consequences determine the best choice of method to adopt.
<b>Research approach-</b> Usually, a deductive approach when data is to test the theory. Also, it could be associated with the inductive approach to develop a theory	<b>Research approach-</b> Usually start with an <i>inductive approach</i> to develop a rich theoretical perspective. Some may, however, start with a deductive approach to test an existing theory.	<b>Research approach-</b> Usually, a combination of both qualitative and quantitative method. A theoretical perspective may be used for direction and focus for the research or to limit the scope.
<b>Research Characteristics-</b> It is used mainly to examine relationships between variables, measured using figures and numbers, and analysed using a statistical technique. Uses probability sampling techniques	<b>Research Characteristics-</b> studies usually focus on participants, meanings, and relationships. No standard data collection process, this makes it both naturalistic and interactive, usually a non-probability sampling technique. Success is assessed based on building relationships, sensitivity, and gain access to cognitive data.	<b>Research Characteristics-</b> Researchers are adopting a combination of both (quantitative and qualitative method). Multimethod-requires more than one data collection method but using either a quantitative or qualitative method for data analysis. Mixed method-here, both methods are combined at different extents: simple, convergent, or complicated.

Source: (Creswell 2014, p. 12; Saunders *et al.*, 2019, p. 162-165)

Table 3.3. Above established that a researcher can, therefore, adopt any of the preferred research inquiry to achieve the best possible desired result for the study. All three definitions show that a research design is a sort of template guide on how research is done. The research designs are influenced by several philosophical views, these ranges from epistemology, ontology, axiological values, theory / practical considerations and methodologies (Bryman, 2011, p.24).

### **3.6.1 Quantitative research designs**

Quantitative research designs are usually synonymous with positivist worldviews. Positivist worldviews involve using natural science process in carrying out a study. The structure and data are usually ‘highly structured’ and ‘predetermined’. The two most used approaches under quantitative designs are survey research and experimental designs.

- **Survey inquiry:** The survey approach is a quantitative or numerical style. It usually shows trends, attitudes, or opinions of a study sample of a population. It uses either a questionnaire or a structured interview for data collection to generalize from a sample to the whole population (Creswell, 2014).
- **Experimental inquiry:** This type of research aims to know how a specific treatment of a phenomenon influences its outcome. This type of inquiry involves treating one group as a test subject, while the same treatment is withheld from the other group to know the outcome of the experiment. These experiments include actual experiments with random subjects and treatment conditions, quasi-experiments with non-randomized assignments (Creswell, 2014).

### **3.6.2 Qualitative research designs**

Qualitative research involves an interpretive philosophy: how one sees and expresses their views or experience on a particular phenomenon being studied. Several researchers, over the years, have tried to explain the different strategies that can be used under a qualitative research design. These strategies will be briefly discussed below,

- **Narrative inquiry:** This type of research design is collective in the humanities, where the focus of the researcher is the life-experience of individuals while asking a few to tell their life stories (Clandinin, 2016; Creswell, 2014). These stories narrated by participants are often retold chronologically and combined with the researcher’s own experience (Creswell, 2014).

- **Phenomenological inquiry:** This type of research inquiry requires the researcher describing the experiences of a participant regarding a lived experience about a phenomenon. The design requires conducting interviews and has a philosophical base (Creswell, 2014).
- **Grounded-theory inquiry:** This research design has a sociological background; it derives an abstract theory or process of action from participant's views (induction method). It requires different stages of data gathering, fine-tuning, and seeking for the relationships between the data and information (Corbin & Strauss, 2015; Creswell, 2014). It is used to develop theoretical explanations and social interactions processes in business and management studies.
- **Ethnography inquiry:** This type of inquiry was developed for the discipline of both sociology and anthropology. The researcher aims to understudy a culture, or way of life of people, particularly the languages, their behaviour patterns, and actions in their original setting over a particular period. Data collection in the type of inquiry involves observation and interviews.
- **Case-study inquiry:** This type of research inquiry is one of the most common among various fields. It involves evaluation or exploring a context deeply to understand and analyse it thoroughly. It is an activity and time, process or by different individuals. The mode of data collection for this study varies depending on the time and availability of participants (Yin, 2014; Creswell, 2014).

### 3.6.3 Mixed methods research designs

This type of research designs involves the combination of both quantitative and qualitative research designs. The mixed methods came about as a result of both qualitative and quantitative methods. Each method alone is limited, weak and biased. The limitation is what the mixed methods have come to address. There are several research designs but will only focus on explaining a few of the more prevalent ones.

- **Convergent parallel mixed methods:** In this type of mixed methods design, the researcher combines both methods to obtain a comprehensive analysis of the problem. Here the data collection is done at parallel times, while integration is done at the point of interpretation of the results. Any contradictions encountered in the findings are dealt with and explained further in the discussion.
- **Explanatory sequential mixed methods:** It has two-phase that follows one another sequentially, i.e. the quantitative method and the qualitative method. This method

entails the researcher collecting first the quantitative data and analysing the findings with results, then a more convincing explanation is done with qualitative research (data collection and analysis). This type of design is popular in disciplines with a strong quantitative orientation, hence starting with a quantitative method. The limitation for this type of research inquiry is the difficulty in knowing which part of the quantitative results to ‘horn-on’ and the different sample sizes to use for each phase of research.

- **Exploratory sequential mixed methods:** This is the opposite of the explanatory sequential methods. Here, the researcher begins with the qualitative research phase, i.e. collects data, analyses them to explore the views of participants; the quantitative phase then follows this. The qualitative phase is used to ascertain, build instruments, or specify variables to be used in the quantitative phase. The limitations of this design are deciding between the qualitative findings and the sample to use for both types.

#### **3.6.4 Appropriate research design for the study**

The research strategy adopted is the **convergent parallel mixed method**. This method is when both data (questionnaire data and interview data) are collected simultaneously. The motive was to get a comprehensive understanding after data analysis of the integration of the finding when data is interpreted. The researcher collected both questionnaire and interview data. The data includes all green HRM practices discussed in the study. The qualitative data is also analysed, and findings interpreted along with the quantitative findings. The results from the combined method will give a more in-depth result and findings. Such as determining which specific HR function has the most influences on employee green behaviour. The researcher adopted this research strategy because it will help to develop a substantive organizational best-practice model for eThekweni municipality in South Africa.

#### **3.6.5 Reasons for the adoption of the mixed-method research design**

According to Creswell (2014, p. 20), both quantitative and qualitative methods are inadequate by itself, because the researcher intends to generalize the findings to municipalities, as well as develop a best-practice model for green behaviours for the employees of the municipalities. This type of study involves collecting data from the HR department, and this was followed up with some interview sessions to gather employees’ perceptions from the green champions at the municipality. So, the collection of both closed-ended quantitative data and open-ended qualitative data is appropriate for this study.

### 3.7 Research Approach

The two primary research approaches available to use in a study include: deductive and inductive approach and they are primarily determined by the reasoning a researcher intends to adopt for the study. According to Saunders *et al.* (2019), there is also a third approach that is commonly used among researchers called “abduction”.

Tables shows the similarities and differences in the three-research approach

**Table 3.4.**

	Deduction	Induction	Abduction
Logic	In a deduction inference, when premises are correct, the conclusion must also be true	In inductive inference, known premises are used to generate untested conclusions	The abductive inference is used to generate testable conclusions
Generalizability	Generalizing from the general to specifics	Generalizing from the specifics to the general	Generalizing from the interactions between the specific and the general
Use of data	Data collection is used to evaluate propositions or hypothesis related to an existing theory	Data collection is used to explore a phenomenon, identify themes and patterns and create a conceptual framework	Data collection is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and test this through subsequent data collection and so forth
Theory	Theory falsification or verification	Theory generation and building	Theory generation or modification, incorporating existing theory where appropriate to build a new theory or modify the existing theory.

Source: Saunders *et al.*, (2019, p. 144)

### **3.7.1 Deductive approach**

This approach is from the scientific research sphere, therefore, from the positivist school. Blaikie (2010), sums up the deductive approach in these six sequential steps:

- Proposing a premise that can be tested or a set of propositions that can form a theory.
- Specifying the conditions for which the theory can be based.
- Examine and ponder on the argument, if it is logical when compared to existing theory and check if it adds to knowledge and continue.
- Test the hypothesis by collecting appropriate data to measure the variables and analyse further,
- After analysis check to see if the result is not consistent with the premise, if not, the hypothesis will be rejected, and theory is the false and the whole process starts again.
- If the results are found consistent with the hypothesis, the theory is correct and therefore corroborated.

The deductive reasoning aims to prove a cause-and-effect relationships between the variables. It usually allows for a structured methodology that can be replicated and reliable (Gill & Johnson, 2010). Characteristics of deductive reasoning include operationalizing of concepts for measurability and reductionism. Indicating issues can be reduced to the smallest elements and generalization which means inferences on the selected sample of study only (Saunders *et al.*, 2019).

### **3.7.2 Inductive approach**

This type of research approach is based on the interpretive school. While the deductive approach is initiated with a proposition and then the research moves to either accepting or rejecting based on the data gathered. The inductive approach is initiated with data collection and analysis. Then the researcher tries to make sense or try to find the logic or consistencies in the variables or phenomenon being studied. If found, then a conceptual theory or model is formed. The research design is not rigid or highly structured like the deductive approach. An inductive approach in a research study is concerned about the context in which a phenomenon takes place. This characteristic usually limits the number of samples taken when using inductive reasoning. Researchers in this school usually employs a qualitative research design while using multiple methods for data collection (Saunders *et al.*, 2019).

### **3.7.3 Abduction Approach**

The third approach is quite different from the previous two known approaches used by researchers. It is, in fact, the merging of the two approaches of induction and deduction approach. It starts by observation of a fact or phenomenon, followed by proposing a plausible theory on how and why the phenomenon happened. While the researcher has it at the back of the mind that other theories can explain the phenomenon better. Here issues can occur at any time of the research process (Ridder, 2017). The approach can be used by researchers to justify a study using both approaches. It can be used to show the results and the parts that need more analysis.

### **3.7.4 Appropriate research approach for the study**

This study adopted the **abduction approach** due to the nature of the study. First, the study needed to identify if there are practices of green behaviours among workplace employees or if the HR management department at the municipality has a green behaviour policy in place. Besides, the induction approach of this study builds on the responses from the interview responses in the research study. The participants' responses were analysed qualitatively and used to back up the explanation of employees on 'management support perceptions. This approach helps to take enough samples for research reliability and validity. Another reason for adopting this approach is the time frame for the study. The researcher has limited time and funding to undertake long research (Saunders *et al.*, 2019).

## **3.8 Horizons**

Horizons is the time frame within which a project is deemed to be carried out and completed (Saunders *et al.*, 2019). There are two primary time frames usually used by researchers: the cross-sectional and the longitudinal times.

### **3.8.1 Cross-sectional time frame**

Cross-sectional time frame refers to the actual time "a snapshot" when the data is collected at a certain point (Flick, 2011). This type of study is employed when a phenomenon is to be studied at a particular (snapshot) point in time. Researchers most times adopt this time frame mainly because of time constraints. Frequently researchers usually adopt the survey research strategy. However, some also use qualitative research strategies; quite a few case studies have employed cross-sectional time frames (Saunders *et al.*, 2019).

### **3.8.2 Longitudinal time frame**

Longitudinal time frame refers to when data collection is done in phases over time or repeated over an extended period. This type of study is done to observe change and development. This type of research is done when a phenomenon or research problem is to be studied over time. “Time” in this type of research is a variable, and it gives the researcher a measure of control over the variable (Almalki, 2016).

### **3.8.3 Appropriate timeframe adopted for the study**

The researcher adopted the cross-sectional time frame for the study; this is due to the nature of research advanced by (Creswell, 2014), which involves taking a snapshot of the research phenomenon. The researcher intends to examine the role of HRM in developing green workplace behaviour for eThekweni municipality in South Africa. So, there is a need to take a snapshot of the present green behaviours the employees engage in now.

### **3.9 Target population**

Saunders *et al.*, (2019, p.678), defines a population as “the complete set of cases or group of members”. The groups of people or things with a common characteristic that can be used for identification. Sekaran and Bougie (2013, p. 262), also defines it “as the entire group of people, events or things of interest that the researcher wishes to study”. Using this definition for the study, the target population refers to the entire group of “employees in the HR department of eThekweni municipality in Durban, South Africa”.

The targeted population are HR department employees of eThekweni municipality Durban, South Africa. eThekweni municipality was chosen because it is one of the few metropolitan municipalities in South Africa. As such, they generate many wastes and is among the highest emitters of GHG in South Africa. This study attempts to develop a “workplace green behaviour model for eThekweni municipality in Durban”. There are too few works of literature on GHRM studies that focus specifically on municipalities in the South African knowledge sphere. Therefore, this study will help to fill that gap.

### **3.10 Sample & Sampling**

Sample refers to a representative number of a larger population due to the inability to cover all respondents in a project (Bryman, 2012). The size and selection of samples most times determines the reliability of the findings in a study. A quantitative study requires a sizable number of samples to make it credible enough. In contrast, a qualitative study requires careful

consideration of the sample characteristics needed, and much smaller numbers of respondents are used (Saunders *et al.*, 2019). Also, some research questions and objectives help researchers to determine the type of sample or sampling techniques to use. While sampling is the process of selecting a subset from a population (Bhattacharjee, 2012). The type and nature of the study also determine the type of sample to adopt for a study. For this study, the nature of research, research questions and the research objectives determine the type of sample to focus choose. The nature of study "...place of HRM to develop a workplace green behaviour... for eThekwini municipality..." is to examine how the HR department at eThekwini municipal use HRM to develop green HRM in their organizations. The nature of the study determines the target population as well as the type of sample population to focus. The target sample of this study is HR employees at eThekwini municipality in South Africa. Selection of a representative sample can be made using two main sampling techniques; these are probability sampling and non-probability sampling.

### **3.10.1 Probability Sampling**

This study adopted the probability sampling technique. In a probability sampling, all the elements in the target population have an equal chance of being selected to partake in the study (Sekaran & Bougie, 2013). The selection sampling probability makes it easy to conduct a statistical analysis of the research questions and characteristics. Probability sampling can be divided into four steps:

- Identify a sample frame that is appropriately suited to the research questions and objectives
- Decide on the sample size to use
- Pick the most suitable sampling technique and sample size
- Cross check to see if the sample is representative of the population.

The significant advantage for probability sampling is the scientific and statistical nature, and its ability to reduce bias in a research study (Wilson, 2016). The main challenge of the design is the long time it takes to collect data, the tremendous efforts it requires from researchers and the expensive nature it requires. Probability sampling designs include pure random, systematic, stratified random, cluster and multi-stage sampling (Wilson, 2016).

#### **3.10.1.1 Simple random sampling**

It is most times referred to as random sampling, and it involves selecting a sample at random and not following a defined process. The selection starts with any number, and this is repeated

until the actual sample required is satisfied. Using a simple random selection eliminates bias and adds representativeness for the population (Bryman, 2015; Sekaran & Bougie, 2016). However, the simple random sampling technique is always open to over or under-representation. However, the simple random sampling technique has the least bias and offers broad generalizability (Bryman, 2015).

The simple random sampling technique was adopted to collect quantitative data for the researcher to test the proposed green workplace behavioural model for eThekweni Municipality, Durban South Africa. The technique is also appropriate to test the theory of GHRM influence on green behaviour of employees in the workplace. The simple random sampling technique has the least bias and offers broad generalizability (Bryman, 2015).

### **3.10.1.2 Non-probability sampling technique**

In non-probability sampling, all the elements in the target population do not have an equal chance of being selected. It is based on the subjective non-scientific and non-statistical method of picking a sample. This type of sampling techniques is synonymous with qualitative research (Bryman & Bell, 2019; Saunders *et al.*, 2012). A non-probability sampling technique includes quota, snowball, purposive and convenience sampling (Wilson, 2016). Non-probability sampling is used when relevant leads or information is sought from the population. This study has a qualitative section, which required the researcher to conduct interview sessions with some participants. The non-probability sampling technique will be adopted for the qualitative sections of this study.

The appropriate non-probability sampling for this study is the purposive (judgmental) sampling technique. For this type of non-probability sampling technique, the selection of elements from the target population is based on the vital information needed from the population. Using any other type of sampling technique would not offer opportunities to obtain the required information needed for the study (Sekaran & Bougie, 2016). To understand the role of the human resource department in helping to develop green workplace behaviour across the human resource (HR) department. There is a need to interview some HR managers, as they are responsible for designing and implementing environmental sustainability policies, as well as HRM policies for the department. The judgmental sampling technique was adopted because of the substantive qualitative data collected, which was helpful to understand how the HRM department can develop a workplace green behaviour model for employees at eThekweni municipality.

### 3.11 Sample Size

The sample size of a study is the total number of respondents, units or elements selected from a larger population for research (Kaczmarczyk & Salamońska, 2018). As stated earlier, the sample size of a study is essential in a quantitative study, and it gives reliability to the results of the study.

**Table 3.5. Sample size plan for the questionnaire & interview process**

<b>Questionnaire &amp; Interview sample size plan</b>	<b>Number of employees</b>	<b>Selected sample size</b>
<b>eThekwini Municipality (HR units)</b>	<b>80</b>	<b>66</b>
<b>HR Managers (eThekwini municipality)</b>	<b>8</b>	<b>7</b>

#### 3.11.1 Questionnaire selection process

The target population for this study was 80. A sample size of 66 HR employees was selected to be administered using questionnaires. The selection was made using the Krejcie & Morgan's (1970) table.

The questionnaires were sent to respondents by both email and hand delivery. Each questionnaire took approximately seven (7) to ten (10) minutes to fill. In all, sixty-six (66) questionnaires were filled and returned. Out of the sixty-six (66), forty-seven (47) were hardcopies, while the rest nineteen (19) returned were soft copies. The 100% response rate was due to the combined method of questionnaire administration adopted for this study

**Table. 3.6. Krejcie & Morgan (1970) Sample size table**

<b>Population Sample Size (N)</b>	<b>Required Sample Size (S)</b>
80	66
85	70
90	73
95	76
100	80
110	86
120	92
130	97

Source: Krejcie and Morgan (1970)

**Source: Krejcie & Morgan, 1970.**

### **3.11.2 Interview selection process**

The qualitative sample was done using the purposive sampling technique; seven (7) interview participants were finally selected. In selecting participants for the interview, the researcher targeted HR managers and policy decision-makers of both the HR. The HR department is in the best position to initiate green HRM on behalf of all employees at the municipality. The participants were in a position to pose in-depth answers to the research questions of the study. So, it was a deliberate selection of participants (Sekaran and Bougie, 2016). This reason justifies the adoption of purposive (judgmental) sampling technique.

The audio recorded interview sessions were conducted in the offices of each selected HR manager at eThekweni municipality. Each interview session took approximately twenty (20) to thirty (30) minutes long.

### **3.12 Data Collection Process**

Data collection process means the way a research study plans to collect or gather data for analysis to find solutions for the problem or phenomenon (Saunders *et al.*, 2019). These are the step by step process a researcher used to gather data to help in resolving a research problem. The type of data collection and analysis process used in a study largely determines the outcome, or the

validity and reliability of the study (Saunders *et al.*, 2012). The researcher employed a pragmatist philosophy in carrying out this study, as this aligned with the research objectives of the study. In line with the pragmatist school, the researcher used both primary and secondary sources for data collection. The primary sources include the questionnaire and interview. In contrast, the secondary source includes several journals, textbooks and eThekweni municipality memo's, and policy documents.

The data collection procedure utilized in this study required the researcher to approach the HR employees, HR managers, as well as green or environmental champions at the municipality.

### **3.12.1 Primary sources of data collection**

Primary data collection is data gathered from the one-on-one interaction with the sources. That is, the researcher goes to the field to collect data from respondents; this can be done either through survey questionnaires or interviews conducted (Bryman, 2012). What makes data 'primary' or 'secondary' is the context in which it was analysed, primary data is analysed as itself, and not through another analysis (Flick, 2011).

The primary source of data collection instrument adopted for this study is a structured self-administered questionnaire. The questionnaire contained multiple-choice questions only. The main motive for adopting this type of instrument was aimed at achieving the main objective, which is "to develop a workplace organizational best-practice model framework for eThekweni municipality in South Africa". This objective was achieved with the aid of the convergent parallel mixed method, which collects and analyses both quantitative and qualitative data for an adequate detailed explanation (Creswell, 2014).

#### **3.12.1.1 Interviews**

Conducting interviews is an essential source of primary data, which will be employed in this study. Interviews provide critical in-depth information on a specific phenomenon being investigated. Sekaran & Bougie (2016, p.111), defines it "as a purposeful and guided conversation between two or more people". The interview process always has a motive and usually follows a procedure. One of the main reason the investigator chooses an interview process was for interviewees to reveal or discuss in-depth experiences/understanding of green human resources management behaviours at eThekweni municipality. These also include their perceptions and behaviours with regards to integrating environmental sustainability at the municipal level. Interviews are qualitative, and most likely, the dominant mode in qualitative

studies (Yin, 2014). Qualitative studies employ the questioning mode to unravel individual perceptions and experiences on issues. The rationale for selecting a semi-structured interview as a method of data collection is the search for deep understanding regarding employees' green behaviours (EGB) at the municipality. The face-to-face semi-structured approach allows for structure and guidance of the interview process. This interview method will also allow for an in-depth probe for underlying information as opposed to other types of qualitative methods of data collection (Yin, 2014). With interviews, the researcher can establish rapport with the interview participants, provide clarity to questions and doubts. The main advantage of the interview is that it provides productive, informed, and valuable information from the participant's perceptions and experiences, such information becomes very useful in the analysis phase.

In order to achieve the above, the interviewer purposively selected eight managers from the HR department and the EPCPD. However, during interviews, one of the managers declined the interview, so the researcher was left with seven interview sessions. The interviewer had to fix appointments with each participant, sending ahead the interview schedule for them to familiarize themselves with the questions and the area of focus for the interview. The interviews were conducted at their offices.

### **3.12.1.2 Questionnaire**

Questionnaires are a pre-formulated set of questions where respondents, record their answers usually within a strictly defined alternative (Sekaran & Bourgie, 2016). Saunders *et al.*, (2012), also defines it as a mode of data collection, where individuals are asked to respond to some similar set of questions in a predetermined order. Questionnaires are used for collecting a large sample of data for analysis. They can be administered personally, distributed electronically, or mailed to respondents (Saunders *et al.*, 2012). This questionnaire was personally distributed to the employees of the organization at their workstations; the total number of respondents is 66. The rationale for using the questionnaire includes:

- Questionnaire administration is easy to administer to respondents and saves time, then other types of data collection methods. The questionnaire for this study was designed efficiently to facilitate smooth response. The researcher used the 5-point Likert scale system.
- Questionnaires tend to be useful for descriptive or explanatory researches. The descriptive study may need to describe the management attitudes and opinions of a large organization,

on the other hand, a critical study may need a questionnaire to examine for relationships and cause and effect issues in a phenomenon (Saunders *et al.*, 2012). This questionnaire was chosen to describe the green behaviours of HR employees of eThekweni municipality, as well as explaining management reasons for ‘adopting’ or ‘not adopting’ a green policy.

- Questionnaires ensured respondents privacy, confidentiality, and anonymity. The questionnaire was designed to be answered anonymously by respondents. Respondents were also required to sign a consent letter to show their willingness to participate in the study, it also protected their confidential information’s, as the information was replaced with pseudo-names.

The questionnaire was divided into two sections: the demographic data sections and the core variables sections. They include green workplace behaviours (GWB), green recruitment behaviours, green training behaviours, green compensation & rewards behaviours, and green performance management behaviour and management support sections. Each HR function will be analysed individually and later analysed jointly together.

Demographic section: This section was done to collect and describe the respondent’s respective departments, gender, marital status, educational qualifications, work experience and level of IT knowledge. The information was necessary to describe if the variables influenced the employee’s behaviour.

Variable sections green workplace behaviours & green HR function behaviours: This section informs the researcher on the different variables being investigated. The study focused on four HR roles which can be influenced by environmental sustainability policies or initiatives to change workplace employees’ behaviour to a greener one. As stated earlier, the researcher used a 5-point Likert scale; ranging from 1 (strongly disagree) to 5 (strongly agree). The Likert scale was adopted due to its straightforward interpretation and designing (Hartley, 2014).

The questionnaire was a self-administered, self-administration of the questionnaire are cost-effective, and saves time. Self-administration affords respondents with freedom from bias and anonymity. Despite the advantages associated with questionnaire administration, there are still some slight limitations. Structured questionnaires give respondents no options, as such cannot go ‘outside the box’ except the options given. Another limitation is that analysing questionnaires requires some statistical skills, which if not present, may hamper the proper interpretation of findings and the results. The above limitation justifies the adoption of

interviews to make up for the limitation of the questionnaire adoption. Using both methods of data collection also help in data triangulation for this study.

### **3.12.2 Secondary sources of data collection**

This type of data is referring to data collected or obtained from a second source. That is, the data had already been used and analysed by a previous researcher. The second researcher decided to use the opinions of the first researcher on data. Flick (2011), on the other hand, differed by stating that 'defining data on the way it was analysed can be limited in certain circumstances. Newspapers can categorize primary or secondary data, and this depends on whether the reporter got his or her story directly from the source or through a second source. To determine how useful a data is, this is dependent on the type of use in a study.

The study also made use of some secondary sources for data collection. The literature reviews and the theoretical frameworks were because of the secondary sources consulted. The sources of secondary data consulted include textbooks, online journal articles, conference papers, theses, and dissertations, both published and unpublished. The researcher also reviewed the various websites of the selected organizations. All the sources, as mentioned earlier, were instrumental in building a credible background, evaluation of the firms showed the researcher to check if the organizations have a green policy initiative in place in the selected organizations. Some of the background data collected were instrumental for data triangulation, which helped to validate the primary and secondary data collected. Therefore, the type of data collection helped reduced the inherent bias the study may have.

### **3.13 Pilot study**

A pilot study was done on 15 employees of a public service organization to test and refine the questionnaire for respondents not to have problems of ambiguity when answering questions. Pilot studies are usually done to test for content validity of an instrument, to improve the questions, format, and scales (Creswell, 2014).

The pilot study was able to show that the questionnaire was not sufficient alone to evaluate the perception of respondents. Thus, the researcher introduced interview questions, so employees could expressly state their views on the subject topic.

This questionnaire was also able to check for clarity in the instructions, ambiguity in the questions, if any of the questions asked made them (respondents) feel uneasy and if any topic was left out.

### **3.14 Data analysis process**

Data analysis involved both quantitative data analysis and qualitative data analysis.

#### **3.14.1 Quantitative data analysis**

The primary data collected through the questionnaire instrument was analysed using both descriptive and inferential statistical analysis. The demographic section was analysed using the descriptive statistics: this type of analysis includes frequency tables, diagram, a measure of central tendency and measures of dispersion. The variable sections will be analysed using the inferential analysis. The type of analysis used was multiple regression analysis and exploratory/confirmatory factor analysis. Both statistical analyses were done using the statistical package for the social sciences (SPSS) version 26.

After the demographic sections were analysed using the descriptive analysis, the variable sections were analysed separately according to the different HR roles or functions: green behaviour, green recruitment, green training, green rewards & compensation, green performance, management support, using regression analysis. After that, the different results of the regression analysis were then used for the exploratory/confirmatory factor analysis to achieve the main objective of the study.

##### **3.14.1.1 Descriptive statistical analysis**

Descriptive statistics is the type of statistical analysis technique that employs the use of data collection, presenting, describing, analysing, and interpreting the data collected. It is used to summarize different values. The method can also be used to describe different data sets and conclusions made by itself. The summary can be done of several data sets. Example a population or a small sample (Perez-vincente & Ruiz, 2009). This type of analysis can be done using the frequency tables, measures of dispersion, measures of central tendency, and diagrams. Using this type of analysis then means data collected can be presented in tables, graphs, pie-charts, bar charts and histograms. This analysis is mainly used to analyse demographic data sets which give the reader or researcher an overview of the collected data (Wilson, 2016).

The researcher also used descriptive analysis in describing the demographic overview of the study.

### **3.14.1.2 Regression analysis ( $r^2$ )**

The regression analysis tool is used for assessing the strengths of a cause-and-effect relationships between the dependent and independent variables of a study (Saunders et al., 2012). It measures the rate at which variations is found in a dependent variable that may be explained by the independent variable, number of sales staffs. For regression, the values can be represented between 0 and +1. When data is sampled from a population, the sample must be picked at random. Researchers can use regression analysis only when there are one dependent variable and one or at most two independent variables. It cannot deal with more than two independent variables (Saunders *et al.*, 2012).

Multiple regression analysis helps to calculate two or more independent variables. For multiple regression, a low significance value (less than 0.05) implies a cause and effect may not have occurred by chance alone. In contrast, a value greater (than 0.05) means coefficients of multiple determination may have occurred through chance alone (Saunders *et al.*, 2012, p. 523).

The researcher adopted the regression analysis to analyse each objective individually to know how strong the HR roles of 'recruitment, training, compensation and rewards, performance management' and management support is to change employee's behaviour to a green one.

### **3.14.2 Qualitative data analysis**

The qualitative data analysis was done using NVivo 12 software. NVivo employs thematic analysis technique for analysing qualitative data. The thematic analysis seeks to pinpoint, look for patterns and examines for recurring themes in the collected data (Nowell, Norris, White & Moules, 2017). These six process steps involved when using thematic analysis (Nowel *et al.*, 2017):

- Getting familiar with the data,
- Generating the first set of codes,
- Searching for themes in the coded data,
- Reviewing the themes,
- Redefining the themes & naming the themes and
- The final report.

The researcher got familiar with the data during transcription, where all spelling and exclamation errors were cleaned out. After transcription was done, the data was exported into the Nvivo12 software for subsequent coding and analysis. The first set of coding themes were generated from the research objectives of the study, the second set of coding was from the interview schedule, third sets were the responses from interviewees, at this stage, the themes, patterns and categories were already emerging.

Using thematic analysis will allow the researcher to use two levels of themes, semantic and latent themes (Maguire & Delahunt, 2017). The semantic themes involve the researcher looks at the participants expressing literally or adopts the surface meaning. At the latent level themes, the search for meanings beyond the underlying ideas and conceptualizations that formed the semantic content. The thematic analysis techniques were adopted because, it allows the researcher to build a structured concept, theme, pattern, and categories, in the same vein, and it looks to explain the meanings explicitly from the interviews.

### **3.15. Data reliability & validity**

Data reliability is when a data collection instrument can replicate the same consistent result when used repeatedly. Reliability refers to the consistency, stability and dependability of a measuring instrument adapted for a study (Sekaran & Bougie, 2016).

Data validity refers to a data collection instrument used in measuring if it successfully measures what it was designed to measure. Sekaran & Bougie (2016) defines it as the extent to which a data collection method accurately measures what it was designed to measure.

The internal consistency and construct validity for this study was assessed through the Cronbach's alpha coefficient. It measures for reliability and validity between two variables (Sekaran & Bougie, 2016). The Cronbach alpha coefficient measured for the various construct for this study varied from 0.822, which was the lowest to 0.963, the highest. The closer the Cronbach's alpha coefficient to 1, the more reliable it is.

#### **❖ Ensuring trustworthiness and rigour in a qualitative study**

The research employed Burke's (2016) four steps: credibility, transferability, dependability/consistency, and confirmability/neutrality.

- a) Credibility ensures confidence and credibility in findings. Credibility was achieved by conducting in-depth interviews with HR or line managers in the HR department at eThekwini municipality. The results were also followed with questionnaire

administration to HR officers in the same department at eThekweni. The results from the interview were confirmed and corroborated by the HR officers who were administered the questionnaires. In other words, the mixed-method approach of the study granted the credibility of the results in line with the aims of seeking truth value.

- b) Transferability refers to external validity if it refers to the extent of application of the result of a study to a situation (Marshall & Rossman, 2014). This study was focused on the HR department and its functions; thus, the findings will be transferable to another HR department in a similar municipality.
- c) Dependability: - This is to ensure consistency in results if the study is repeated as it is elsewhere. This research employed a mixed-method approach, which indicates that Cronbach's alpha reliability test was performed on all the constructs, and it was confirmed highly reliable.
- d) Confirmability: -This is ensuring objectivity and eliminating research bias from the study (Patton, 2014). The objectivity in this study was ensured through the data-oriented approach employed whereby the researcher used diagrams to show how the findings were derived.

### **3.16 Ethical consideration**

Ethical consideration in research helps to guide the conduct and behaviour of the researcher during the research process (Sekaran & Bougie, 2016). In ensuring ethics was followed, the researcher obtained an ethical clearance certificate with number HSSREC/00000377/2019 from the humanities and social science research ethics committee of the University of KwaZulu-Natal, (UKZN). Aside from the ethical clearance from the ethics research office at UKZN, the researcher also obtained a gatekeeper's letter from the eThekweni municipality. Participant's consent was also sought through the consent form before starting the interviews and administering the questionnaires. The main objective and purpose of the research were explained to the participants, they were also made aware of the voluntary nature, and that they can choose to withdraw if they were not comfortable with the line of questions asked. Participant's identities were kept anonymous, and the information they gave was strictly used for academic purposes only. Sources used were dully referenced and cited accordingly.

### **3.17 Chapter summary**

The chapter dully explained in detail the research process and the methodology employed in carrying out this study. Each of the processes was explained in detail, from the pragmatist

research philosophy adopted to the mixed-method, and research designs selected. The population of the study, sample size and sampling designs adopted was also explained, along with the reasons for adoption. The data collection instruments adopted: questionnaire and interviews, was also explained along with how it was designed and administered, for analysis, the researcher used SPSS and NVivo for analysing the gathered data. The study also discussed the validity and reliability of data collected and how ethical considerations were observed during the research process.

## **CHAPTER FOUR**

### **PRESENTATION OF DATA AND ANALYSIS**

#### **4.1 INTRODUCTION**

This study adopted a mixed-method research design. The mixed-method design requires data collection using both quantitative and qualitative methods. The quantitative method data was collected through a structured questionnaire, while the qualitative method data was gathered through an in-depth interview using a voice sound recorder. This chapter, therefore, presents the raw data, the analysis and the interpretation of the results gathered from both interviews and questionnaires administered.

The IBM statistical package for social sciences- SPSS (version 26) was used to analyse the quantitative data. The data collected was coded into an excel sheet and subsequently imported into the SPSS software for the statistical analysis. After cleaning the data and correcting some grammatical errors. The demographic data were subsequently analysed using descriptive statistics. The questionnaire had 59 closed-ended questions that are designed to elicit responses from HR officers on green HRM at eThekweni municipality. The questions were divided into different categories, such as demographic data, green workplace behaviours, green recruitment, green training, green reward & compensation, green performance, and management support. The questionnaire was self-administered to 66 respondents at the municipality, although the response took three months (from December till February) all 66 questionnaires were returned having a 100% response rate. The data analysis for this study involved using series of statistical tests: frequency distribution, principal factor analysis, Cronbach's alpha's reliability, normality QQ test, correlation (spearman's rank) and regression test. These results will be presented in different tables and graphs.

NVivo 12 version was employed to analyse the qualitative data collected through in-depth interview. The responses from the interview participants were transcribed. Thematic analysis was conducted to identify themes and sub-themes within the qualitative data. In NVivo 12, themes are denoted with a parent node, while sub-themes are denoted with child nodes.

#### **4.2 ANALYSIS OF DEMOGRAPHIC DATA**

The questionnaire was structured into six categories of demographic data from the respondents. The categories include gender, educational qualification, type of appointment, department &

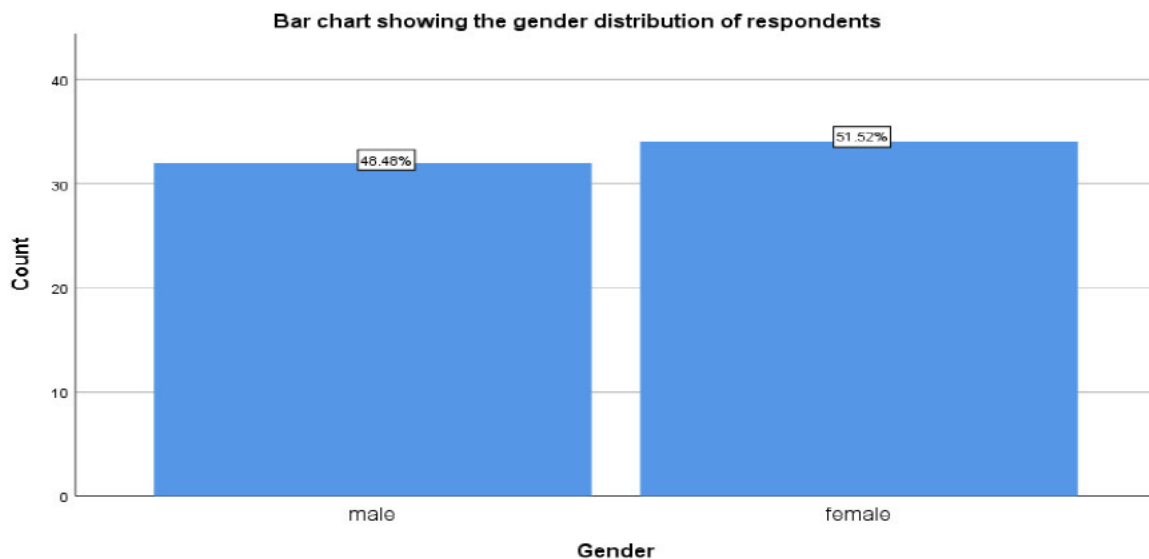
designation, work experience and information (I.T.) skills. They were presented in tables, pie chart and bar charts below.

#### 4.2.1 Gender

Table 4.1. Gender distribution of respondents

	Frequency	Percentage
Male	32	48.5
Female	34	51.5
Total	66	100.0

Source: Author's compilation



**Figure 4.1. The distribution of respondents by gender**

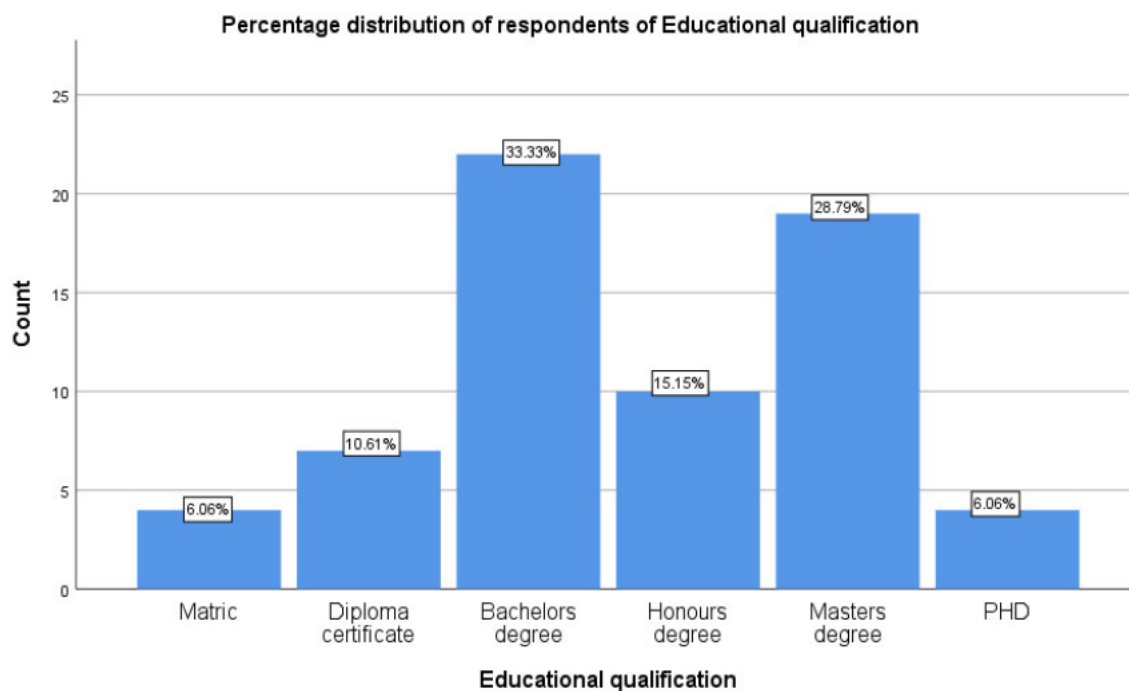
There is a balanced distribution of respondents by gender, and this was displayed in Figure and Table 4.1. Of the 66 respondents, 34 (51.5%) were females, while the males were just 32 (48.5) respondents. This outcome shows a higher number of female respondents among HR officers at eThekweni municipality.

#### 4.2.2 Educational qualification

Table 4.2. Distribution of educational qualification of respondents

	Frequency	Percentage
<b>Matric</b>	4	6.1
<b>Diploma cert.</b>	7	10.6
<b>Bachelor’s degree</b>	22	33.3
<b>Honours degree</b>	10	15.2
<b>Master’s degree</b>	19	28.8
<b>PhD</b>	4	6.1
<b>Total</b>	66	100.0

Source: Author’s compilation



**Figure 4.2. The educational qualification of respondents at eThekwini municipality**

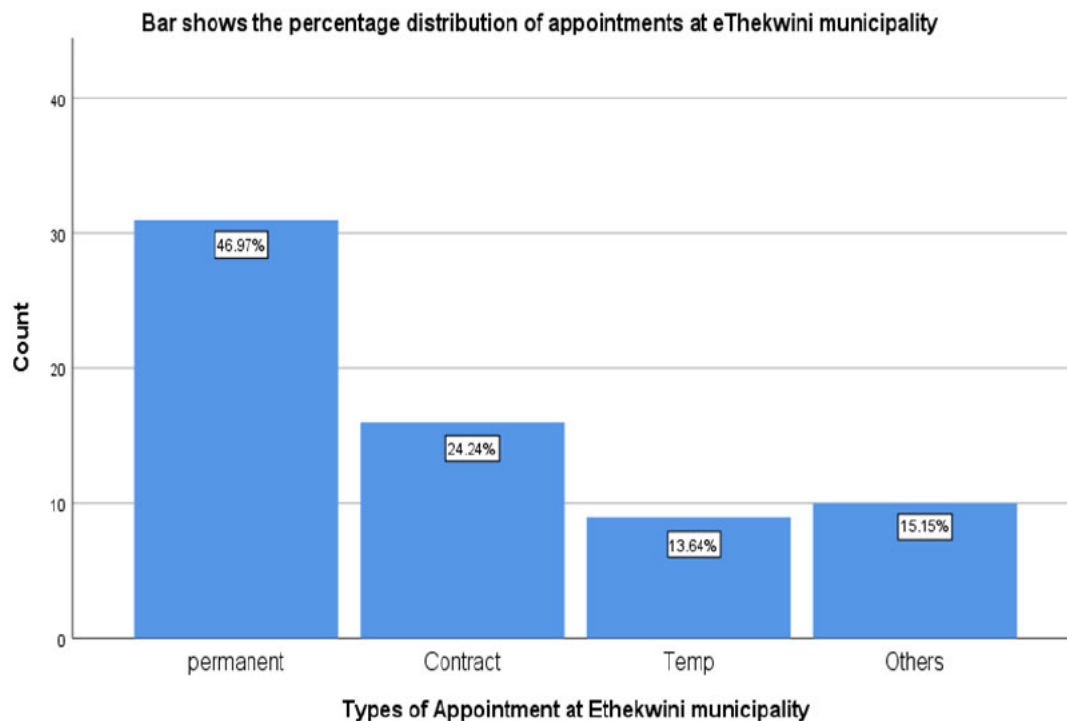
The bar chart and table 4.2 above shows the educational qualification of the respondents at the municipality. Matric holders had 4 (6.0%) respondents, diploma certificate holders had 7 (10.61%) respondents, bachelor’s degree had 22 respondents (33.3%), the honours degree had 10 (15.15%) respondents, and master’s degree had 19 (28.79%) respondents, while PhD had 4 (6.06%) respondents. From the above distribution, the results show that ‘bachelor’s degree’ had the highest percentage among the respondents; masters’ degree holders follow this. The PhD and matric holders had joint lowest four respondents with a percentage of (6.06%). One can thus conclude that there is a high rate of educated HR officers at eThekwini municipality.

### 4.2.3. Types of appointment

Table 4.3 Distribution of appointment of respondents

	Frequency	Percentage
Permanent	31	47.97
Contract	16	24.24
Temp.	9	13.64
Others	10	15.15
Total	66	100.0

Source: Author's compilation



**Figure 4.3. The percentage distribution of appointments at eThekweni municipality**

Table and Figure 4.3 above show the distribution of the type of appointments among the respondents. The distribution of appointment shows 'permanent' staff were 31 with a percentage of 46.97%, 'contract' staff were 16 (24.24%), 'temp' staff were 9 with a percentage of 13.6%, while 'other' staff were 10 with a percentage of 15.15%. Based on the outcome of this statistical analysis, the permanent staff had the highest percentage among the respondents, and contract appointments followed this. The 'temp' appointments had the lowest numbers.

The ‘other’ appointments were indifferent and did not state what type of appointment they currently have. These results indicate over 50% of HR staff at eThekwini municipality are permanent staff and may likely be involved in green HRM.

#### 4.2.4 Department and designation

Table 4.4. Distribution of respondents by department/designation

	Frequency	Percentage
<b>HR</b>	19	<b>28.8</b>
<b>HR Talent management</b>	5	<b>7.6</b>
<b>EMA</b>	11	<b>16.7</b>
<b>Skills development</b>	9	<b>13.6</b>
<b>ODCM</b>	8	<b>12.1</b>
<b>Policy and development</b>	10	<b>15.2</b>
<b>IT</b>	4	<b>6.1</b>
<b>Total</b>	<b>66</b>	<b>100.0</b>

Source: Author’s compilation

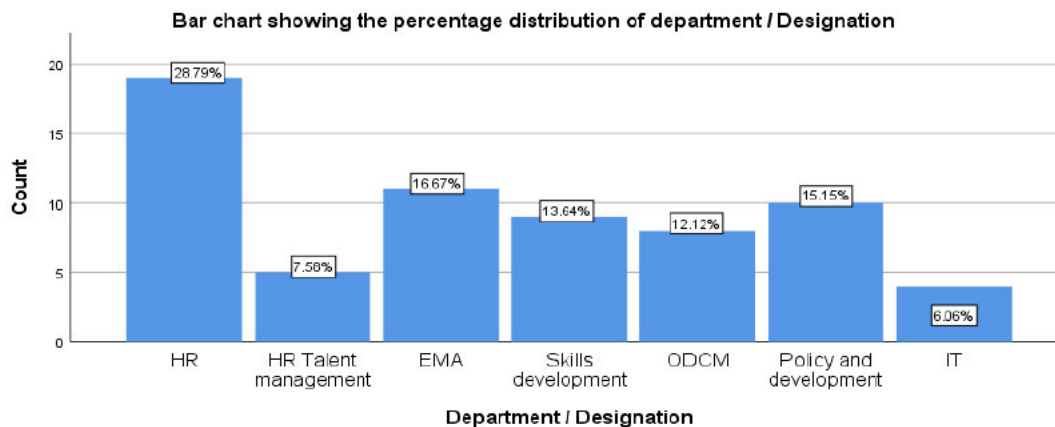


Figure 4.4. The percentage of respondent’s departments or designation

Table 4.4 and Figure 4.4 show there are several departments under the HR department at eThekwini municipality. The respondent's departments include HR core with 19 (28.79%), HR talent management 5 (7.58%), eThekwini municipality academy (EMA) had 11 (16.67%), the skills development department had nine respondents with a percentage of (13.64%),

organisational development and change management (ODCM) had eight respondents with (12.12%). Policy and development had ten respondents with 15.15%, and I.T. also had four respondents and with a percentage of 6.06%. Based on these results, HR core, the EMA and policy & development department had the highest respondents, respectively. Thus, it indicates there are several departments that can implement the GHRM practices, which may mean a broad awareness campaign across the whole municipality.

#### 4.2.5 Work experience

Table 4.5. Distribution of work experience of respondents

	Frequency	Percentage
0-5 years	38	57.6
6-10 years	11	16.7
11-15 years	10	15.2
15-20 years	3	4.5
Over 20 years	4	6.1
<b>Total</b>	<b>66</b>	<b>100.0</b>

Source: Author's compilation

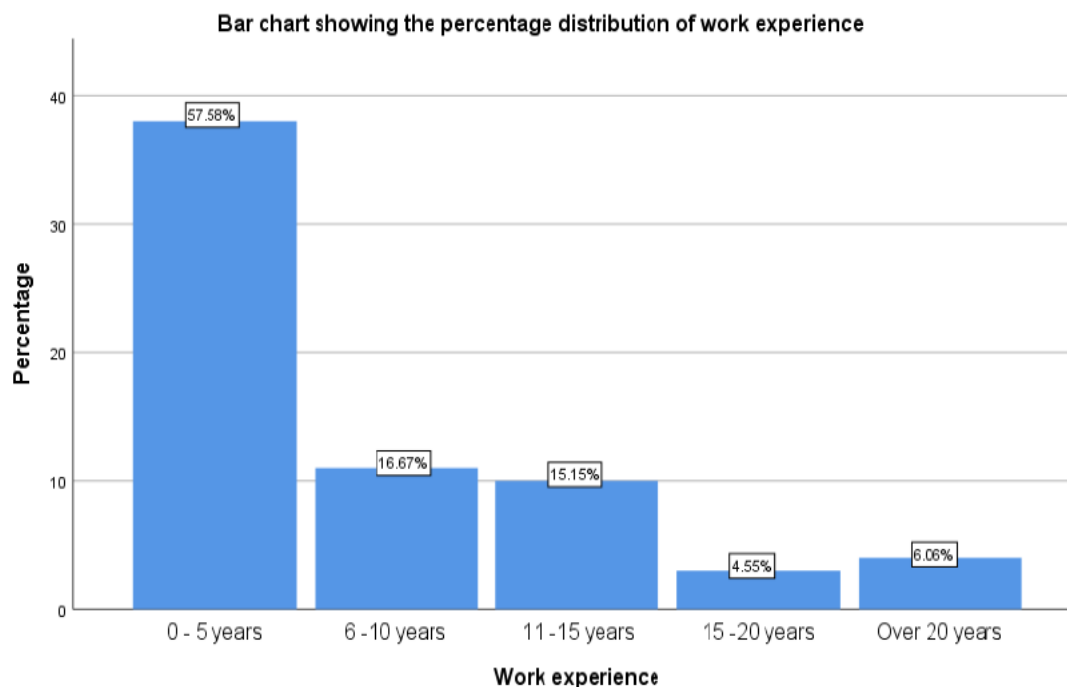


Figure 4.5. The distribution of work experience of respondents

Table 4.5 and Figure 4.5 shows five levels of experiences of the respondents. Respondents with 0-5 years' experience were 38 (57.58%), 6-10 years' experience was 11 (16.67%) respondents, 11-15 years' experience had 10 (15.15%) respondents, and 15-20 years' experience had 3 (4.55%) respondents, while over 20 years' experience had 4 (6.06%) respondents. This result implies that employees with 0-5 years' experience had the highest number of respondents while 15-20 years' experience was the lowest.

#### 4.2.6. Information (I.T.) skills

Table 4.6. Distribution of respondents I.T. skills

	Frequency	Percentage
<b>Few skills</b>	9	13.6
<b>Average skills</b>	22	33.3
<b>Good skills</b>	26	39.4
<b>Highly skilled</b>	9	13.6
<b>Total</b>	66	100.0

Source: Author's compilation

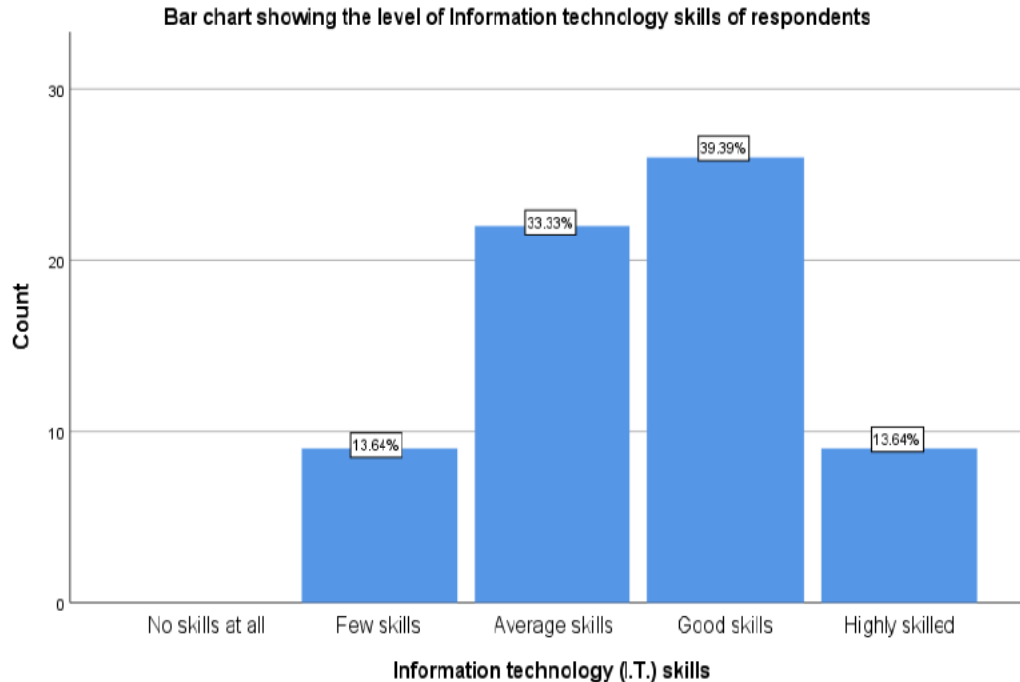


Figure 4.6. The distribution of work experience of respondents

Table and Figure 4.6 show the distribution of respondents based on their I.T skills. Their I.T skills range from: few skills had 9 (13.64%) respondents, average skills had 22 (33.33%) respondents, excellent skills had 26 (39.39%) respondents, and highly skilled had 9 (13.64%) respondents. From Figure 4.6, respondents with a good knowledge of I.T skills had the highest number of respondents, while there was a joint lowest with both few I.T skills and highly skilled respondents with I.T skills. None of the respondents had no skills. This result implies that HR officers who have I.T. skills may influence the implementation of e-recruitment, which is a component of green recruitment (GR).

### **4.3 ANALYSIS OF RESEARCH OBJECTIVES (RO) USING INFERENCE STATISTICS**

Inferential statistics were also used in this study, inferential statistics is usually used in making inferences and generalizations on a specific population (Dubihlela & Dubihlela, 2014). Inferential statistics are also used in making decisions and reaching educated and logical conclusions. For this study, inferential statistics were used to generalize on GHRM to the targeted population (eThekweni municipality), it was also useful to determine the level of influence GHRM had on green workplace behaviours at eThekweni municipality.

The following inferential statistical tests were performed to determine various factors around the GHRM concept at eThekweni municipality:

1. Exploratory factor analysis test- this was done to reduce the dimensions and eliminate the redundant questions or responses that did not have any impact on the variable when answered,
2. Cronbach alpha test was used to determine the reliability of each construct. After these tests were done,
3. The normality test was done using the Shapiro-Wilk, and normality QQ test plots were used to visualize the normality and unusual nature of the values.
4. The next process was followed by the spearman's ranking correlation tests to prove the level of influence between two variables.
5. The last test was the regression test between all single GHRM practices combined over green workplace behaviour.

#### 4.3.1. EXPLORATORY FACTOR ANALYSIS TEST (EFA)

Exploratory factor analysis was used to reduce data dimension and exclude missing data. Redundant questions and responses that impact on constructs were removed. The EFA helped ensure the process of linearity. The principal component analysis (PCA) was used in determining the values or factors to be extracted. With the PCA, various sets of constructs were identified using the factor extraction (Hadi, Abdullah & Sentosa, 2016).

The Kaiser-Meyer-Olkin (KMO) was used to determine the suitable and adequate sample size for the study. Kaiser (1974) suggests 0.5 as the KMO threshold, while other values include: values between 0.5 and 0.7 are mediocre, 0.7 and 0.8 are good, 0.8 and 0.9 are considered a great value and 0.9 and above is considered excellent (Hadi *et al.*, 2016; Pallant, 2013). Pallant (2013), also recommends that KMO can be 0.6 and above. Some items with poor loadings were however deleted. The corrected item-total was valuable for purifying the items. It prevented less critical items from compounding the interpretations of the EFA (Sila, 2013).

Cronbach's alpha coefficient was done to find out the internal consistency of the extracted factors. The following tables 4.7 - 4.14 below presents the factor loading items retained for the CFA.

#### 4.3.2. EXTRACTED FACTORS & CRONBACH'S ALPHA COEFFICIENTS

Table 4.7 KMO and Bartlett's test

<b>Kaiser-Meyer-Olkin measure of sampling adequacy</b>		<b>.505</b>
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	<b>4692.736</b>
	df	<b>1378</b>
	Sig.	<b>.000</b>

The Kaiser-Meyer- Olkin test is used to measure how suitable the data is for factor analysis. The higher the value, the more it suits your data and makes it suitable for factor analysis. The MSA sampling adequacy for this data is at **0.505**. According to Kaiser (1974), rule of thumb 0.50 to 0.59 is miserable. Therefore, the researcher removed (remedy) some of the irrelevant questions were that did not have adequate loadings.

The Bartlett's test of Sphericity is at **0.000**. The test is used to measure the correlation matrix to the identity matrix. It also measures the redundancy between variables.

### Rotated matrix table

Table 4.8 Extracted factor loadings for Green training (GTR)

Item GTR component	Item factor loadings
GTR 1	.847
GTR 2	.836
GTR 3	.826
GTR 4	.824
GTR 5	.802
GTR 6	.784
GTR 7	.772
GTR 8	.765
GTR 9	.704
<b>Cronbach's alpha</b>	No. of items
<b>.963</b>	<b>9</b>

Table 4.9 Extracted factor loadings for Green performance management (GPM)

Item GPM component	Item factor loadings
GPM 1	.816
GPM 2	.805
GPM3	.781
GPM 4	.753
GPM 5	.708
GPM 6	.686
GPM 7	.651
GPM 8	.616
GPM 9	.593
GPM 10	.592
<b>Cronbach's alpha</b>	No. of items
<b>.953</b>	<b>10</b>

Table 4.10 Extracted factor loadings for Green rewards & compensation (GR&C)

Item GR&C component	Item factor loadings
GR&C 1	.834
GR&C 2	.831
GR&C 3	.831
GR&C 4	.826
GR&C 5	.817
GR&C 6	.796

GR&C 7	.780
GR&C 8	.764
<b>Cronbach's alpha</b>	<b>No. of items</b>
.933	8

Table 4.11 Extracted factor loadings for management support (MS)

<b>Item MS component</b>	<b>Item factor loadings</b>
MS 1	.875
MS 2	.860
MS 3	.838
MS 4	.819
MS 5	.785
MS 6	.753
<b>Cronbach's alpha</b>	<b>No. of items</b>
.953	6

Table 4.12 Extracted factor loadings for Green recruitment (GR)

<b>Item GR component</b>	<b>Item factor loadings</b>
<b>GR 1</b>	<b>.862</b>
<b>GR2</b>	<b>.823</b>
<b>GR3</b>	<b>.815</b>
<b>Cronbach's alpha</b>	<b>No. of items</b>
.905	3

Table 4.13 Extracted factor loadings for Green workplace behaviours (GWB)

<b>Item GWB component</b>	<b>Item factor loadings</b>
GWB 1	.663
GWB 2	.657
GWB 3	.617
GWB 4	.616
GWB 5	.599
<b>Cronbach's alpha</b>	<b>No. of items</b>
.822	5

Cronbach's alpha values are used to measure internal consistency and reliability. Cronbach alpha implies how well the answers satisfy the question. The more the result is closer to 1, the more reliable it is. Table 4.8- 4.12 above shows the Cronbach alpha for the following variables.

**GTRA-** 0.963, **GPM-** 0.953, **GC&R-** 0.933, **MS-** 0.953 **GR-** 0.905, **GWB-** 0.822. The above results show the factors are very reliable and are internally consistent for factor analysis to be done.

#### 4.3.3. TEST OF NORMALITY (SHAPIRO-WILK TEST & NORMALITY QQ PLOTS)

Determining if a data set is regular (normality), this can be done through several tests, such as the Kolmogorov –Smirnov test or the Shapiro-Wilk test. The Shapiro-Wilk test was adopted in this study. In testing for normality through the Shapiro-Wilk test, if the sig. Value is more significant than 0.05; the data is considered normal if, below 0.05, the data is considered to have deviated from a normal distribution (Statistics, 2015). Table 4.14 below indicates four significant values below (0.05) (i.e. non- parametric distribution), while only two of the variables have average (parametric) values (i.e. **GWB-** green workplace behaviour and **GPM-** green performance management). The rest of the variable have abnormal values (non-parametric).

**Table 4.14 Shapiro- Wilk normality test**

	Shapiro-Wilk		
	Statistic	df	Sig.
<b>GWB</b>	<b>.971</b>	<b>66</b>	<b>.118</b>
<b>GR</b>	<b>.835</b>	<b>66</b>	<b>.000</b>
<b>GTRA</b>	<b>.953</b>	<b>66</b>	<b>.015</b>
<b>GPM</b>	<b>.968</b>	<b>66</b>	<b>.083</b>
<b>GCR</b>	<b>.916</b>	<b>66</b>	<b>.000</b>
<b>MS</b>	<b>.962</b>	<b>66</b>	<b>.040</b>

The blue shaded cells have abnormal distribution or are said to be non-parametric values because of the inconsistency of the normality test, whereby some variable is standard, while some are not normal. Since correlation is between two variables, the researcher opted for the non-parametric correlation tests (spearman's ranking correlation). Spearman's rank-order correlation is used for non-parametric version, for measuring the strength and direction of the association between two ranked variables. The spearman's variables are ordinal, interval or ratio. The assumption of Pearson product-moment correlation was not satisfied.

Normality or non-normality can also be depicted graphically; this is usually referred to as the Q-Q plot. On the Q-Q plot, when the data points are shown close to the diagonal line, then it is considered normally distributed. Nevertheless, if the data points are not on the line or are said to stray away from the line, then the data is considered not a normal distribution. The normality test for each construct was done, along with each Q-Q plot to show the normal and non-normal distributions in the constructs graphically. Six Q-Q plots are presented below in figure 4.7-4.12.

**- Q-Q plot for Green workplace behaviour (GWB) - Normal**

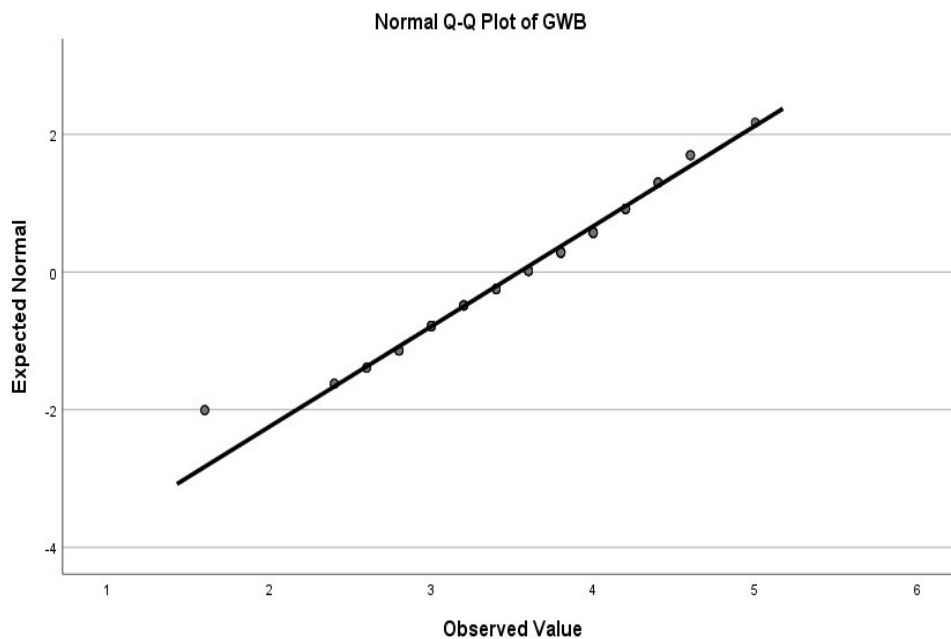


Figure 4.7. Q-Q plot for green workplace behaviour

- Q-Q plot for Green recruitment (GR) Not- normal

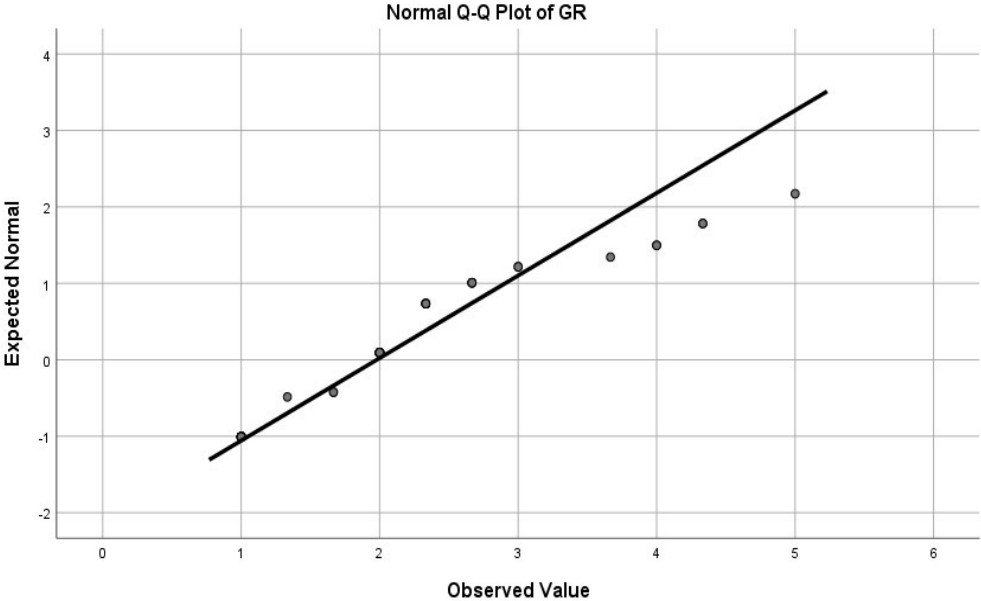


Figure 4.8. Q-Q plot for green recruitment

- Q-Q plot for Green training (GTRA)- Not -normal

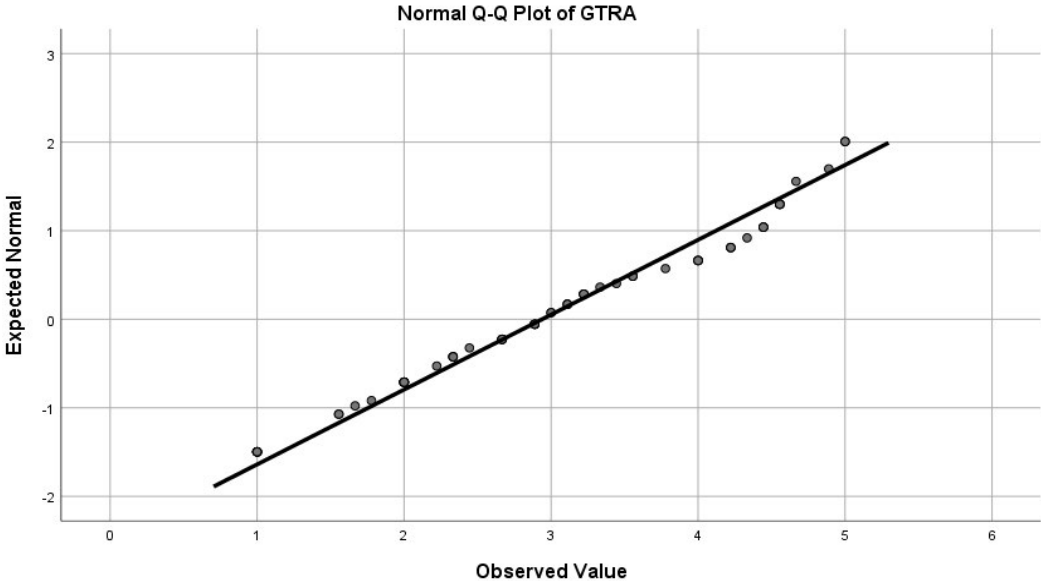


Figure 4.9. Q-Q plot for green training

**- Q-Q plot for green performance management (GPM) - Normal**

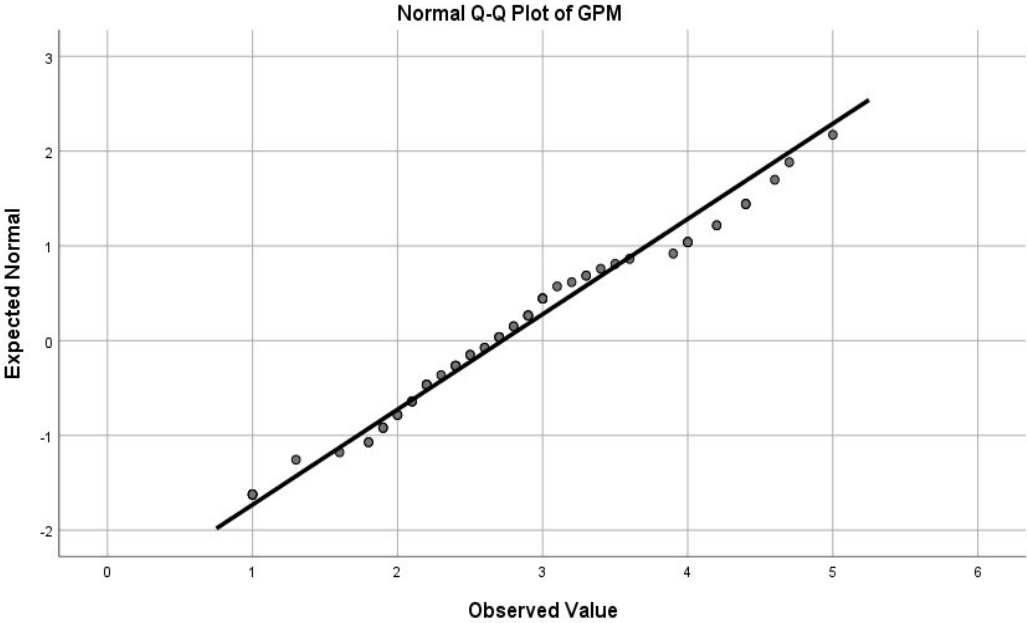


Figure 4.10. Q-Q plot for green performance management

**- Q-Q plot for green compensation & rewards (GCR) – Not-normal**

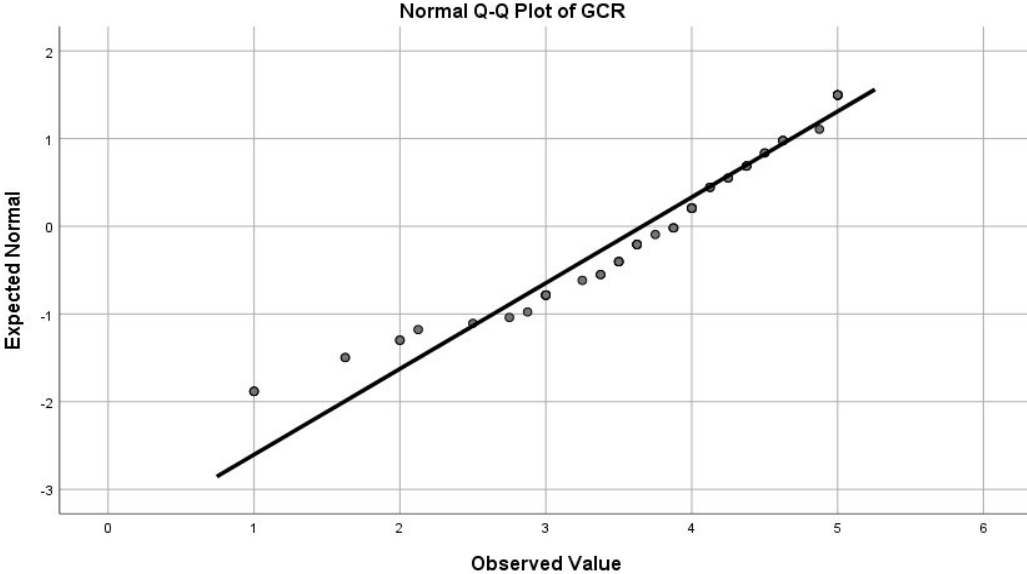


Figure 4.11. Q-Q plot for green compensation & rewards

### - Q-Q plot for Management support (MS) – Not normal

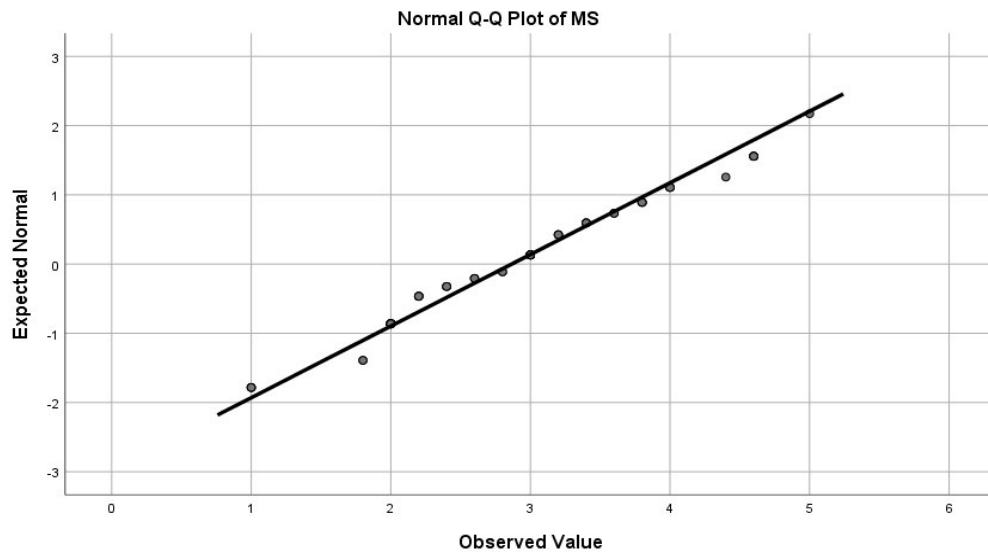


Figure 4.12. Q-Q plot for management support

#### 4.4. ANALYSIS OF RESEARCH OBJECTIVES (RO) WITH SPEARMAN'S RANKING CORRELATION

After conducting a normality test to determine if the data was parametric or non-parametric, the outcome of the normality test showed that two of the six constructs were non-parametric. In comparison, the remaining four constructs were parametric, the researcher then chose to adopt the spearman's ranking correlation because of the presence of non-parametric values in the data.

The respective research objectives to be achieved are presented below:

- a) To investigate the influence of green recruitment on employees' green behaviour
- b) To ascertain the effects of green training and development intervention on employees' pro-environmental outcomes.
- c) To ascertain the most effective type of reward system in place to enhance good pro-environmental behaviour for the organization.
- d) To examine the influence of environmentally sustainable key performance areas on employees' green behaviour.
- e) To investigate the relative influence of green behaviours and the above-listed GHRM practices on workplace green behaviour.

f) To examine the influence of managerial support on green workplace behaviour.

#### 4.4.1. SPEARMAN'S RANKING CORRELATION

Research studies such as this looking to examine relationships, influences or impact between two variables (bivariate). It is useful for a better understanding of two variables. The Spearman's rank is used for non-parametric data or ordinal variables, while Pearson's product-moment correlation is used to look for relationships or among linear variables. Spearman's ranking correlation was used to analyse research objectives: a, b, d, and e (that is influence between green recruitment (GR) and green workplace behaviour (GWB), between green training and GWB, to examine the influence between green performance management (GPM) and GWB, it also aims to examine the influence of managerial support (MS) and GWB). After running the spearman's test results usually range from +1.0 to -1.0. +1.0 indicates there is a perfect positive relationship or influence, while -1.0 means a perfect negative relationship or correlation. The rule of thumb, according to Ferrerira (2000), lists coefficient values:

0.10 – 0.29 and -0.10 - -0.29 means a weak correlation

0.30 – 0.49 and -0.30 - -0.49 indicates a moderate correlation

0.50 – 1.0 and -0.50 – -1.0, which indicates a solid correlation.

##### 4.4.1.1. RO 1 - To investigate the influence of green recruitment on employees' green behaviour

Research objective one was formulated to show the relationship between green recruitment and employee's workplace green behaviours. Table 4.16 shows the relationship between

**Table 4.15. Spearman's rho**

		GWB	GR	GTRA	GPM	GCR	MS
GR	Correlation Coefficient	.251*	1.000	.494**	.524**	-.076	.283*
	Sig. (2-tailed)	.042	.	.000	.000	.542	.021
	N	66	66	66	66	66	66

\* Correlation is significant at the 0.05 level (2-tailed).

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

From the above table, the correlation between green recruitment and green workplace behaviour was weak, though positively significant. ( $P < 0.05$ ,  $r = 0.251$ ). Indicating an increase in green recruitment will lead to a slight increase in green workplace behaviour.

**4.4.1.2. RO 2 - To ascertain the effects of green training and development interventions on employees' pro-environmental outcomes.**

Research objectives two sought to ascertain the level of effect green training interventions had on employee's pro-environmental outcomes or behaviour. The table is shown below in table 4.16.

**Table 4.16. Spearman's rho**

		GWB	GR	GTRA	GPM	GCR	MS
GTRA	Correlation Coefficient	0.524**	.494**	1.000	.567**	.170	.464**
	Sig. (2-tailed)	.000	.000	.	.000	.172	.000
	N	66	66	66	66	66	66

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

From the table, the correlation between green training and green workplace behaviour was strong and highly positive. ( $P < 0.05$ ,  $r = 0.524$ ), and significant. There is no negative correlation in the above values. Based on the findings, green training will influence green workplace behaviour positively at a great extent.

**4.4.1.3. RO 3 - To ascertain the most effective type of reward system in place to enhance good pro-environmental behaviour for the organization.**

The research objectives explored the most effective reward system that will enhance good pro-environmental behaviour. This particular objective will employ a distribution table to show the most preferable, and this will also be combined with a principal component analysis matrix (PCA). The PCA matrix is used to identify a **combination of factors that mostly influence an outcome.**

**Table 4.17.** Perception of respondents in percentages in terms of the most effective type of reward & compensation

Questions / Items	Number of responses	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Monetary bonuses	66	7.6%	9.1%	18.2%	31.8%	33.3%
Time off work, e.g. an afternoon off; a long weekend.	66	6.1%	12.1%	24.2%	30.3%	27.3%
Reimbursements for travel for employee's who reduces the effect of their travel on the environment by purchasing hybrid cars or used 'safe cars', or sharing transport (carpools, public transport) or cycling.	66	4.5%	10.6%	9.1%	43.9%	31.8%
Bonus incentive programs tied to financial rewards for meeting set green metrics in the organization, whether individually or as team members.	66	4.5%	7.6%	13.6%	42.4%	31.8%
Recognition-based award programs, e.g. "certified green champion" that comes with different bonuses, prizes or perks.	66	7.6%	9.1%	16.7%	34.8%	31.8%
Having an exclusive lunch with the director or head manager.	66	16.7%	16.7%	21.2%	22.7%	22.7%
A rewarding employee with recognition certificates.	66	10.6%	13.6%	12.1%	34.8%	28.8%
Having point-based programs where the points can be redeemed when employees engage in 'green' sustainable milestones for the municipality. (The points could be used, e.g. for gym memberships or actual products and services or leave days).	66	10.6%	9.1%	15.2%	33.3%	31.8%
<b>Total percentage</b>	<b>66</b>	<b>13.64%</b>	<b>17.58%</b>	<b>26.06%</b>	<b>54.8%</b>	<b>47.86%</b>

The above table describes the perception of respondents in percentages in terms of the most effective type of reward & compensation that will encourage or motivate pro-environmental behaviour at eThekweni municipality. The results show that the “agree” had 274%, while ‘strongly agree’ had 239.3%. Taking a closer look at the questions that make up the rewards & compensation variable, questions:

*“Reimbursement/travel grants for an employee who reduces the effect of their travel on the environment by purchasing hybrid cars or used 'safe cars', or sharing transport (carpools, public transport) or cycling”*. This question had **43.9%** in agreement, while **31.8%** who strongly agree that having this in place will improve green workplace behaviours compliance.

*“Bonus incentive programs tied to financial rewards for meeting set green metrics in the organization, whether individually or as team members”*. This question had **42.4%** and **38.8%** who strongly agreed that it would encourage green workplace behaviour.

Also, some other questions had some relatively high responses, and such questions include: *“Recognition-based award programs, e.g., "certified green champion" that comes with different bonuses, prizes or perks”* which had **34.8%** who agreed, and *“Rewarding employee with recognition certificates”* also had **34.8%** who agreed.

Taking a closer look at the results and the responses, the questions that had higher percentage agreements were non-monetary rewards & compensation questions. Therefore, the results indicate that non-monetary reward packages will be the most effective to influence green workplace behaviour at eThekweni municipality.

**Table 4.18**

**Principal Component Analysis (PCA) Matrix**

	Component	
	1	2
<b>Monetary bonuses</b>	<b>.785</b>	<b>.410</b>
<b>Time off work, E.g. an afternoon off; a long weekend</b>	<b>.783</b>	<b>.449</b>
<b>Reimbursements/travel grants for an employee who reduces the effect of their travel on the environment by purchasing hybrid cars or used 'safe cars', or sharing transport (carpools, public transport) or cycling.</b>	<b>.837</b>	<b>.225</b>

Bonus incentive programs tied to financial rewards for meeting set green metrics in the organization, whether individually or as team members.	.844	.331
Recognition-based award programs, e.g. "certified green champion" that comes with different bonuses, prizes or perks	.868	-.200
Have an exclusive lunch with the director or head manager.	.787	-.375
A rewarding employee with recognition certificates	.838	-.444
Having point-based programs where the points can be redeemed when employees engage in 'green' sustainable milestones for the municipality. (The points could be used, e.g. for gym memberships or actual products and services or leave days)	.884	-.338

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

The PCA matrix was used in identifying a combination of factor that influences an outcome. In this case, the combined factors with the highest component value (closest to 1) were the most influential.

The question: *“Having point-based programs where the points can be redeemed when employees engage in 'green' sustainable milestones for the municipality. (The points could be used, e.g. for gym memberships or actual products and services or leave days)”* had the highest score under component 1 with **.884**. The question was followed by: *“Recognition-based award programs, e.g. "certified green champion" that comes with different bonuses, prizes or perks”* with a score value of **.868**.

The question on *“Bonus incentive programs tied to financial rewards for meeting set green metrics in the organization, whether individually or as team members”* also had a score of **.844**.

*“Reimbursement/travel grants for an employee who reduces the effect of their travel on the environment by purchasing hybrid cars or used 'safe cars', or sharing transport (carpools, public transport) or cycling.”* This question had a score of **.837**.

These questions, when grouped, represent non-monetary rewards or non-financial compensation. The results also align with table 4.18, above which also indicated that **non-monetary rewards** are more effective and believed to motivate employees better green workplace behaviour.

**4.4.1.4. RO 4 - To examine the influence of environmentally sustainable key performance areas on employees' green behaviour.**

**Table 4.29.**

**Table 4.19**

		<b>GWB</b>	<b>GR</b>	<b>GTRA</b>	<b>GPM</b>	<b>GCR</b>	<b>MS</b>
<b>GPM</b>	<b>Correlation Coefficient</b>	<b>.463**</b>	<b>.524**</b>	<b>.567**</b>	<b>1.000</b>	<b>.174</b>	<b>.551**</b>
	<b>Sig. (2-tailed)</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.</b>	<b>.163</b>	<b>.000</b>
	<b>N</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>

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

Table 4.20 above, the correlation between green performance management and green workplace behaviour shows a moderate and positively significant. ( $P < 0.05$ ,  $r = .463$ ). The result indicates that green performance management will positively influence green workplace behaviour of employees. So, if employees know they will be evaluated on certain green performance areas, it will have an influence on employee's behaviour.

**4.4.1.5. RO 5 - To investigate the relative influence of green behaviours and GHRM practices on green workplace behaviour.**

This research objective explored the relative influence of green workplace behaviours and the other research variables under the GHRM practices (these practices include, green recruitment, green training, green reward & compensation, green performance management and management support). Because of the multiple variables, the researcher adopted the regression test. The result is presented below.

**4.4.2. REGRESSION**

**Table 4.20.**

**ANOVA**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
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1	Regression	14.110	5	2.822	10.255	.000 <sup>b</sup>
	Residual	16.511	60	.275		
	Total	30.621	65			

a. Dependent Variable: **GWB**

b. Predictors: (Constant), MS, GCR, GR, GTRA, GPM

Taken together, all the independent variables influence the green workplace behaviour. The statistical value,  $p = 0.000$ , which is less than 0.05. This result indicates all the predictors when held constant together will influence green workplace behaviour at eThekwini municipality.

**Table 4.21.**

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.651	.301		5.488	.000
	GR	.047	.084	.064	.560	.578
	GTRA	.163	.074	.282	2.210	.031
	GPM	.075	.102	.108	.731	.468
	GCR	.172	.067	.256	2.557	.013
	MS	.169	.089	.238	1.894	.063

a. Dependent Variable: **GWB**

While this result shows that each individual construct is significant, but from the above table 4.21, it indicates the most significant out of the five (5) constructs, was GTRA (with  $p =$  value at **.031**, and GCR with  $p =$  value at **.013**). From the coefficients results, it shows that an improvement in both GTRA and GCR will lead to an improvement in **GWB**.

#### 4.4.2.1. RO 6 - To examine the influence of managerial support on green workplace behaviour.

**Table 4.22.**

	<b>GWB</b>	GR	GTRA	GPM	GCR	MS
--	------------	----	------	-----	-----	----

<b>MS</b>	<b>Correlation Coefficient</b>	<b>.400**</b>	<b>.283*</b>	<b>.464**</b>	<b>.551**</b>	<b>.038</b>	<b>1.000</b>
	<b>Sig. (2-tailed)</b>	<b>.001</b>	<b>.021</b>	<b>.000</b>	<b>.000</b>	<b>.759</b>	<b>.</b>
	<b>N</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>

\* Correlation is significant at the 0.05 level (2-tailed).

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

From the above table, the correlation between managerial support of greening and green workplace behaviour was moderate and positively significant. ( $P < 0.05$ ,  $r = 0.400$ ). The results also show a moderate correlation between management support (MS) and green workplace behaviour (GWB). Therefore, this indicates that management support does influence green workplace behaviour moderately.

#### 4.5 QUALITATIVE DATA ANALYSIS

The section presents the report of the qualitative data collected via in-depth interview. Seven HR managers of the municipality were interviewed. The interview aimed to gather data for two main areas, on green behaviour conceptualization. The questions from this topic were aimed to find out if the participants understood what green HRM means. The categories include green conceptualization (2) questions, green recruitment (2) questions, green training (2) questions, green compensation (2) questions, green performance management (2) questions and management support (3) questions.

The questions are listed below.

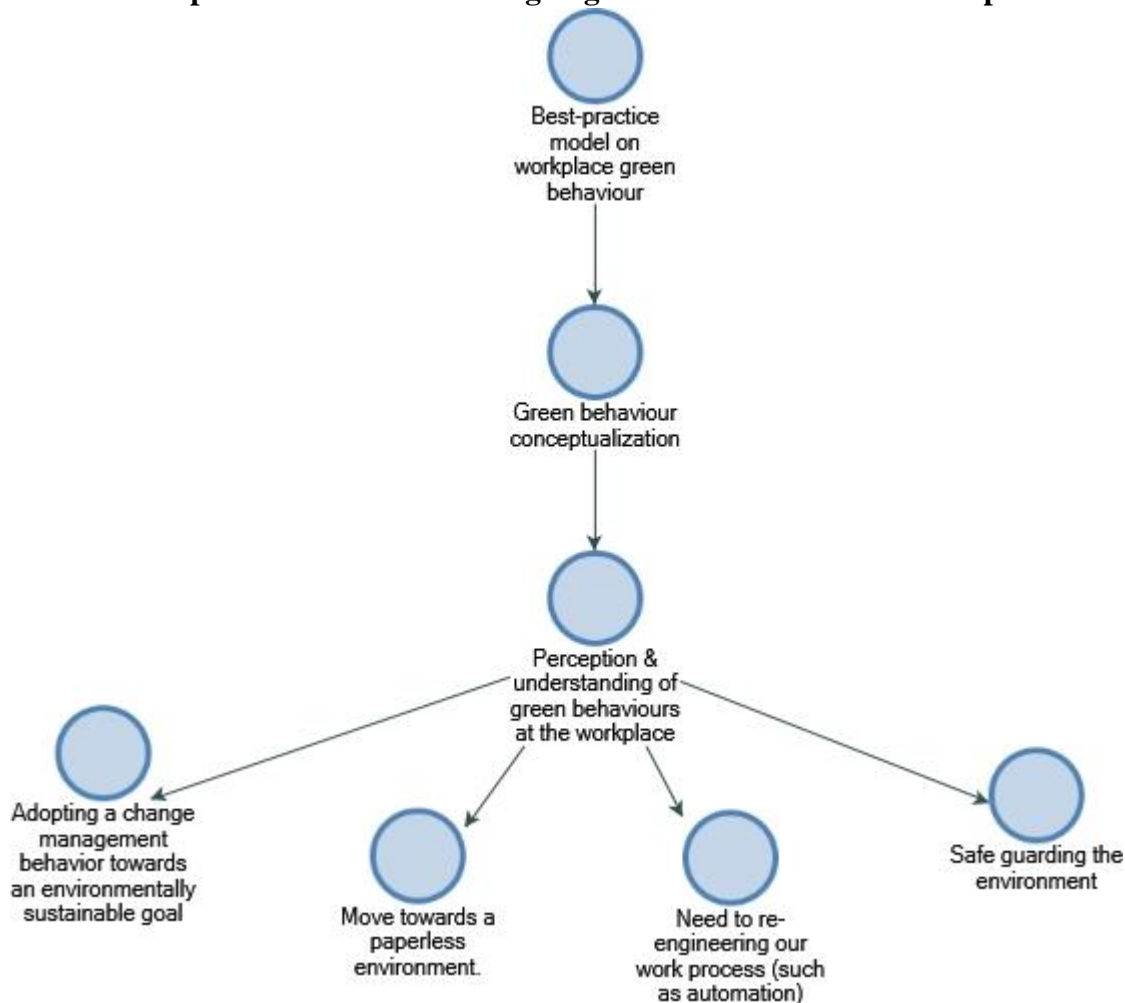
- (1) What are the perceptions and understanding of green behaviours at the workplace?
- (2) Please mention some of the green workplace behaviours at the workplace.
- (3) How does HR align the recruitment function with environmental sustainability?
- (4) How is recruitment presently done at the workplace?
- (5) How does HR align training with environmental sustainability?
- (6) Please tell us about the past and present environmental sustainability training interventions at the workplace, green reward and compensation?
- (7) How can reward & compensation be aligned with environmental sustainability at the workplace?

- (8) What are the best ways to continuously motivate green behaviour at the workplace, green performance management system?
- (9) How can environmental behaviour performance be measured or evaluated in the workplace?
- (10) What type of employee performance environmental assessment tool is used at the workplace, management support for green behaviour?
- (11) Does environmental sustainability enjoy support from management?
- (12) What specific type of support does management give to encourage green behaviour at the workplace?
- (13) What are the apparent challenges or obstacles faced during GHRM implementation?

All interviewed HR managers who agreed to participate had good knowledge on the topic of green HRM and the level of implementation at the municipality. The participants all signed the consent form after they were assured of the protection of their anonymity. The interview participants and the researcher were also allowed to ask to follow-up questions for further clarifications if they needed to via telephone. The interview participant's voice was taken down using an audio recorder, and the voice was later transcribed into Microsoft-word format after transcription, themes and patterns were then identified. The report of the analysis is presented below.

## 4.5.1 Green conceptualization

### 4.5.1.1. Perceptions and understanding of green behaviours at the workplace



**Figure 4.13. Perception and understanding green HRM at eThekweni municipality**

Figure 4.13. Above illustrates the different perceptions or understanding of green HRM.

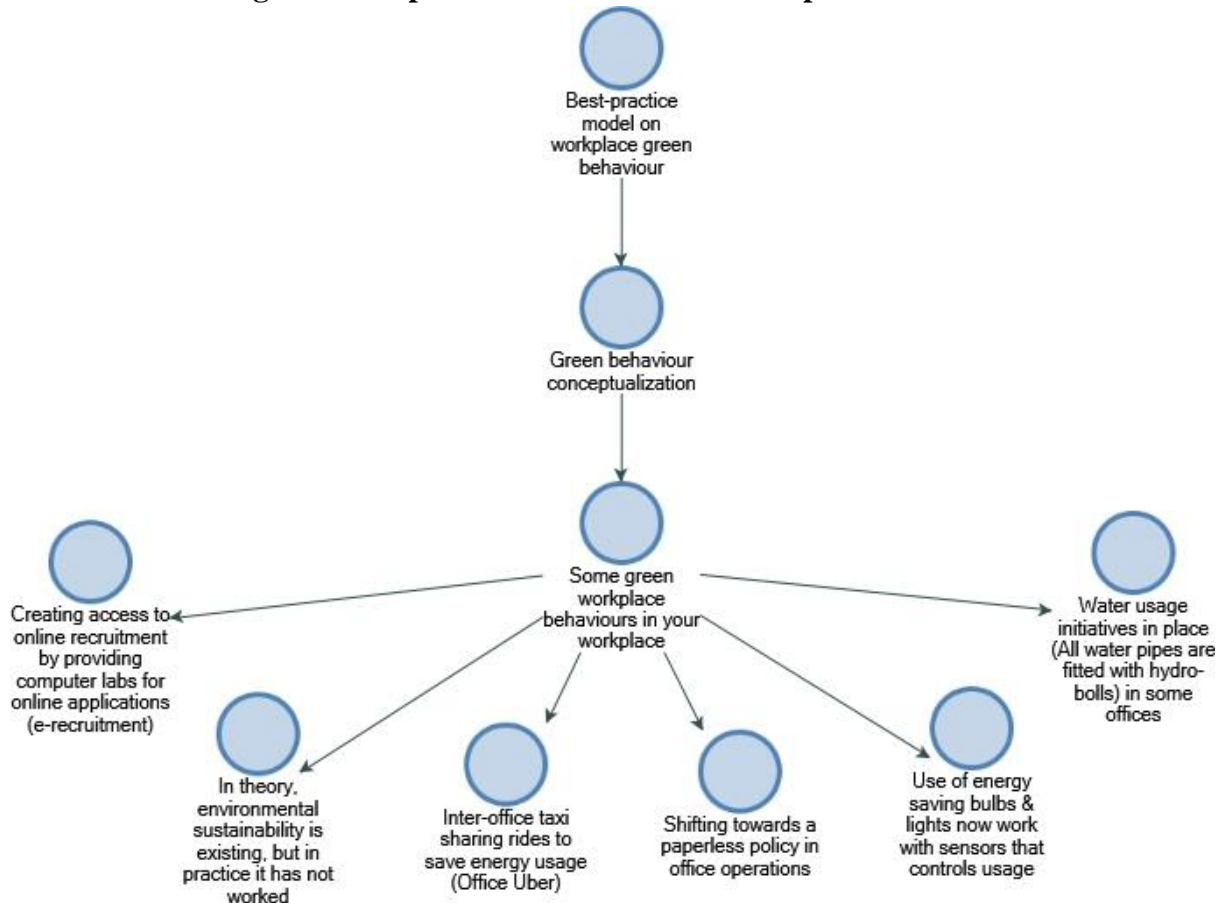
Their perceptions range from: “*Adopting a change management behaviour towards an environmentally sustainable goal*”, “*move towards a paperless environment*”, “*need to engineer our work process (such as automation)*” and “*safeguarding the environment*”.

The results show that environmental sustainability is all about caring and re-engineering how things are done in consideration of the environment. These results show the participants have a selective idea of what green HRM means for them at their workplace.

Some just identify with an aspect, saying “*operating a paperless environment*”, or “*just automating our operations*”.

This result indicates respondents were knowledgeable on GHRM. There is a mix-up of perceptions of the concept of environmental sustainability in general and its practice with HRM functions.

#### 4.5.1.2. List some green workplace behaviours at the workplace



**Figure 4.14. Participants listing of some workplace green behaviours**

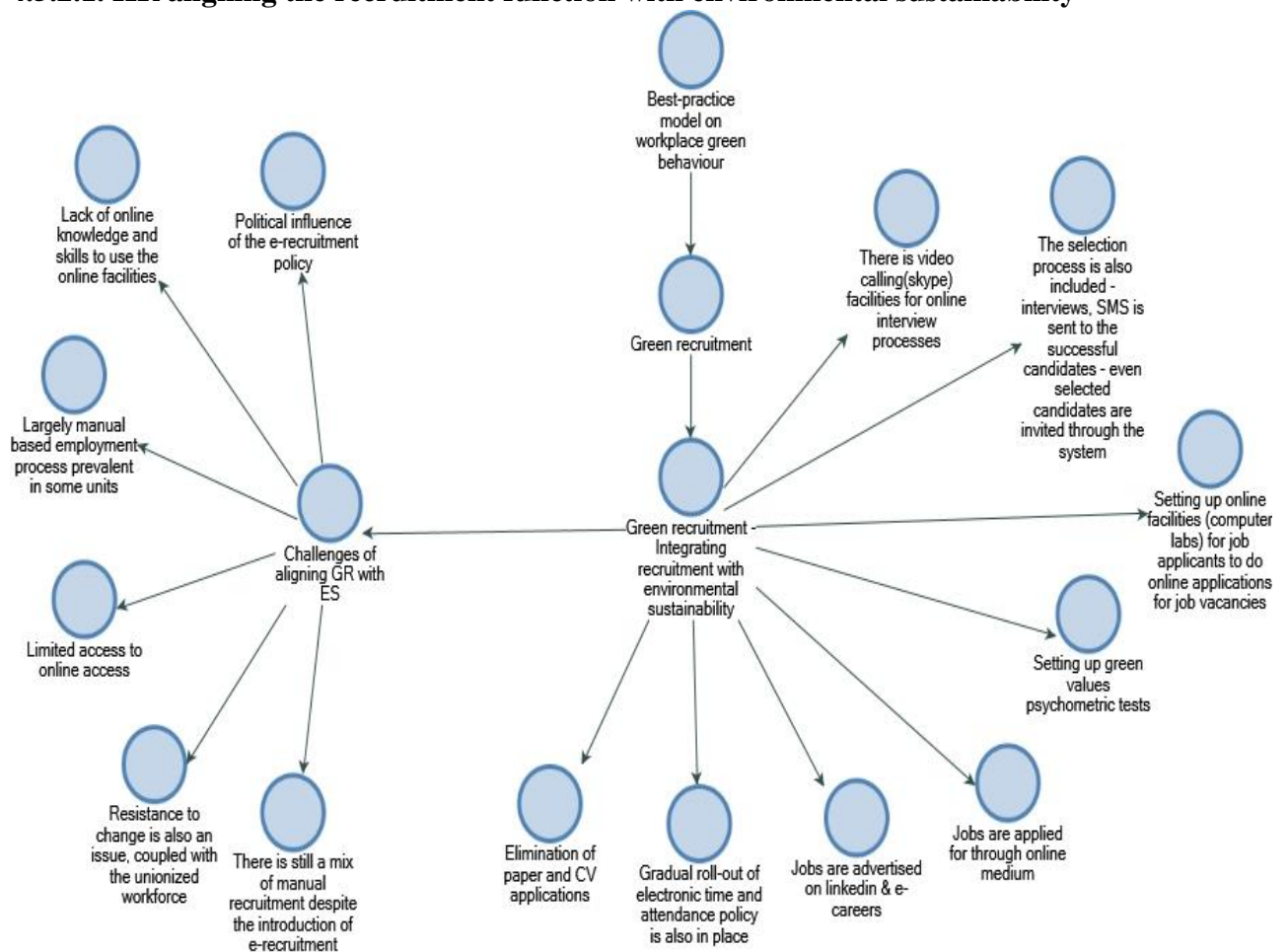
Figure 4.14 indicate participants listing of some of the green workplace behaviours that are being practised at their workplace.

The green workplace behaviours listed include: “*creating access to online recruitment by providing computer labs for online applications (e-recruitment)*”, “*inter-office taxi (i.e. sharing of rides to save energy usage (office-uber)*”, “*a slow, gradual shift towards a paperless policy in office operations*”, “*use of energy-saving bulbs & lights now work with sensors that control usage*”, “*water usage initiatives are in place (all water pipes are fitted with hydro-bolls) in some offices*”.

The above findings indicate there are some environmental sustainability initiatives already in place at eThekweni municipality. However, looking in terms of actual green HRM practices, “e-recruitment”, seems to be gradually taking shape. One of the participants also affirmed that the practice of environmental sustainability is still low, quoting that “in theory, environmental sustainability is existing, but in practice, it has not worked”.

#### 4.5.2 Green recruitment (GR)

##### 4.5.2.1. HR aligning the recruitment function with environmental sustainability



**Figure 4.15. Participants list the forms of green recruitment in place at eThekweni municipality & some challenges during alignment**

The above figure shows how recruitment was integrated with environmental sustainability at the municipality and the challenges that comes with its implementation.

The below are the listed forms of green recruitment: “There is video calling (skype facilities in place) for online interview process”, “elimination of paper and CV applications, the gradual

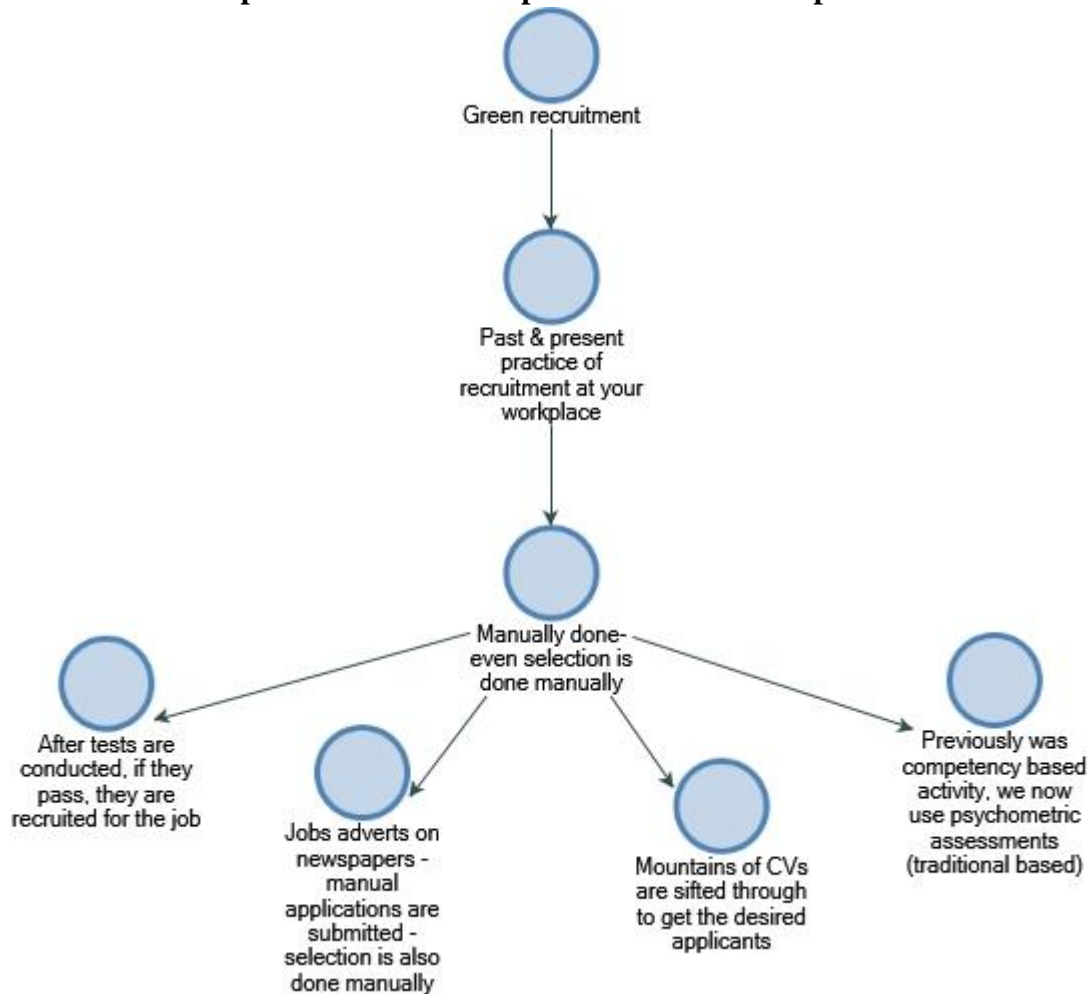
*roll-out of electronic time and attendance policy is also in place”, “jobs are advertised on both LinkedIn and e-careers”, “jobs are now being applied for through online mediums”, “setting up of green values through the psychometric tests”, “putting place online facilities (such as computer labs)” “for job applicants to make online applications for jobs and the selection process is also included in our new system”, “this also automatically sends out messages to successful staff through an SMS system”.*

These findings further indicate that there is a gradual roll-out of some green HRM initiatives, particularly e-recruitment initiative.

These gradual roll-out is presently being faced with some distinct challenges, which range from, *“political influence of the e-recruitment policy”, “lack of online knowledge and skills to use the online facilities”, “some units still make use of manual recruitment processes”, “access to online mediums is still limited to some staff”, “unionization of the workforce and their resistance to change” and “the large mix of manual processes, despite the introduction of the e-recruitment options”.*

Until the above challenges are resolved through management support inclusive strategies, green recruitment implementation may not be successful at eThekwini municipality.

#### 4.5.2.2. Past and present recruitment processes at the workplace



**Figure 4.16. Participants enumerate the current recruitment practice(s) in place at eThekwini municipality**

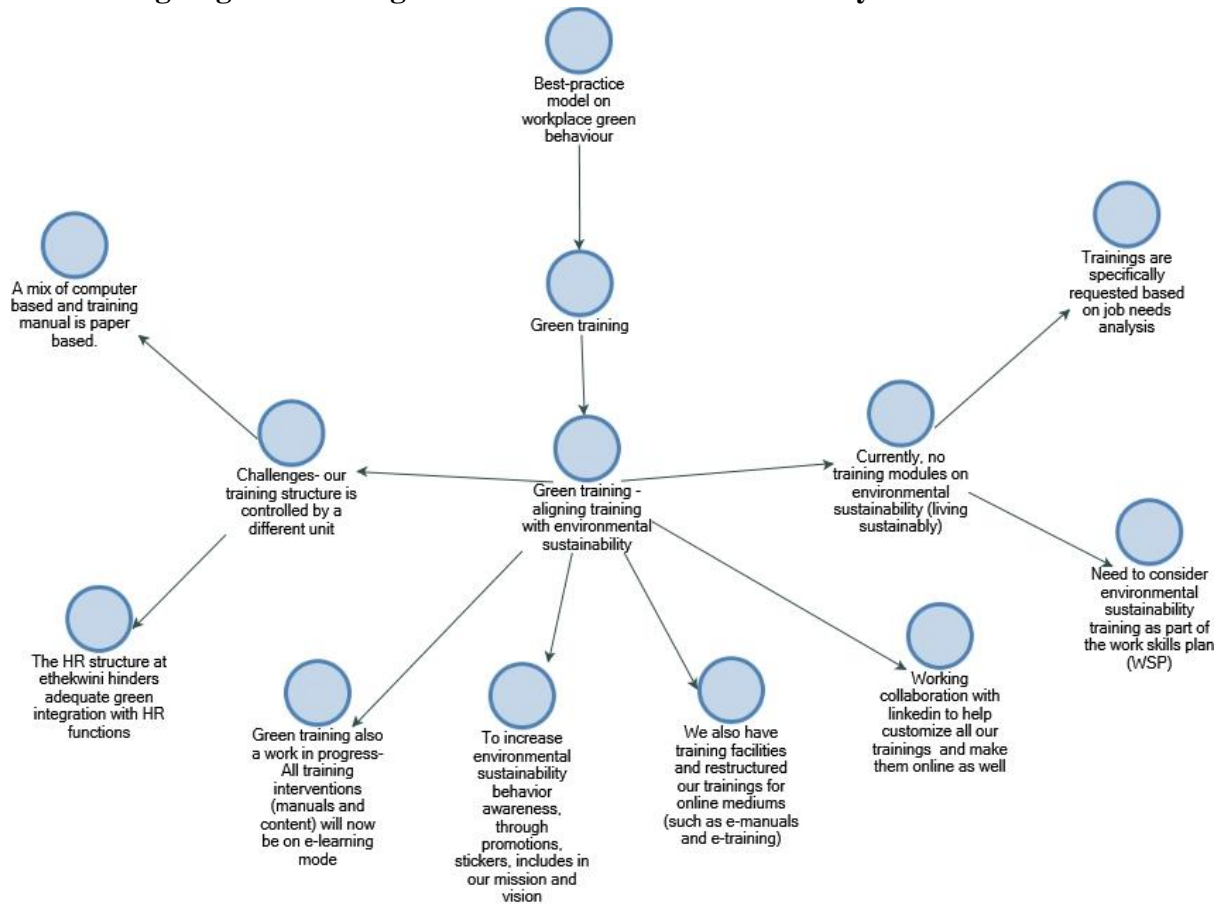
The figure above revealed the present recruitment practices still in use at eThekwini municipality.

These practices include, “*job adverts on newspapers, the manual application is submitted- the selection is also done manually*” (still in practice), “*mountain of CVs is sifted through to get the desired applicants*”, “*previously competency-based activities, but presently now there is the use of psychometric assessments*”.

The old recruitment practice was manually based, which make use lots of paper for applications. However, presently information technology (I.T.) has gradually been creeping in and changing how the practice is being done. Although, papers are still being used, there is a mix of paper and technology now, these also include the introduction of psychometric tests which was previously competency test activities.

### 4.5.3. Green training (GTRA)

#### 4.5.3.1. Aligning HR training with environmental sustainability



**Figure 4.17. Participant’s highlight current green training practices at eThekwini municipality**

The above findings include current green training practices and some operational challenges faced during alignment with environmental sustainability.

The challenges include, “green training is a work in progress- all training interventions (manuals and contents) going forward will now be on e-learning mode”. “To increase environmental sustainability behaviour awareness through promotion stickers, also to include in our mission and vision.”, “Provision of training facilities, also restructured our training for online mediums (such as e-manuals and e-training).”, “Working collaboration with linkedIn to help customize all our training and make them online as well”.

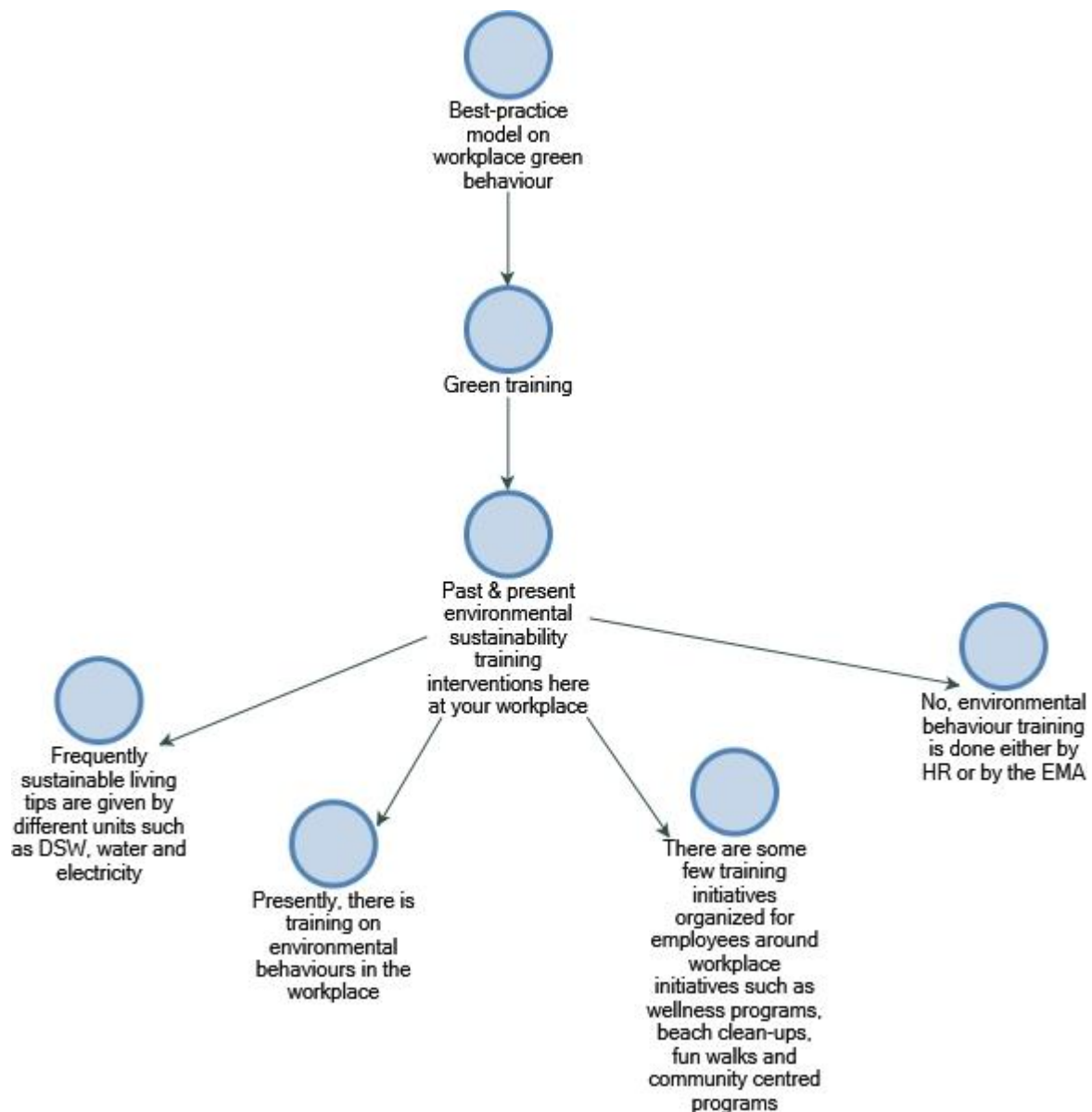
Some of the participants also mentioned two challenges hindering the alignment of training with environmental sustainability (green training) at eThekwini municipality.

These challenges include: “*the HR structure at eThekweni hinders adequate green integration with HR functions*” because the training function is handled by another unit the EMA. “*A mix of computer-based, and training manuals are paper-based*”.

One-participant also noted that there are currently “*no training modules on environmental sustainability (to living sustainability)*”.

Some of the participants that stated that their “*training were specifically requested based on their job needs analysis*”, others even showed concern that there is a “*need to start considering environmental sustainability training as part of work skills plan (WSP)*”.

#### **4.5.3.2. Employee workplace perceptions on past and present environmental sustainability training interventions at the workplace**



**Figure 4.18. Participants highlights past and present green training practices interventions at eThekwini municipality**

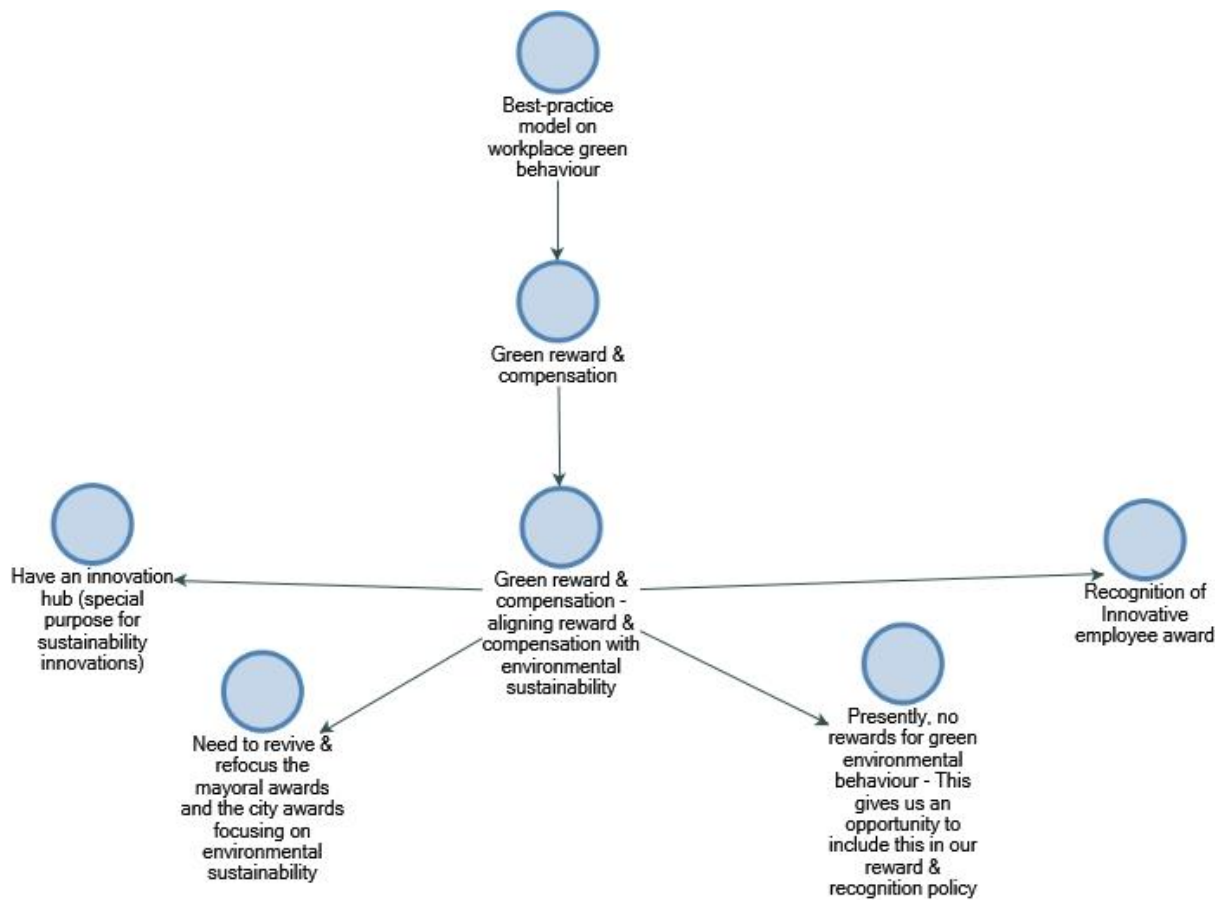
The findings above indicate that green training initiatives are limited at eThekwini municipalities.

These are evident through these quotes: “*Frequently sustainable living tips are given by different units such as DSW, water and electricity*”, “*presently there is no training on environmental behaviours in the workplace*” however, *there are some few environmental sustainability initiatives organized for employees around workplace. Initiatives such as wellness programs, beach clean-ups, fun walks and community centred programs*”, and “*no environmental behaviour training is done either by HR or by the EMA*”.

From the participant’s responses, one could deduce that there is no deliberate green training structure on the ground meant for green training. Also, their responses indicate they were just trying to fit-in any available such green initiatives as a green training intervention.

#### 4.5.4 Green reward & compensation (GR&C)

##### 4.5.4.1. Aligning reward & compensation with environmental sustainability at the workplace



**Figure 4.19. Participants lists how rewards & compensation is aligned with environmental sustainability at eThekweni municipality**

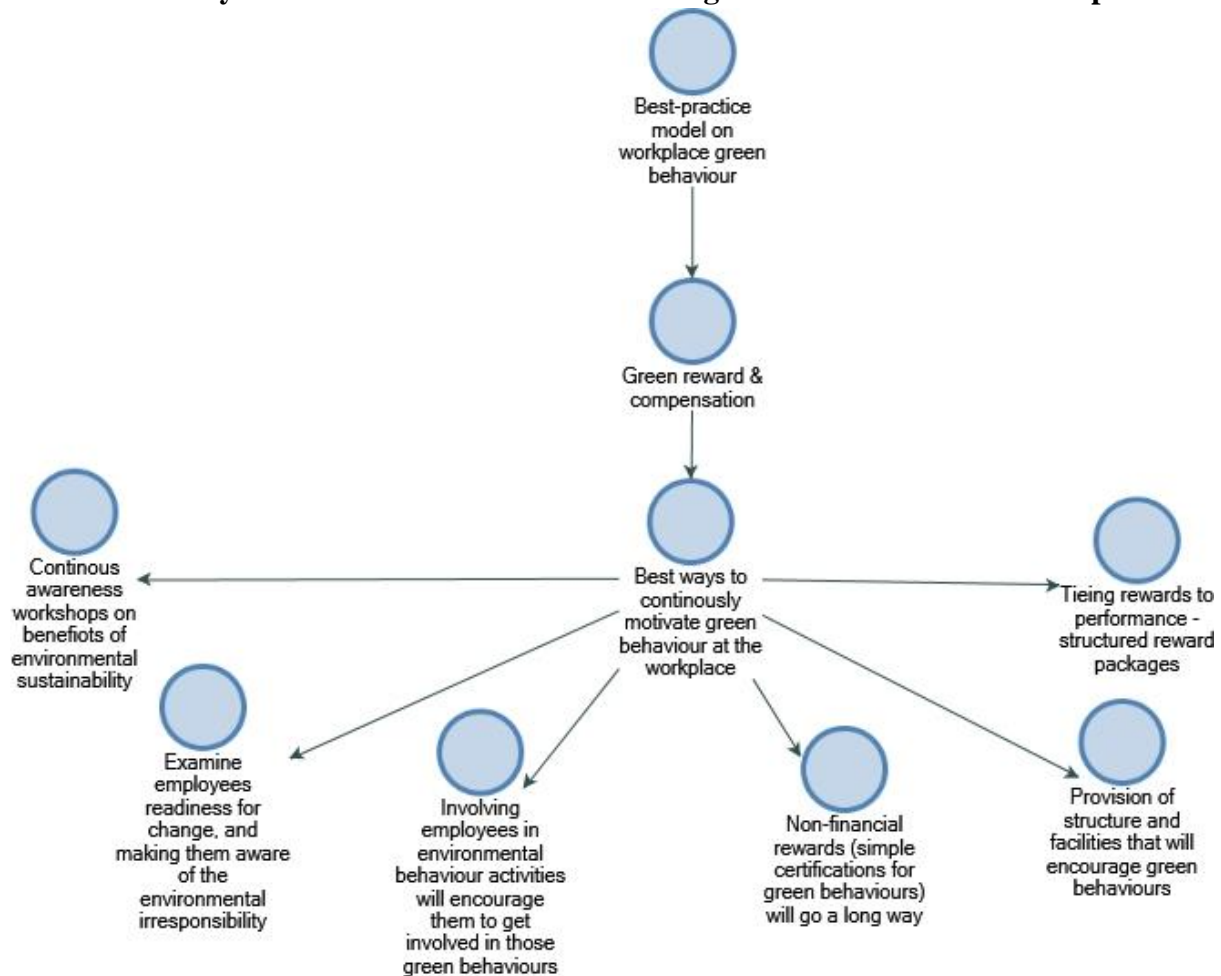
The findings above reveal that green reward and compensation is not a regular practice at eThekweni municipality.

Their responses include: *“have an innovation hub (special purpose for sustainability innovations), need to revive and refocus the mayoral awards and the city awards focusing on environmental sustainability (non-monetary rewards). Presently, there are no rewards (non-*

monetary rewards) for green environmental behaviour. These allows us to include this in our reward and recognition policy and recognition of innovative employee award”.

From the above one can conclude that green behaviours were not rewarded before. However, now the HR managers are beginning to see the need to start refocusing towards rewarding green behaviours to encourage environmental sustainability behaviours.

#### 4.5.4.2. Best ways for the continuous motivation of green behaviour at the workplace



**Figure 4.20. Participants list the best ways to motivate green behaviour at their workplace continuously**

The results highlight the several ways green behaviours can be motivated continuously at eThekweni municipality.

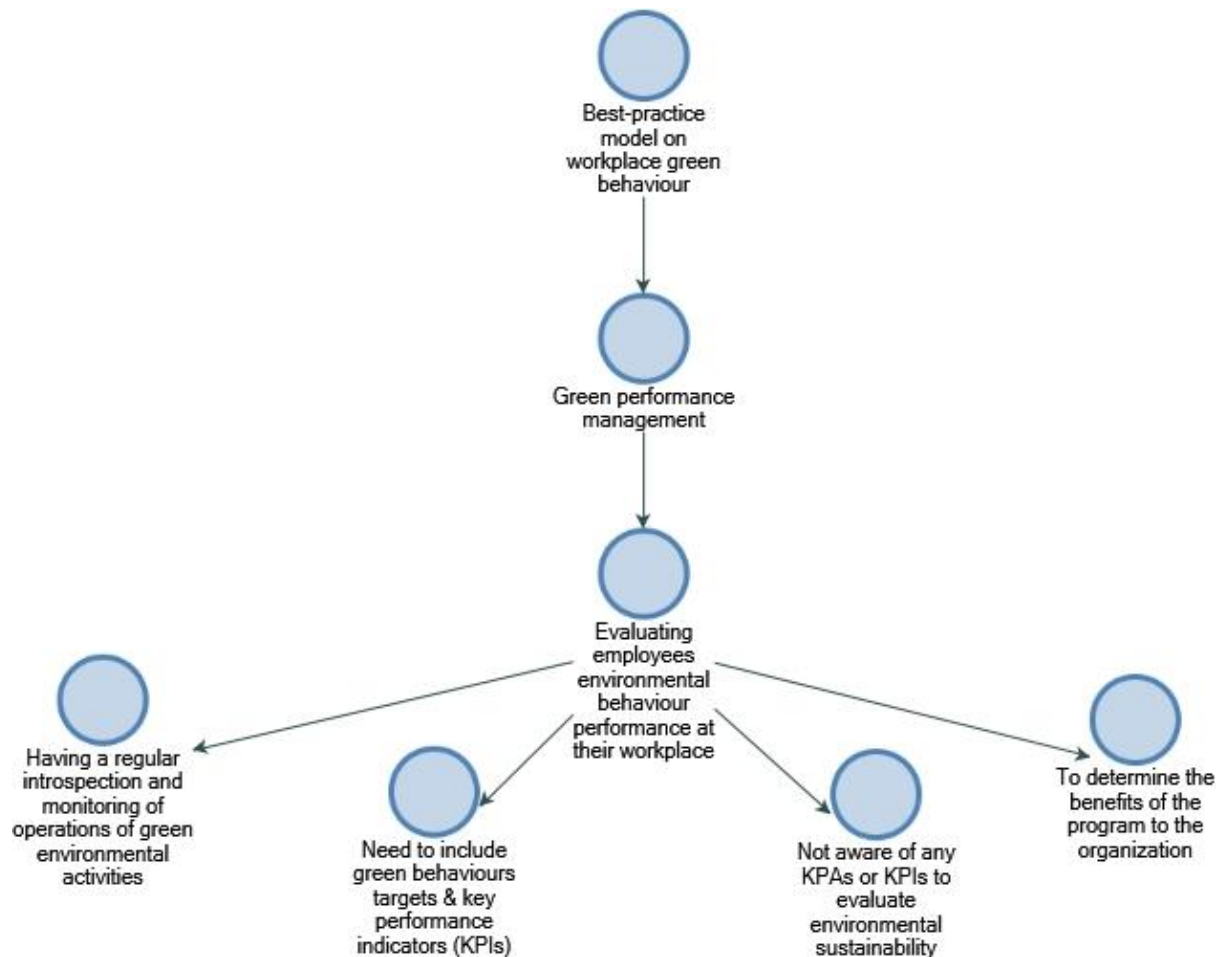
The response includes: “*continuous awareness workshops on the benefits of environmental sustainability, examine employees readiness for change and making them aware of their environmental responsibility, involving employees in environmental, behavioural activities will*

*encourage them to get involved in those green behaviours, non-financial rewards (simple certification for green behaviours) will go a long way, provision of structure and facilities that will encourage green behaviours, and tying rewards to performance-structured rewards packages”.*

The responses outline different ways indicating that non-monetary or non-financial rewards are the best option for continuous motivation for green behaviour at eThekwini municipality.

#### 4.5.5 Green performance management (GPM)

##### 4.5.5.1. Measuring & evaluating environmental behaviour performance at the workplace



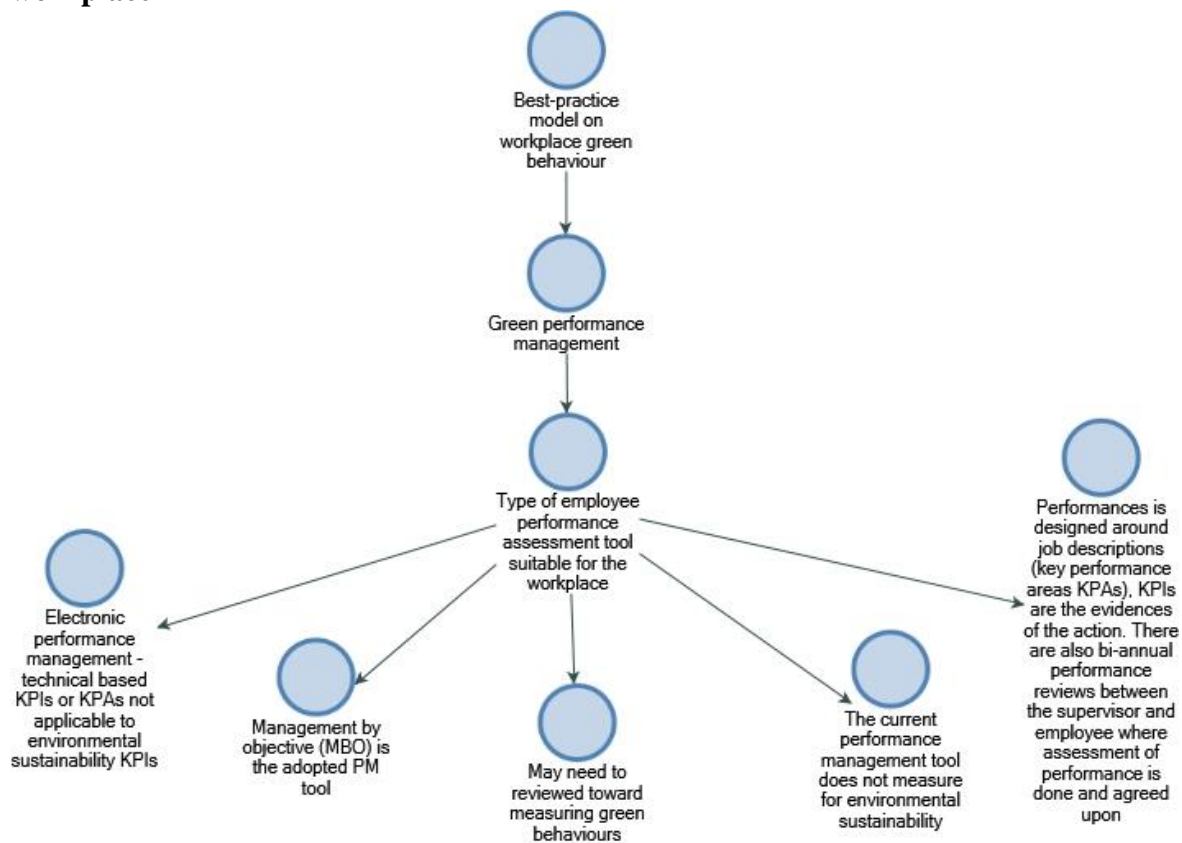
**Figure 4.21. Participant’s perspective on evaluating employee’s environmental performance at the workplace**

Participants affirmed that environmental performance was not among their performance areas or performance indicators; they, however, look to the future where it can be included as part of their key performance areas.

The perspectives include: *“having a regular introspection and monitoring of operations of green environmental activities, need to include green behaviours targets and key performance indicators (KPIs). Not aware of any KPIs or KPAs used in evaluating environmental sustainability and or benefits of the program to the organization”*.

The findings indicate there is no present environmental sustainability indicator in the performance appraisal used at eThekwini municipality. They also added that it needs to be included in their performance appraisals before the green behaviour initiatives can be useful.

#### 4.5.5.2. Type of employee performance environmental assessment tool is used at the workplace



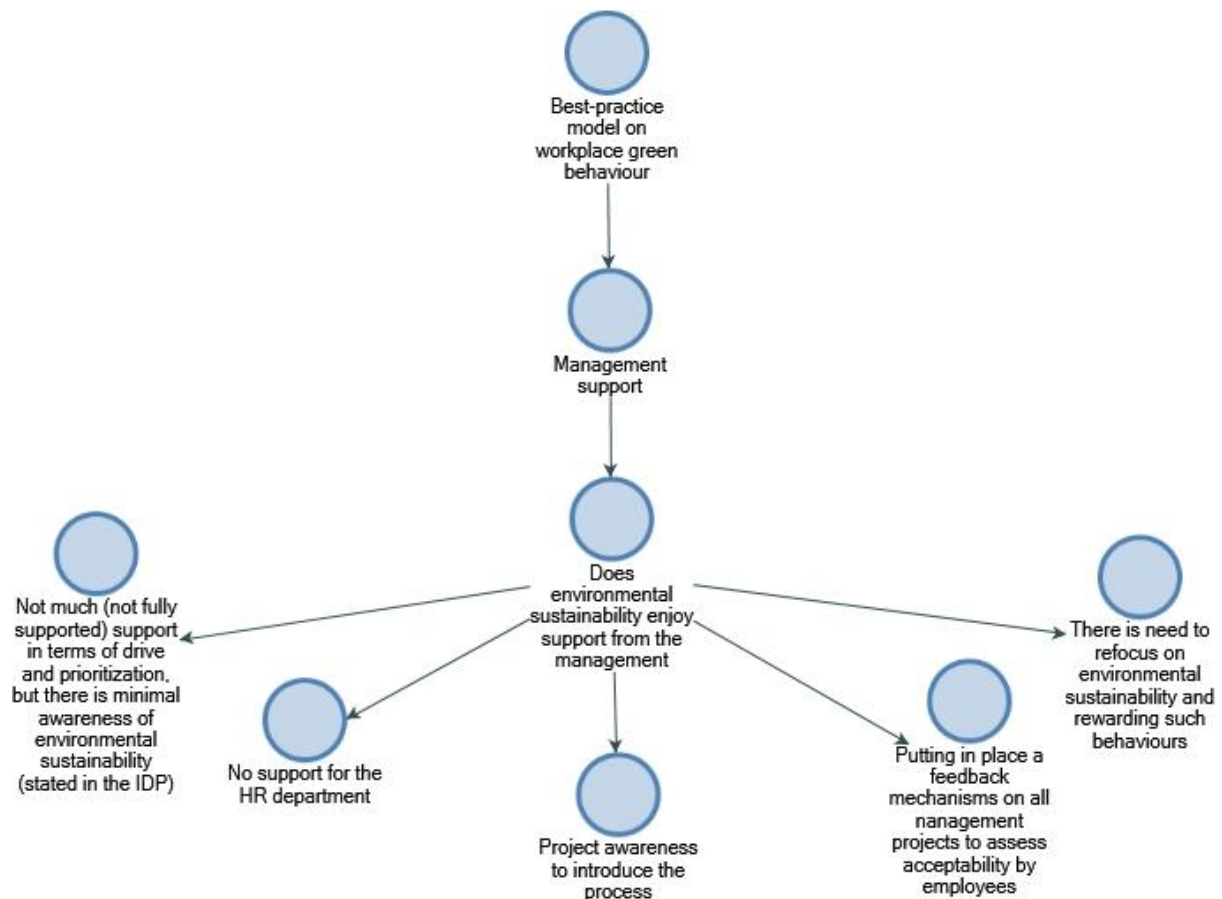
**Figure 4.22. Participant’s response on the type of employee performance assessment tool used at eThekwini municipality**

The participants gave the following responses: “*electronic performance management-technical based on KPIs or KPAs not applicable to environmental sustainability KPIs. Management by objective (MBO) is the adopted PM tool, may need to be reviewed toward measuring green behaviours. The current performance management tool does not measure for environmental sustainability, and performances are designed around job descriptions (key performance areas KPAs). KPIs are pieces of evidence of the action. There are bi-annual performance reviews between the supervisor and employee where the assessment of performance is done and agreed upon*”.

The results indicate that the eThekweni municipality adopts the management by objective (MBO) performance management system. The MBO presently does not consider green workplace behaviours. Participants also expressed their support, if the green workplace behaviour is added either as a workplace ‘KPA’ or ‘KPI’.

#### 4.5.6 Management support (MS)

##### 4.5.6.1. Environmental sustainability support coming from management



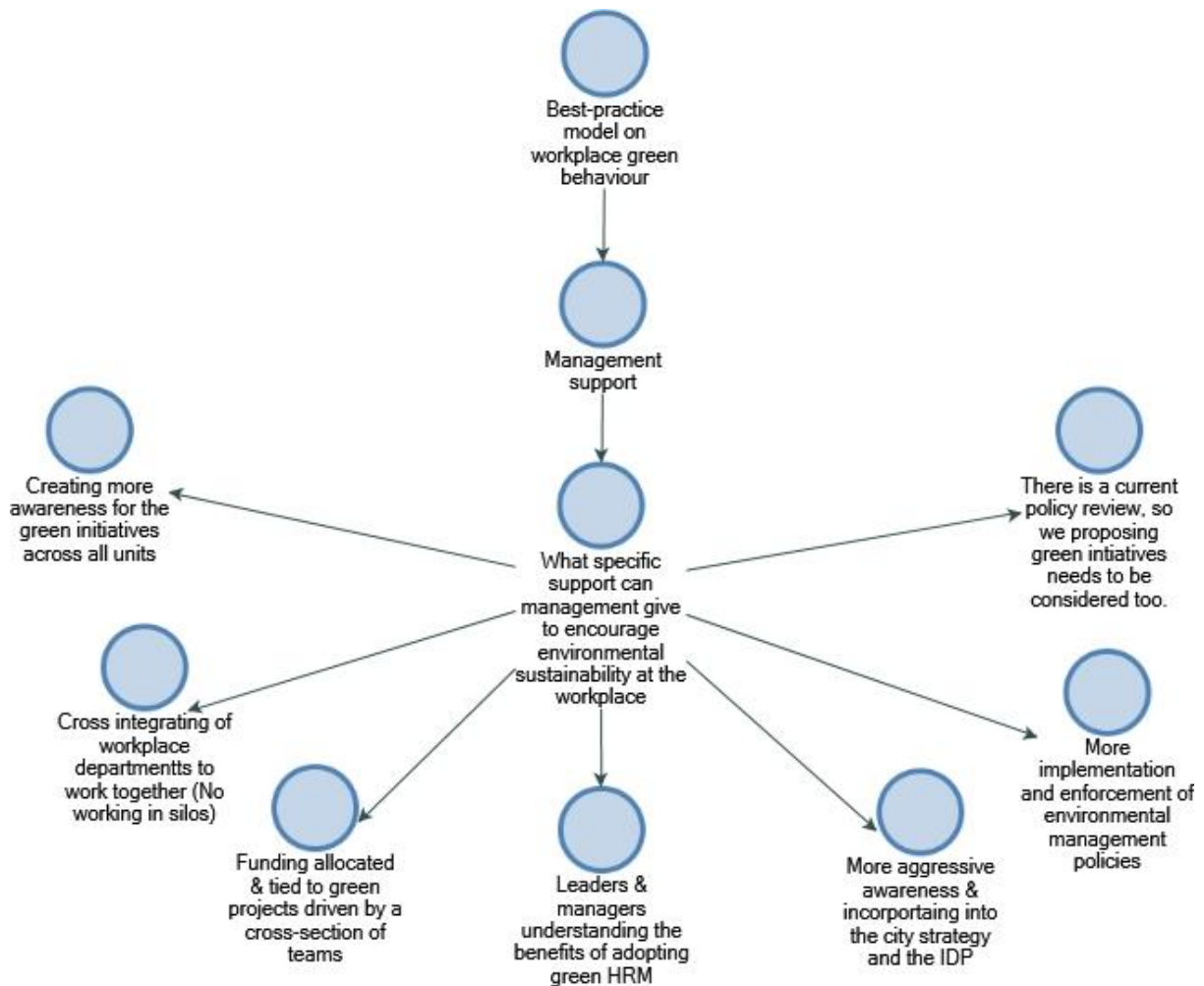
#### **Figure 4.23. Participant's response on if there is enough management support for environmental sustainability by management**

The participants were sceptical as they felt there was not much management support for environmental sustainability.

Below are their submissions: *“not much (not fully supported) support in terms of drive and prioritization, but there is minimal awareness of environmental sustainability (as stated in the IDP), no support for the HR department, project awareness to introduce the process, putting in place a feedback mechanism on all management projects to assess acceptability by employees, and a need to refocus on environmental sustainability and rewarding such behaviours”*.

The findings show that although environmental sustainability was stated in the municipality's IDP, the management has not been able to match it with actions. The management support, according to the participants, is not encouraging.

#### **4.5.6.2. Type of management support given to encourage green behaviour at the workplace**



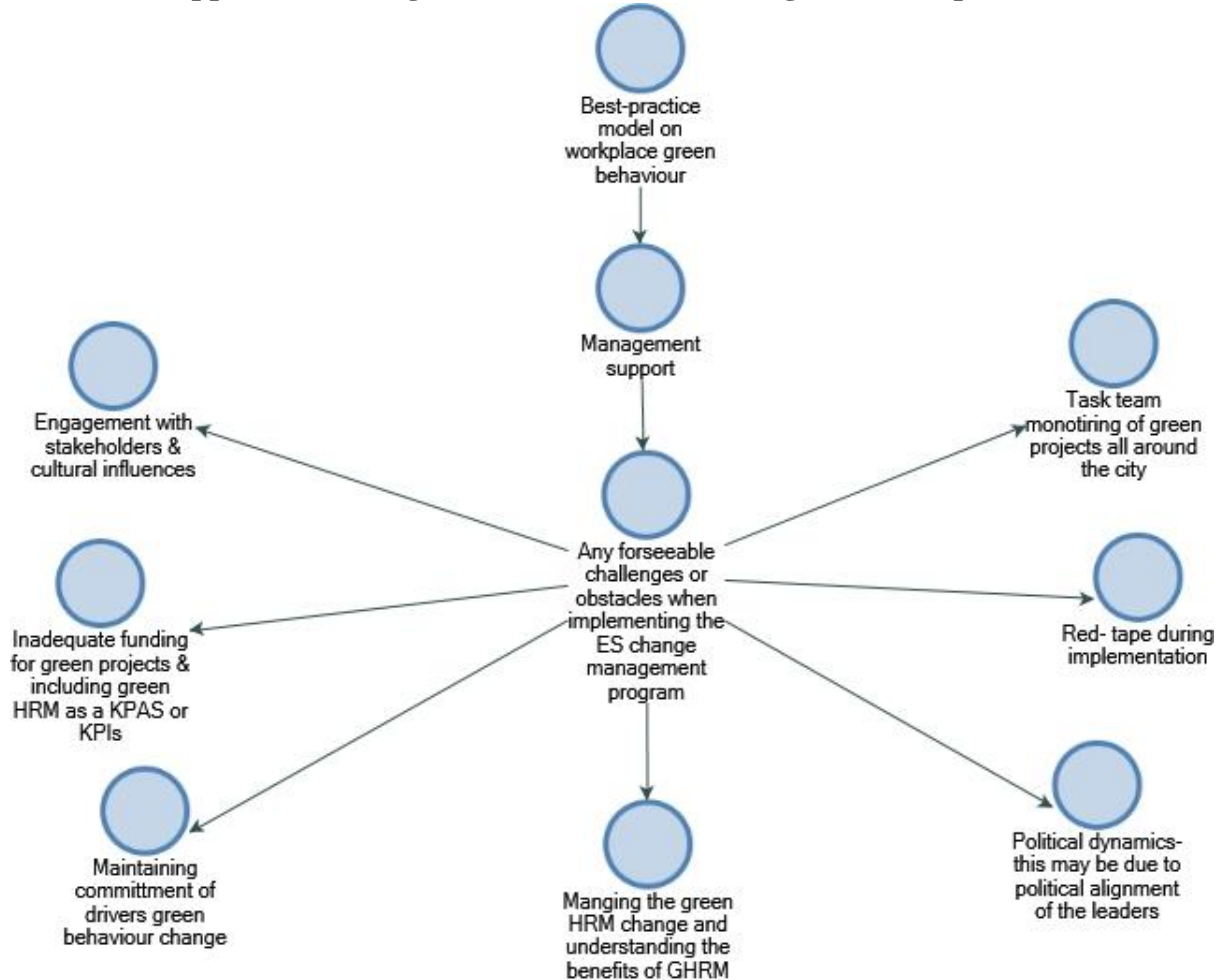
**Figure 4.24. Participant’s response to what specific management support can be given to encourage environmental sustainability at eThekwini municipality**

The question sought to know what kind of support can be provided to encourage green behaviour at eThekwini municipality.

Their responses are as follows: “*creating more awareness for the green initiatives across all units, cross integrating of workplace department to work together (no working in silos), funding allocated and tied to green projects driven by a cross-section of teams, leaders & managers understanding the benefits of adopting green HRM, more aggressive awareness and incorporating into the city strategy and the IDP, more implementation and enforcement of environmental management policies, and presently, there is a policy review, so we proposing green initiatives needs to be considered too*”.

The participants listed various ways green behaviour can be improved at the municipality. One of the ways is that constant aggressive campaigns and funding allocations for green projects should be tied to performance also.

#### 4.5.6.3. The apparent challenges or obstacles faced during GHRM implementation



**Figure 4.25. Participant’s perspectives on any unforeseeable challenges or obstacles that may hinder ES implementation at eThekweni municipality**

Figure 4.25 showed the participants as some of the projected challenges that may come with the project implementation.

They include: “*engagement with stakeholders and cultural influences, inadequate funding for green projects and including green HRM as a KPAs or KPIs, maintaining the commitment of drivers green behaviour change, managing the green HRM change process and the*

*understanding the benefits of GHRM, political dynamics, this may be due to political alignment of the leaders, red-tape during implementation, and task team monitoring of green projects all around the city”.*

The following above were some of the projected challenges that may arise during the implementation of GHRM at eThekweni municipality.

#### **4.6. CHAPTER SUMMARY**

This chapter focused on the data analysis and presentation of the quantitative and qualitative data collected via a structured questionnaire and an in-depth interview.

For the quantitative section: the demographic data collected were analysed using descriptive statistics. A couple of inferential statistics was used in analysing the research questions or objectives; exploratory factor analysis test, normality test which included the Shapiro-Wilk test, correlation tests (both Pearson & Spearman’s ranking test) and regression test.

The findings showed that all identified GHRM practices or functions had a different level of influence, either weak, moderate, or firm. At the same time, all were positively significant on green workplace behaviour, and there were varying degrees of relationships and influence between the variables.

As regards the qualitative section, the findings showed that although HR managers have a good knowledge of environmental sustainability, there was a gap in knowledge, its practices and implementation of actual green HRM practices at eThekweni municipality. Therefore, there was a need for a sustainable model to support its implementation at the municipality.

The next chapter discusses findings from both qualitative and quantitative sections with supporting works of literature, as well as the comparison on both results.

## **CHAPTER FIVE**

### **DISCUSSION OF FINDINGS**

#### **5.1 INTRODUCTION**

This chapter presents a discussion of the findings presented in the previous chapter on data analysis and interpretation. This chapter is aimed at further explaining the results received from the data analysis with pieces of literature on the research objectives. The main aim of this research study is to develop a green HRM best-practice model on workplace green behaviour for employees of eThekweni municipality in Durban South Africa. Also, an explanation was done to the extent to which the study's findings align with the proposed conceptual model aimed at developing a green HRM best-practice model of workplace behaviour.

The discussion of findings was useful in explaining if the research objectives and research questions were answered adequately. Also, discussion of findings showed how previous studies and theories allude to or contradict the research objectives. The formulated research objectives also put into context the relationships between green workplace behaviours and HRM employees of organizations. Other discussions in this chapter were the influences of green recruitment with green behaviours of employees. The discussion also included the effects of green training programs on employee pro-environmental behaviours, the influence of the most effective type of rewards on employee pro-environmental behaviour. Moreover, this discussion also includes the influence of environmentally sustainable key performance areas on employee behaviours and the influence of managerial support on green workplace behaviours. The discussion also explains the result of the best-practice conceptual model.

##### **5.2.1. Discussion with the demographic data of the study**

The demographic data discussion involves showing the relationship between gender findings, educational history findings, type of appointment findings, designation and department findings, work experience and information technology skills findings with respect to the respondents and the research objectives of the study. If the demographic data had any influence on the outcome of the findings.

### **5.2.1.1. Gender findings**

There was a higher number of female respondents among HR officers among the respondents, the female respondents had 34, which amounts to 51.5%, while the male respondents had just 32, amounting to 48.5%. This result showed a high number of female respondents among HR officers at eThekweni municipality. This result may indicate a higher number of women employees at eThekweni municipal.

### **5.2.1.2. Educational qualifications**

The findings showed that a bachelor's degree had the highest number of respondents at 22 persons equivalent of 33%, followed by a master's degree, honours degree and diploma certificates. The PhD holders and matric holders had the lowest numbers of respondents. The result indicated that the HR officers at eThekweni municipality were highly educated.

### **5.2.1.3. Types of appointment**

The findings show that the permanent staff had the highest percentage with 46.97%, which amounts to 31 persons, the contract appointments had 24.24% with 16 persons. On the other hand, temporary appointments had the lowest number, with nine persons and 13.64%. Therefore, these figures show that 50% of the HR staff at eThekweni municipality are permanent staff and may likely be involved in green HRM.

### **5.2.1.4. Designation and department**

There are several departments at eThekweni municipality, even at the HR department. The departments under the HR department include: HR core with 19 (28.79%), HR talent management 5 (7.58%), eThekweni municipality academy (EMA) had 11 (16.67%), the skills development department had nine respondents with a percentage of (13.64%), organisational development and change management (ODCM) had eight respondents with (12.12%). Policy and development had ten respondents with 15.15%, and I.T. also had four respondents and with a percentage of 6.06%. Based on these results, HR core, the EMA and policy and development department had the highest respondents, respectively.

#### **5.2.1.5. Work experience**

The findings for the work experience distribution indicates that employees with 0-5 years' experience had the highest number of respondents with 38 or 57.58%, while respondents with 15-20 years' experience were the lowest with three persons and percentage figures at 4.55%.

#### **5.2.1.6. Information technology skills**

I.T. proficiency can also influence the green employee behaviours. The findings, therefore, indicate that possession of I.T. skills. Respondents with a good knowledge of I.T skills had the highest number of respondents with 26 and 39.39%, while there was a joint lowest with both few I.T skills and highly skilled respondents with I.T skills with nine respondents and 13.64%.

### **5.2.2. Discussion concerning the research questions and objectives of this study**

This section will focus mainly on discussing the findings with the research objectives of the study. The research findings are presented below from both quantitative and qualitative data analysis; this is followed by past literature studies guiding the discussion.

#### **5.2.2.1. The influence of green recruitment on employees' green behaviour**

This research question was analysed using both quantitative and qualitative data analysis process methods. The findings in response to this question were gotten from both quantitative and qualitative test analysis.

The quantitative data analysis result was generated through the spearman's correlation coefficient data analysis. The findings revealed that green recruitment not only was weak but also had a positive relationship. The results can be interpreted as green recruitment have an influence (although a weak influence) on employee's green behaviour at eThekwini municipality. This weak influence may be a consequence of the partial practice of e-recruitment, while other green recruitment practices were not in place at eThekwini municipality. The other recruitment elements not in place or not in use at eThekwini include green interviews sessions using environmental-related values to job applicants, conducting green assessment psychometric tests, and green organizational projects. It also includes a public display to attain a green reputation were not in practice. So, therefore, the non-existence of all this may rightly influence the weakness of employee green behaviour at eThekwini municipality.

On the other hand, the qualitative data analysis of the interview question indicated that the existing recruitment structures at eThekweni municipality was not green inclined enough or had no grain of environmental sustainability. The findings were in consonance with all the interviewer's perspectives about the existing recruitment structures at eThekweni municipality, where they stated that the current recruitment practices were not precisely aligned to green workplace behaviour. However, they were quick to point out that there is a gradual adoption of e-recruitment practices (a sub-set) of green recruitment at the workplace. The adoption of e-recruitment was partially implemented, as there was some resistance to the full adoption in the organization. The responses to the other interview question on green recruitment also buttressed further the manual process of recruitment currently in practice at the municipality. According to the findings, the hiring process still allows and accept manual CV submissions and face-to-face interview sessions are still very much in practice.

The above submissions were in contrast with the Masri & Jaaron (2017) findings that showed that green recruitment was the most influential amongst the GHRM practices tested among some selected manufacturing companies in Palestine. Other scholars such as (Jabbour, 2011; Oaya *et al.*, 2017; Aranganatha, 2018; Astuti, 2018; Jia *et al.*, 2018), acknowledged the increased and positive influence of green recruitment on green workplace behaviours.

Anderton & Jack's (2011), the study asserted that some job applicants (graduates) make their job decisions and interest based on how the firm influence their environment. This result corroborates with Oaya *et al.*, (2017) & Thakur (2020), these studies indicated the green recruitment processes and redesigned work operations helped organizations in hiring competent green employees that influenced green workplace behaviour. Besides, Tang *et al.*, (2017), also asserted the importance of the green recruitment component to GHRM. They also explained further in detail, that green recruitment encompasses three concepts: green awareness, green employer branding and green criteria.

Green awareness talks about checking to see if the prospective employee is aware of his or her environment. The awareness can be done by developing a green psychometric assessment tool. The assessment tool can be used to ascertain if the job applicant possesses any green trait, values agreeableness, which can also influence a positive environmental performance by employees of organizations (Tang *et al.*, 2017; Jia *et al.*, 2018).

The second green recruitment component is employer branding; this is a situation whereby the organization or recruiting firm maintains an environmentally friendly reputation in order to

attract new employees (Ehnert, 2014). According to a Willness & Jones (2013) study, they were able to prove those job applicants consider several criteria's aside, employer reputations such as being environmentally friendly, employee centred, a learning-focused organization or conscious organizations when making job decisions. In the same vein, Jabbour (2011) & Aranganathan (2018), also affirmed the above assertion by Willness & Jones (2013).

The third and last green recruitment component is referred to as the green criteria. This concept involves having a set of criteria or a benchmark for employing new employees (Renwick *et al.*, 2013; Jia *et al.*, 2018). Adopting this recruitment component requires organizations to emphasize environmental aspects in their job tasks, job designs and employee specification. Ones & Dilchert (2013), also argued that some organizations do recruit based on green attitudes and tasks of their job applicants, while some other organizations indicated smooth recruitment due to their adoption of voluntary environmental standards. Green recruitment should include posing environmental questions, values or beliefs to the job applicants. Another component of green recruitment is online recruitment or e-recruitment. Online recruitment is a process of using internet technology or the world wide web to attract highly talented job candidates, screening of suitable resumes and sorting of the applications received (Las & Das, 2016; Siska & Lenny, 2019). E-recruitment helps reduces pollution, wastes, improves processing times, conservation of energy and helps in reducing costs to both parties (Diana, 2015; Siska & Lenny, 2019).

In light of the above findings, the result is consistent in stating that green recruitment undoubtedly influences employee workplace behaviour. However, since there is a partial application of e-recruitment or green recruitment component at eThekwini municipality, there is a, therefore, a weak influence (positive significance) on employee's behaviour at eThekwini (the workplace).

#### **5.2.2.2. How green training interventions influence employee pro-environmental outcomes**

For this research question, the quantitative analysis results derived was also from the Spearman's ranking correlation test; the result showed a high and robust correlation between green training and green workplace behaviour. It indicated there was no negative correlation, meaning that green training influences green workplace behaviour positively at eThekwini municipality. Sakaris *et al.* (2010), also confirmed with the findings, by stating that green

training acts as a mediating effect and impact on the organization. Zhang *et al.*, (2019) & Tang *et al.*, (2018), both alluded by describing environmental training as a way of instilling a green culture where employees feel accountable for environmental sustainability outcomes, using human resources management practices in order to achieve the organization's environmental goals. Several scholars such as (Saeed *et al.*, 2019; Dumont *et al.*, 2017; Jabbour *et al.*, 2010, 2011; Jackson *et al.*, 2011; Arulrajah *et al.*, 2015) have all alluded to the positive impact or influence of green training on employee's behaviours. The low implementation findings are also in congruence with Karande & Bihade (2018) study, that also had a low-level implementation of green training at the workplace. The study recommended a deliberate targeting of employees to influence employees' behaviours in organizations.

The qualitative data analysis result for this research question informs us of the current state of green training: either in the form of current structures or processes for better implementation at eThekwini municipality is lacking.

#### **a.) Lack of green training infrastructure**

According to the findings, green training interventions were not in practice or use. Respondents were of the view that *“green training is a work in progress; currently, all training interventions such as manuals and contents will be moved to the e-learning medium”*. Other respondents indicated their interest to *“increase sustainable environmental behaviour through aggressive awareness promotions, stickers and their prompt inclusion in the mission and vision of organizations”*. They also pointed out that there is a *“working collaboration with LinkedIn to help customize all our training and make them online as well”*.

However, it was also pointed out that there are currently no modules on environmental sustainability (living sustainably) at eThekwini municipality. Two reasons were given for this: *“training was specifically requested based on the job need analysis, and a need to include environmental sustainability training as part of the workplace skills plan (WSP)”*.

#### **b.) Challenges of green training**

There were also some persistent challenges common with public institutions like eThekwini municipality. The challenges include obstructing alignment of training with environmental sustainability, such as *“a mix of computer-based, and training manual is paper-based, and the HR structure at eThekwini municipality hinders adequate green integration with HR functions”*.

The above findings from the qualitative data analysis also justify the non-existence of green training structures and the challenges facing its adoption by the municipality.

These qualitative results also support the views of Jabbour (2013); Karande & Bihade (2018), which stated that challenges may occur or may not be successful if the green training interventions were not implemented well. Jackson *et al.*, (2011) & Renwick *et al.*, (2013), also alluded that training needs analysis of the workspace gives employees specific training interventions on energy efficiency, waste management, recycling, and development of interpersonal skills for the benefit of their organization. These training interventions were also advocated for by (Karande & Bihade, 2018).

Training practices were highly associated with improved performance and behaviour among employees, so with the focus on environmental sustainability with training practices come green training (Opatha, 2013; Jackson *et al.*, (2011); Renwick *et al.*, (2013) and the resultant effect will be felt on employee's behaviour at the organization. Dumont *et al.*, (2017) & Ones & Dilchert (2013), along with other scholars, added that employee behaviours could be changed via educational and motivational intervention that involves learning and development. Pinzone *et al.* (2016) & Parker (2011), also alludes that green training is a crucial factor when it comes to environmental sustainability. Dumont *et al.*, (2017) & Jackson (2012b), were of the view that training will be more effective when backed up with incentives, on-boarding, and socialization with environmental best practices.

### **5.2.2.3. To ascertain the most effective type of reward system in place to enhance good pro-environmental behaviour for the organization.**

The quantitative data analysis method used to analyse the research question was the descriptive and component matrix analysis. The aim was to identify which form of reward is most preferred by the employees at eThekwini municipality. The findings from the qualitative data analysis indicated that non-monetary reward packages were the most effective that may influence workplace behaviour at eThekwini municipality. The result was also corroborated with findings from the component matrix analysis, which held that non-financial compensation was more correlated with the respective loadings. Thus, it was more effective and believed to motivate employees at eThekwini municipality to engage in green workplace behaviours.

Furthermore, the qualitative data analysis results, further confirm that non-monetary reward may be the best option to motivate for green behaviours at eThekwini municipality. The following themes were generated from the interview sessions held with respondents helped to buttress the above result:

- Continuous awareness workshops on the benefits of environmental sustainability,

- Examine employee's readiness for change and making them aware of their environmental responsibility,
- Employee involvement in environmental, behavioural activities will encourage them to get involved in those green behaviours,
- Non-financial rewards, such as certification, awards and recognition for engaging in any form of green behaviours will go a long way,
- Provision of structure and facilities that will encourage green behaviours, and
- EThekwini municipality tied rewards to performance structured rewards packages.

Scholars such as Jackson *et al.*, (2011), Arulrajah *et al.*, (2015) & Opatha (2013) were the leading advocates of non-financial reward package for employees. It is widely known that rewards & compensation play a significant part in improving organizational performance (Huber & Hirsch, 2017; Tang *et al.*, (2018), also used non-financial rewards as a strategy to influence organizational behaviours aimed at achieving organizational objectives (Bussin, 2012; Armstrong & Stephens, 2014). Walls *et al.*, (2012), also alluded by stating that the best way to influence performance and employee's behaviours was through compensation and rewards. The finding was also in consonance with Gupta (2015) & Tang *et al.*, (2018) assertion that a reward strategy of recognizing and rewarding any behaviour that safeguards the environment. Examples of one of such reward and compensation regime were the compensation and rewards for environmental services (CRES) by Yanda, Yatich, Ochola, & Ngece (2010), for the employees of a national wildlife park. These include poverty reduction, giving of economic planning tips, rural and justice perspectives and business perspectives, farmers and other ecosystems tips.

However, it is worth noting that non-monetary rewards benefits include encouraging strategic behaviours of employees, cost efficiency, the immediateness of impact, employer-branding, employee retention, and positive employer reputation (Handgraaf *et al.*, 2013; Walls *et al.*, 2012). Several scholars also pointed out that, effective green rewards and compensation are maximised when it is implemented across all level of employees, this way it enables employee's innovation, creativity and learning (Renwick *et al.*, 2013; Temminck *et al.*, 2015; Dumont *et al.*, 2017; Chaudharry, 2019).

The study by (Huber & Hirsch, 2017; Tang *et al.*, 2018; Renwick *et al.*, 2013; Kristof-Brown & Guay, 2011), all confirmed there is a relationship between environmental sustainability and

employee behaviours. The findings also indicate that reward packages can be deployed strategically to influence employee behaviours.

Moreover, Merriman & Sen's (2012) study found that indirect compensation benefits linked to ES projects may not be enough to motivate senior management attention to green initiatives. However, a change in the organization's compensation culture seems important to sustain employees' efforts to developing energy-efficient products (Taylor *et al.*, 2012). Kane (2011), the study in UK higher institutions also believed that withholding funds motivated some HEIs to reduce their carbon management aggressively.

#### **5.2.2.4. To examine the influence of environmentally sustainable key performance areas on employees' green behaviour.**

The quantitative data analysis for this objective also employed the spearman's correlation coefficient. The result indicated that green performance management and green workplace behaviour was moderate and positively significant at ( $P < 0.05$ ,  $r = .463$ ), this means green performance management will positively influence green workplace behaviour of the HR employees at eThekwini municipality. In other words, if the employees of eThekwini municipality were aware of being evaluated on some green practices (environmental sustainability), their behaviours may change towards achieving that target or goal.

For the qualitative data analysis that was done on the data collected through the interview session, the results from the analysis highlighted the following themes:

- Monitoring & evaluation – *“having a regular introspection and monitoring of operations of green environmental activities.”*
- Green PM metrics – *“need to include green behaviours targets and key performance indicators (KPIs)”* in the appraisal used at the municipality.
- Inadequate awareness – *“not aware of any KPIs or KPAs used in evaluating environmental sustainability.”*
- Benefits & disbenefits should be made available – *“to determine the benefits of the program to the organization”*.

Presently, the eThekwini municipality has no green performance management structure in place. So, there is a need to adapt to the existing performance management system with green

performance indicators or a need to have a green performance appraisal that sets environmental performance goals for the employees.

In light of the above, it is necessary to have in place a green performance management system to monitor all green practices, as this may influence environmental behaviour among employees in the organization. The green performance management was probably the main reason why environmental management scholars such as (Arulrajah *et al.*, 2015; Saeed *et al.*, 2018) advocated for an environmental management information system (EMIS) and regular reviews of the environmental sustainability practices in organizations. Having in place an environmental management information system will make the monitoring and evaluation easier for organizations or institutions alike. The EMIS should not just be based on reporting environmental refractions, but it must include evaluating the performances of all employees (Ahmad, 2015; Milliman & Clair, 2017). In the same vein, organizations or institutions also need to create awareness by publicizing the environmental policies, this way all employees will also feel a sense of responsibility towards the organizational objectives for an adequate evaluation (Pinzone *et al.*, 2016; Wehrmeyer, 1996). Scholars such as (Anderton & Jack, 2011; Maley, 2014; Masri & Jaaron, 2017; Kirande & Bihade, 2019), believes that the inclusion of environmental indicators into the performance management appraisal (PMA) is a prerequisite for corporate social responsibility. Jackson (2012), did argue that its inclusion into the PMA was required to sustain progress on green goals.

Another critical element of green performance management involves implementing green metrics (Sharma & Gupta, 2015; Jackson *et al.*, 2011; Zibarras & Coan, 2015; Milliman & Clair, 2017). Metrics can be used for setting green targets and goals, initiating recognitions, determining compensations and influence of employee career progressions (Jackson *et al.*, 2011). Ahmad (2015), Jackson *et al.*, 2011 & Renwick *et al.* (2013), also supported the findings, with their agreement that there is need to integrate green indicators into performance appraisals or evaluate all employee's job performance with green-related criteria.

#### **5.2.2.5. To examine the influence of managerial support on green workplace behaviour.**

The quantitative data analysis findings for this research objective indicated that managerial support for environmental sustainability was moderate and positively significant. Which means managerial support may influence employee's workplace green behaviour at eThekwin Municipality, although moderately so.

For the qualitative analysis, the themes generated were,

- No support - Not much support in terms of drive and prioritization, but there is minimal awareness of environmental sustainability (as stated in the IDP),
- No support for the HR department,
- No project awareness to introduce the process was in place,
- Putting in place a feedback mechanism on all management projects to assess acceptability by employees
- A need to refocus on environmental sustainability and rewarding such behaviours

Moreover, participants suggested several ways the municipality management can improve on managerial support for employee's green behaviour. The suggestion includes.

- Creating more awareness for the green initiatives across all units,
- Cross integrating of workplace department to work together (no working in silos),
- Funding allocated and tied to green projects driven by a cross-section of teams,
- Leaders & managers understanding the benefits of adopting green HRM,
- More aggressive awareness and incorporating into the city strategy and the IDP,
- More implementation and enforcement of environmental management policies, and
- Presently, there is a policy review, so we proposing green initiatives needs to be considered too.

The findings, therefore, revealed that management support for environmental sustainability at eThekweni municipality was low and not encouraging enough to influence employees' behaviours. Also, the conclusion from the above findings, therefore, requires adequate and aggressive awareness, funding for green projects and monitoring employee performance with EMIS.

Cantor, Morrow & Montabon (2012), in their study, found a significant relationship between organizational support for environmental management and environmental participation by employees. The findings were also corroborated with Zhang *et al.*, (2013) findings, which stated that, when the attitude is low, it impacts on employee's weak work culture. Indicating a means an organizations behaviour may reflect negatively on the employee's environmental behaviours.

Marshall *et al.*, (2005), also argued that employees work conditions are significant for instilling environmental behaviour among employees. Graves *et al.* (2013), along with Cantor *et al.*, (2012), in their studies stated the importance of financial and non-financial work incentives and provision of resources would help improve a green cultural behaviour among employees. Norton *et al.*, (2014), Sharma & Gupta (2015) & Zhang *et al.*, (2019), agreed that managerial support in terms of environmental policies would help achieve green environmental behaviour for employees of organizations.

The increasing neglect of the environment and the gradual destruction of natural resources therein, has made the adoption of environmental management system for organizations and public institutions relevant (Nejati *et al.*, 2014 and Zou *et al.*, 2014). Organizations are starting to implement measures that show compliance with appropriate regulations, certifications, internal and external control measures (Sandberg & Holmlund, 2015; Dahlmann, Branicki, & Brammer, 2019). The responsibility of management to manage their environment was also reiterated by (Tuan *et al.*, 2014; Martins & Gomes, 2019; Walker & Wan, 2012). Management support was emphasized on significantly for the success of the organization's undertaken.

Sharma & Gupta, (2015); Wagners (2011) & Jackson *et al.*, (2011), alluded in their study on German manufacturing firms, that active engagement on green activities or environmental sustainability by executive management and middle-level managers. May lead to an increase in employee's satisfaction and improved retention of employees.

Since the findings indicated that management support was low and not encouraging to motivate employees, then HR managers or management of eThekweni municipality do need to acknowledge there is a relationship between the environment and organizational resources as alluded to by (Krama, 2014). In other words, any project or program without the required management support may likely fail. This management support could be in the form of supportive organizational policies, initiatives, specific programs, the type of reward package system and an enduring environmental management framework (Russell & McIntosh, 2011; Cox, Higgins, Gloster, Foley, & Darnton, 2012; Osbaldiston & Schott, 2012; Robertson & Barling, 2013).

The impact of management support is felt by organizations when there are significant changes in profitability, increased performance, changes in pro-environmental attitudes & behaviour at the workplace. Schwartz *et al.* (2010) and Jones *et al.* (2012), stated that management support

or organizational leadership encourages cultural change and recognition from employees. Wu *et al.*, (2013), also added that provision of recycling bins centres might help change that. Cairns *et al.*, (2010), believed that providing required infrastructures such as bicycle facilities, provision of bus services or carpooling services may affect employee's behaviour positively.

For an improved commitment of employees, Ones & Dilchert, (2013) and Anderton & Jack, (2011), believes managers, executives and supervisors' participation in green projects or initiatives of organizations leads to an increase of employee's commitment to environmental sustainability. Pinzone *et al.*, (2016) & Parker (2011), further stated that the formal creation of roles or positions such as 'chief sustainability officer', 'green champions' also helps to drive positive change to become environmentally compliant.

Furthermore, Jia *et al.*, (2018); Robert & Barling's (2013) and Andersson, Jackson, & Russell (2013), studies asserted that transformational leadership and pro-environmental behaviours, had a positive emotion mediating employee's behaviours positively, while also influencing employee's pro-environmental behaviours among non- managerial staff. Ones & Dilchert (2013), and Anderton & Jack (2011), also alluded that UK managers or executive's active participation motivates other employees to take part in pro-environmental activities.

On the contrary, Kane (2011) listed some challenges that may obstruct managerial support in organizations, these challenges include supervisors or line managers not being carried along or not on board, with the green projects at the organization, and thus may lead to low commitment. In other instances, the HR systems may not be aligned with greening initiatives or that the HR structures are not tuned to the green vision or maybe that the employees are not adequately trained or skilled in the EM projects.

#### **5.2.2.6. To investigate the relative influence of green behaviours and GHRM practices on green workplace behaviour.**

This research question was answered by testing four GHRM practices (predictors) against one outcome. The predictors include green recruitment, green training, green reward & compensation, green performance management and management support. The outcome of the test should be green workplace behaviour at eThekweni municipality.

The quantitative data analysis test used for this research objective was the regression analysis. The study used the test because it sought to know the level of influence each of the green HRM practices had on employee green behaviour at eThekwini municipality.

The findings indicated that the respective green HRM practices: management support, green reward & compensation, green recruitment, green training and green performance management influenced employee green behaviour when held together at eThekwini municipality. Besides, when narrowed further down, the findings also showed that green training (GT) and green reward and compensation (GR&C) was the most significant with  $p =$  value at .031, and  $p =$  value at .013, respectively. The findings showed that with both variables present, there is a high likelihood, it may lead to an influence on employee's workplace green behaviours.

The studies by Ones & Dilchert (2013), Jackson *et al.*, 2011; Renwick *et al.*, (2013); Kumari, (2012); Jackson & Seo, 2010), affirmed the result was showing the positive and significant influence of green HRM practices on employee behaviours. By advocating the adoption of GHRM practices for effective implementation of green policies in organizations.

Dumont *et al.*, (2017), the empirical study also corroborated the influence of GHRM practices on employee green behaviours, the scholars also differentiated on the effects of GHRM practices on employees 'in-role' and 'extra-role workplace behaviours' was as a result of different social and psychological processes.

Siyambalapitiya, Zhang & Liu (2018); Jabbour, (2013), Jabbour *et al.*, (2010); Sarkis *et al.*, (2010) studies all support the view that several integrated GHRM practices will help in the adoption of pro-environmental behaviour across different organizations in any sector. It is noteworthy to note that Jabbour (2011, 2013), in his study, identified the importance of green training in influencing employee environmental behaviour at the workplace. Jabbour's (2013), study alludes with this study's findings, that indicates training and incentives (rewards) had a higher significance than the rest of the predictors for employee workplace behaviour.

### **5.3. Summary of the present state of findings from the questionnaires**

To investigate the influence of green recruitment on employees' green behaviour. Green recruitment and green workplace behaviour Indicate an increase in green recruitment will lead to a slight increase in green workplace behaviour—weak significance.

To ascertain the effects of green training and development intervention on employees' pro-environmental outcomes. There is no negative correlation in the above values. Based on the

findings, green training will influence green workplace behaviour positively at a great extent—strong significant.

To ascertain the most effective type of reward system in place to enhance good pro-environmental behaviour for the organization. This results also align with table 4.18, above which indicated that non-monetary rewards are more effective and are believed to motivate employee's green workplace behaviour better. It is believed non-monetary rewards will better motivate GHRM—strong significant.

To examine the influence of environmentally sustainable key performance areas on employees' green behaviour. This result indicates that green performance management will positively influence green workplace behaviour of employees—strong significant.

To investigate the relative influence of green behaviours and the above-listed GHRM practices on workplace green behaviour. It shows that each individual construct is significant shows that an improvement in both GTRA and GR&C will lead to an improvement in GWB—strong significance.

To examine the influence of managerial support on green workplace behaviour.

This indicates that management support does influence green workplace behaviour—moderately significant.

#### **5.4. Summary of the present state of findings from the In-depth interviews**

##### **Green recruitment (GR)**

A gradual build-up of green recruitment practices 'e-recruitment', although ES is existing but was yet to be put int practice.

The green recruitment findings also showed several challenges such as lack of skills to use online facilities; several units still make use of manual recruitment processes. Making access to online mediums limited, unionized workforce making resistance to change difficult and a broad mix of manual processes despite the e-recruitment options available.

Recruitment was previously manual based at eThekwini, and there is now the introduction of psychometric tests.

##### **Green training (GT)**

The findings show that green training at eThekwini currently faces some hurdles, such as the HR structure hindering green integration with HR functions; this is due to the training aspect is handled by EMA. Another challenge is the prevalence of manual-based training modules and no deliberate training materials of environmental sustainability at the workplace.

The Work skills plan is expected to include environmental sustainability living so that training requests can be made on ES training.

Although there are some ES training tips currently offered by different units, such as DSW, water and electricity units. However, there are a few ES initiatives such as wellness programs, beach clean-ups, fun-walks, and community centred programs. Nevertheless, currently, there are no environmental behaviour pieces of training by the HR or EMA.

### **Green reward & compensation (GR&C)**

Green rewards and motivation are not regular at eThekwini. Although, there were some redundant green reward initiatives such as have an innovation hub, city and mayoral awards (non-monetary rewards). It also showed there was never any green reward & compensation (financial rewards) package included in the salary or wage's structure. Although, they (managers) are now beginning to realize the need for it.

The following are the suggested green reward practices, employee involvement in environmental, behavioural activities, awarding green champion certificates, provision of structure and facilities that will encourage green behaviours, and linking employee rewards to performance-structured rewards packages.

The findings also show a preference for non-monetary rewards for green behaviour motivation.

### **Green performance management (GPM)**

eThekwini municipal operates management by objective (MBO) performance management system.

The MBO does not currently consider green workplace behaviours. Although, the managers expressed hope that they will support it if green KPAs or green KPIs are included.

### **Management support (MS)**

Management support for environmental sustainability was not deliberate or matched with actions, thus not encouraging.

The managers interviewed suggested the following, creating more awareness for the green initiatives across all units, cross integrating of workplace department to work together (no working in silos), funding allocated and tied to green projects driven by a cross-section of teams, leaders & managers understanding the benefits of adopting green HRM, more aggressive awareness and incorporating into the city strategy and the IDP, more implementation and enforcement of environmental management policies, and presently, there is a policy review, so we proposing green initiatives needs to be considered too

In summary, there is a need for constant aggressive campaigns and funding allocations for green projects, this can be tied to performance.

### **MS - Projected challenges with GHRM implementation at eThekweni municipality**

Engagement with stakeholders and cultural influences, inadequate funding for green projects and including green HRM as a KPAs or KPIs, maintaining the commitment of drivers' green behaviour change, managing the green HRM change process and the understanding the benefits of GHRM, political dynamics, this may be due to political alignment of the leaders, red-tape during implementation, and task team monitoring of green projects all around the city.

The summary of the present state is illustrated in the figure 5.1. below:

## 5.5. SUMMARY OF THE PRESENT STATE OF THE HRM UNIT AFTER FINDINGS

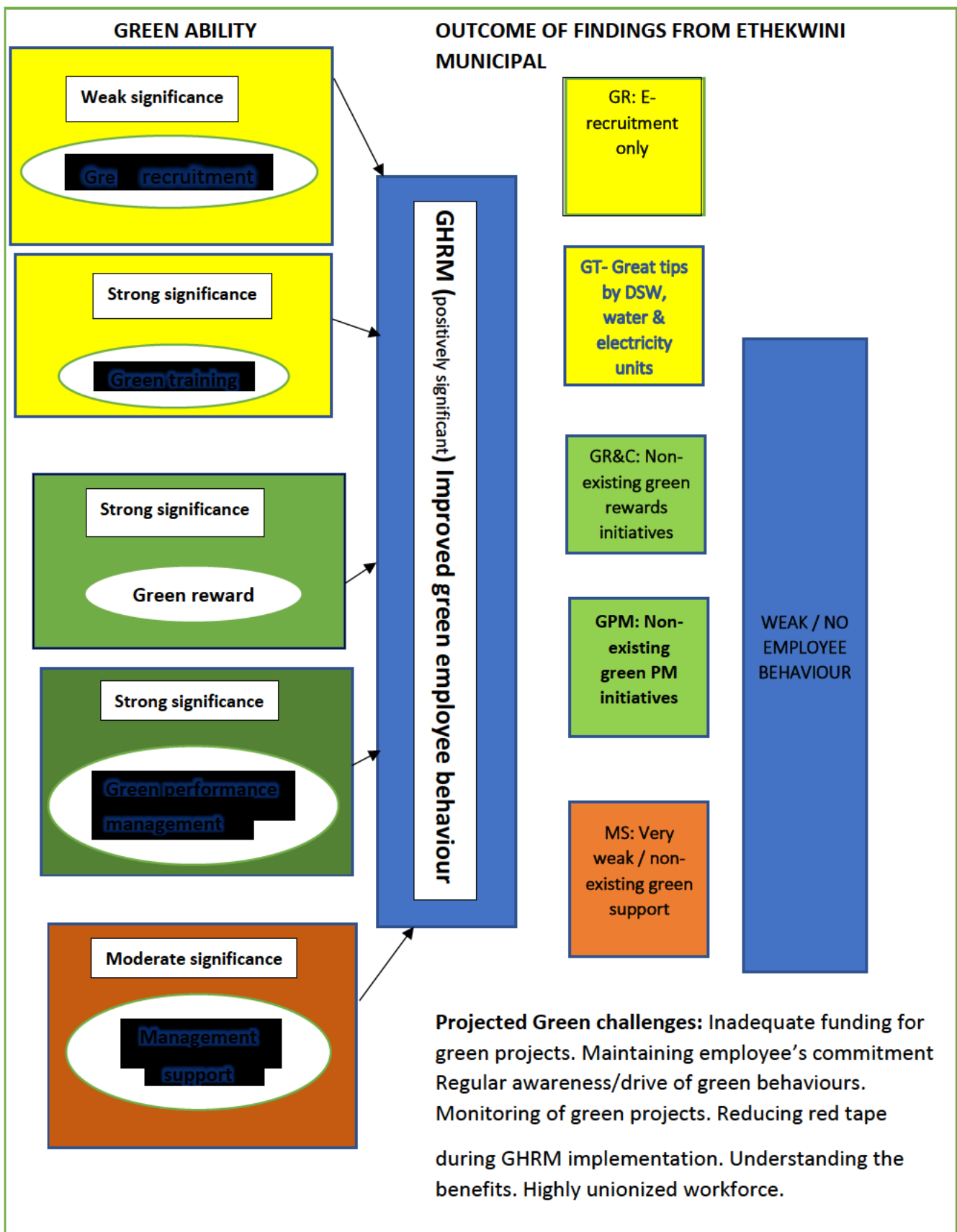
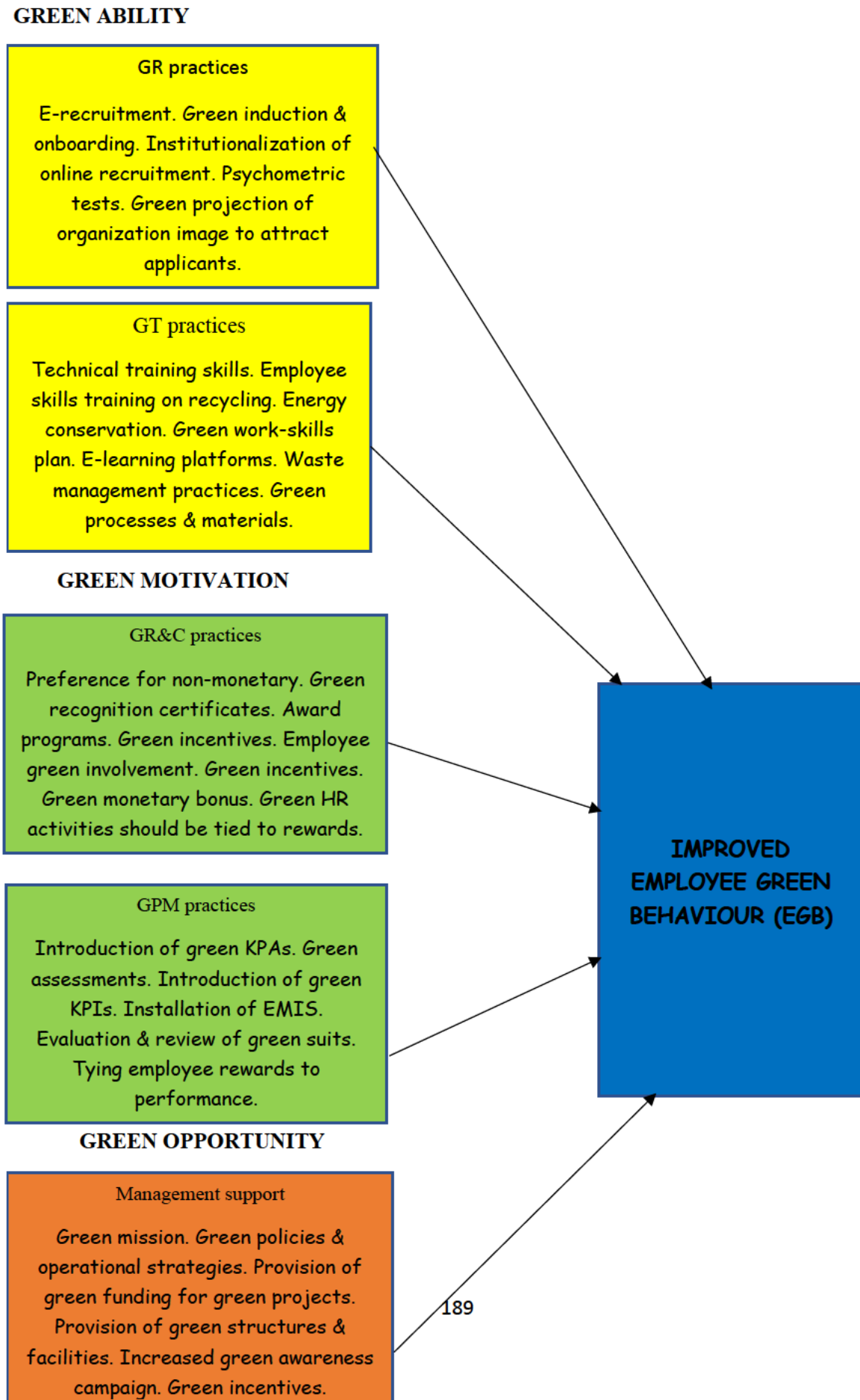


Figure. 5.1. Model showing the present state of GHRM at eThekwini municipality before the study.

PROPOSED CONCEPTUAL MODEL WITH GHRM INTERVENTIONS FROM THE FINDINGS



**Figure 5.2.** Proposed conceptual framework model derived from GHRM interventions and findings

### 5.5.1. Predictors

**Managerial support (MS)-** *Vision & mission, policies & operational strategies reviewed, financial incentives provided for green projects, driving the greening awareness across the organization.* The managers and municipality management need to redraft and include in their vision and mission statements environment sustainability ethos. Put in place green policies and regulations. The operational strategy (organization objectives or goals) of the organization should be green-oriented and targeted to achieving greening. Funding should be set aside for green projects, or awards for green initiatives that may be implemented for motivation. Organization or municipality broad awareness should be done consistently for full acceptance across the municipality.

**Green recruitment (GR):** The quantitative analysis found some issues as very significant as regards green recruitment; the few issues include, *institutionalized online recruitment (e-recruitment), green psychometric assessments & green induction / on-boarding.* Online recruitment can be instituted as the leading recruitment medium, while only the field workers should be allowed to apply through paper applications. Green psychometric assessments should be developed for all positions and job applicants to discover if job applicants have green values or not. All new applicants when recruited should be adequately socialized into the organization, that is informed about the present and future green goals and targets, green projects, green products and services and the dos and don'ts of the organization.

**Green training (GTR):** *Training of green processes & materials, technical training skills, including all training in the workplace skills plan (WSP), e-learning platforms instituted, development of employee skills on recycling, energy conservation, waste reduction skills.* E-learning platforms should be adopted for all the training programs or modules on offer. Management should develop green processes or standard operating guidelines that are services tailored. Green training on instruction and generation of eco-values, development of employee work skills which can be included into the workplace skills plan (WSP) of the municipality, skills such as recycling, how to conserve energy, how to reduce waste at the workspace, technical training initiatives such as; triple bottom line, life cycle analysis, zero waste, cradle to cradle, green chemistry. Training programs on how to solve environmental issues, training on how to develop employees on environmental management awareness and skill expertise.

Training programs designed to engage employees emotionally, training on the cost benefits of applying green practices and education on how to develop preventative and innovative solutions.

**Green reward & compensation (GRC):** *Monetary & bonus incentives tied to performance, reimbursement for travels done to reduce the effect on the environment, recognition certificates & award programs, develop disincentives, hr policy should be tied to reward systems.* Provision of different type of non-financial incentives to encourage employees to continue engaging in green behaviours. The non-financial incentives such as, recognition certificates, award programs, weekly and monthly recognition programs and rewards for employees to look forward to, rewarding employees with gift certificates, reimbursement/travel grants for employees who make efforts to reduce the effect of their travel on the environment either by carpooling, public transport or the use of hybrid or electric cars. Sometimes, bonus and monetary incentives can be introduced. All reward packages (financial and non-financial) should be tied to employee performances.

**Green performance management (GPM):** *Implementation of EMIS, green criteria's, & performance areas, the introduction of green targets, regular review & evaluation of green targets for all, and department & corporate-wide performance standards.* Green performance management areas and criteria should be developed, coupled with its indicators and appraisal. Green performance targets and goals should be devolved to all departments and units at the municipality. GPM will make it easy for adequate monitoring and evaluation and included in the performance appraisal (performance objective of all employees). All green targets and goals included in the performance appraisal should be widely known across all units and departments of the municipality not just by a specific unit. There should be in place an environmental management information system (EMIS) to monitor and evaluate the municipality full green performance compliance. All managers and supervisors are expected to monitor each of their units or department green performance and report to their higher authority.

### **5.5.2. Outcomes**

**Green workplace behaviour (GWB)** at eThekwini municipality. If all the above are adequately implemented, the findings stated according to regression analysis. The following predictors are strongly significant together with the p-value = 0.000, which is less than 0.05. The results indicate that if all predictors above are held constant, there will be a change in employee green behaviour at eThekwini municipality.

However, the findings also indicated that two predictors had a higher significance than the rest of the other predictors. The two predictors are, green training (GTR) with (p = value at .031 and green reward & compensation (GR&C) with (p = value at .013).

## **5.6. CHAPTER SUMMARY**

This chapter focused on the discussion of findings and a presentation of the proposed conceptual framework, in line with the research questions and objectives. The discussion of findings was based on the results from the quantitative data, and the qualitative data (thematic). The research findings revealed that there GHRM practices do have a significant favourable influence on employee's green behaviour. Moreover, among the GHRM practices, green training (GTR) and green reward & compensation (GRC) had the most influence on employees' green behaviours. Also, the non-financial rewards were the most preferred by employees as the most impactful on employee workplace green behaviours. Although green recruitment (GR) and green performance management (GPM) practices had weak and moderate influence respectively, Their, findings still indicated significant influences on employee green behaviour.

Furthermore, the findings of this analysis did generate a conceptual framework that maybe when implementing for environmental management at eThekwini municipality. The qualitative findings revealed that aside from some e-recruitment structures in place at eThekwini, there was no other indication of environmental management structure in place, so the conceptual framework may be useful if adopted. The next chapter will focus on the summary of findings, recommendations, and conclusion of the study.

## **CHAPTER SIX**

### **SUMMARY OF FINDINGS, RECOMMENDATIONS & CONCLUSION**

#### **6.1. INTRODUCTION**

This research study is focused on developing a best practice conceptual framework on workplace green behaviour for employees of eThekweni municipality Durban, South Africa. The following objectives guide this research study:

- To investigate the influence of green recruitment on employees' green behaviour.
- To ascertain the effects of green training and development intervention on employees' pro-environmental outcomes.
- To ascertain the most effective type of reward system in place to enhance good pro-environmental behaviour for the organization.
- To examine the influence of environmentally sustainable key performance areas on employees' green behaviour.
- To investigate the relative influence of green behaviours and the above-listed GHRM practices on workplace green behaviour.
- To examine the influence of managerial support on green workplace behaviour.

Based on the above-presented objectives, this chapter will also present the summary of significant findings from the data analysis, the recommendations, limitations, and conclusion of the study.

#### **6.2. SUMMARY OF THE FINDINGS**

This study's findings were arrived at due to the two type of data analysis method employed by the researcher. The summary of findings will first present those of quantitative data analysis methods, followed by the qualitative data analysis method.

##### **6.2.1. Summary of findings from the quantitative data**

The data analysis from the green recruitment (GR) findings revealed that green recruitment influence at eThekweni municipality was weak but positively significant to employee workplace green behaviour. The findings are an indication that GR structures such as online

recruitment, conducting green values assessment test for new entrants and socialization of new applicants on the municipality's green projects, targets, and objectives. Although the GR influence may be weak, it had a positive influence on employee green behaviours at eThekwini municipality.

Furthermore, the findings from the study showed that green training (GT) at the workplace was intense and positively significant to employee workplace green behaviour. Meaning, GT had a significant influence on employee behaviours at the municipality. Some of the recommended GT structures includes training on recycling, energy conservation, how to reduce waste, technical training initiatives such as triple bottom line, life cycle analysis, zero waste, green chemistry, and cradle to cradle. Other training includes environmental education on how to develop preventative solutions, programs that can engage employees or keep them emotionally involved. Perhaps, if all these training programs are implemented, employee behaviours at eThekwini municipality may begin to become green.

Also, green rewards and compensation (GR&C) had a strong and positive significant influence on employee workplace green behaviours. The findings also revealed that more preference was given to non-financial rewards rather than financial rewards. It was also established that each reward tied to performance. The GR&C structures can include, monetary bonuses, recognition-based programs, having points-based programs for employees, where the points can be redeemed as a bonus, reimbursement of travel grants that reduce the effect on the environment and time off work. All of these and much more indicated green rewards influence on employee behaviours at eThekwini municipality.

In the same vein, the green performance management (GPM) data analysis revealed that GPM was moderate and positively significant to employee workplace green behaviour. The result indicated that monitoring and evaluation of employees do have an influence on employee behaviours at eThekwini municipality. This result implies GPM measures such as environmental goals and target setting for employees, water and energy usage targets be put in place, prompt regular reviews and feedbacks, departmental and corporate-wide environmental targets, and setting of green targets areas or indicators. Installing an environmental management information system to help with monitoring and penalizing of employees that do not meet their targets.

Moreover, management support (MS) and green workplace behaviour findings showed that there were a moderate correlation and positive significant between them. This result revealed that the level of management support of an organization influenced employee workplace green behaviour. The MS structures include, the level of support for green initiatives and projects showed by management, financial support and motivation for green projects or initiatives, MS for adequate organization-wide awareness, and MS to ensure strict adherence and compliance to all environmental regulations.

In conclusion, the findings also revealed through a regression analysis among all five green human resource management practices (GHRM) examined were positively significant on employee green workplace behaviour. This result indicates that when all 5 GHRM practices are held constant, it will undoubtedly influence employee workplace green behaviour. Besides, the result from the regression analysis also revealed that GT and GR&C, when held together, had the most substantial influence on employee workplace behaviour at eThekweni municipality.

### **6.2.2. Summary of findings from the qualitative data**

NVivo 12 was adopted for the qualitative data analysis collected via the in-depth interview conducted on some HR managers at eThekweni municipality. The following themes were generated under two main topics GHRM conceptualization and GHRM practices which comprised of GR, GT, GR&C, GPM and MS.

#### **6.2.2.1. GHRM conceptualization**

In terms of GHRM conceptualization, the findings showed a relative awareness and knowledge of GHRM practices by the interview participants. Themes such as ‘adopting a change management behaviour towards an environmental goal’, ‘a move towards paperless environment’, ‘re-engineering work process and safeguarding the environment’.

Furthermore, GHRM operational structures such as ‘creating access for online recruitment by setting up computer labs’, ‘inter-office taxis’, ‘a gradual shift towards paperless operations’,’ use of energy-saving bulbs or light controlled by sensors and water-saving pipes. The above themes justify the findings result of relative awareness of what GHRM is and, its partial practice at eThekweni municipality.

### **6.2.2.2. GHRM practices**

GHRM practices involve the five HRM practices (recruitment, rewards & compensation, training, performance management and management support) that have been integrated with environmental sustainability.

Green recruitment (GR) findings revealed that there is a measured roll-out of e-recruitment structures to adopt online recruitment as part of green recruitment practices. Some e-recruitment structures in place include video calling (skype facilities in place) for the online interviews, reduced use of paper for CV applications, the phased roll-out of electronic time and attendance policy is also included. Other structures include advertisement of available jobs online using online platforms, like LinkedIn and e-careers, use of psychometric tests to determine job applicant's suitability, values and personality. Furthermore, the provision of additional online facilities (such as computer labs) for job applicants to make their job applications, and some of the selection processes are also included in the new system". Although green recruitment practice structures at eThekwini are in place, there are still operational challenges with its usage.

However, the findings also highlighted several challenges obstructing the implementation of green recruitment practices at eThekwini municipality. The apparent challenges include political influences from municipal heads about the e-recruitment policy, limited knowledge and skills on the use of online facilities. Some departments still primarily make use of the manual process in their operations, only a limited number of employees have access to computer systems while excluding other field employees and unionized workforce with their resistance to change stance.

The green training findings revealed that green training was not existing. However, there are recent movements in the process to change the training models to the online models through setting up of such as e-manuals and e-training. There are also working collaborations with online training resource company like LinkedIn to help customize all pieces of training and make them available online too. However, even that is still at the pipeline stage. Also, it was noted that some of the challenges could be linked to the existing organizational structure at the municipality, where a separate unit handles the training functions and the absence of green training modules in their work skills plan (WSP) at the municipality.

Moreover, green reward & compensation findings also established that there was no reward for green behaviours. Although, during interviews, all managers alluded that GHRM needed to be introduced and implemented. It was also established that non-financial rewards & compensation, such as employee involvement in environmental activities would encourage them to get involved in green behaviours. Other non-monetary rewards include certification for green behaviours, recognition for environmentally sustainable projects or behaviours, provision of green structures and facilities. The non-financial rewards and compensation might encourage green behaviours, tying rewards to performance, structured rewards packages according to organizational objectives, can also be beneficial to motivate employee green behaviours at eThekweni municipality.

Furthermore, green performance management also had some findings worthy of note. It was revealed from the findings that currently, there was no performance indicator or performance evaluator/appraisal. Also, some of the interviewees even confirmed that management by objective (MBO) was the performance management tool currently adopted at eThekweni municipality.

Management support was also categorised as an HRM practice; therefore, the findings revealed that management support for green behaviour at eThekweni municipality is very minimal, even though environmental sustainability is mentioned in the integrated development plan (IDP).

However, there were several challenges enumerated by the interviewees, and these challenges include engagement with stakeholders, cultural influences, inadequate funding for green projects, the inclusion of green HRM as a KPAs or KPIs. Other challenges include maintaining the commitment to green behavioural change, managing the green HRM change process, understanding the benefits of GHRM, political dynamics. This may be due to the political alignment of the leaders, red tape during implementation, and task team monitoring of green projects all around the city. The findings also noted the various suggestions and ways adduced by the participants to make the implementation of GHRM smooth. These include awareness creation of green initiatives, reduced work in silos, adequate financial support, providing exemplary leadership to employees, implementing environmental management policies and programs.

### **6.3. RECOMMENDATIONS**

The following are recommendation guided by the research findings, the aim of which is to present a best-practice conceptual model for the employees of eThekwini municipality. These recommendations below will make it easy for the implementation of green HRM and the adoption of green behaviours at eThekwini municipality. The adoption or imbibing of a 'green behavioural culture by the management and employees of eThekwini municipality may influence a general pro-environmental behaviour across the whole municipality.

#### **6.3.1. Recommendation one**

Managerial support (MS) is essential for the success of the green culture at eThekwini. According to the results, MS at eThekwini was moderate and positively significant. In other words, it had enough effect on employee's behaviour. Since this is established, the management needs to institute green policies. The policies should be included in the IDP as well as in the city's strategic vision and mission (service goals and objectives) values of the municipality, so that employees can internalize and see it as an organizational responsibility. There should be a massive awareness campaign of the 'what and why. The massive awareness should also include the benefits of adopting a green culture for the employees and the organization. The council management and managers should drive the campaign because of the influence of leadership on employee behaviours (Robert & Barling's, 2013).

There should be provisions and prioritization of funds for significant green projects and programs. The prioritization will help to motivate employees further in adopting green behavioural practices. The support from the management may also include setting up a management team to coordinate all green initiatives, with terms of reference. The team should cut across all units at the municipality. This team will also be able to cut through the red-tape and bureaucracy that may arise during implementation. This team will also be responsible for any reporting the performance scorecard of the whole municipality both internally and externally.

#### **6.3.2. Recommendation two**

The results from the green recruitment practice indicated that GR had a weak but positive influence on employee green behaviours. The results also highlighted some challenges common with the public sector organization. Therefore, it is necessary to institutionalize online recruitment across the municipality, so that it becomes the norm, then may just need to have

few exceptions for specific job positions. All job vacancies should be advertised online, and this should also include all other possible recruitment processes. There is also a need to design a green psychometric assessment test to know the attitudes and values necessary for the quick adoption of green behaviour.

There should also be comprehensive green socialization or onboarding process for new job entrants that may include their respective green goals, targets, roles, departmental objectives & goals and proposed on-going green projects. The recommendations may also include the benefits to them as an employee and the organization at large. Publicizing the organizations green projects or on-going green programs can also be beneficial for both internal motivations of employees, while also acting as an attraction factor for candidates that are passionate about green projects.

### **6.3.3. Recommendation three**

The results from the data analysis on green training practices indicated that the importance of training is in the adoption of a green culture or green behaviour at the workplace. The result also attributed one of the reasons for the non-adoption and absence of green training at the municipality to the differences in HR office structures or departments responsible for training. The structure and operational process of the organization are quite different (E.g. EMA is separate from HR policy or organization development). In light of the challenges, it is therefore recommended that all training modules or strategy should be moved online. All training manuals should also be done online. The restructuring can also be followed up with the organization of different green innovative or technical training program such as recycling, energy conservation modules, how to reduce waste skills at the workplace, environmental management processes, resource conservation. The green training modules will also be very impactful on employees if they are included in the work skills plan (WSP) of the municipality. It is also recommended that all other training programs that relate to all other organizational processes should be moved and done online. Regarding the challenges, the EMA may need to incorporate the green training benefits and strategies into their WSP. Simply put, there is a need to prioritize green training as an essential component of green culture, as this will promote the adoption of green behaviours at eThekweni municipality.

#### **6.3.4. Recommendation four**

The findings from green reward & compensation revealed that non-monetary reward is significant for the adoption of green behaviour at the workplace. Rewards such as monetary bonus tied with performance should be put in place. Any travels or office task engaged in with consideration or adherence to environmental conservation should be rewarded or reimbursed. Recognitions for work done either with certificates or award programs should be consistent. There should be dis-benefits developed for those not meeting up to the expected standard. The reward policy should be strictly tied to an employee's performance. Employees should be made aware of all the benefits inherent in a specific environmental policy; this will improve compliance. Employees should often be allowed participation or contribution to the policy; this can also improve participation and a sense of belonging to the organization.

#### **6.3.5. Recommendation five**

The results from the data analysis on green performance management indicate the absence of a measuring framework for green behaviours. The findings showed there is currently nothing that evaluates or measures green behaviour at eThekweni municipality. Therefore, it is recommended that the eThekweni municipality management needs to introduce a green management system (environmental management information system – EMIS) that processes, measures, evaluates and reports all environmental sustainability infractions across the municipality and according to external environmental legislations. There should be the creation of green criteria, performance areas, the setting of green targets for all units. The above-listed suggestions should be included in each employee's performance appraisal that needs to be reviewed regularly and tied to their rewards. With adherence to all of the above recommendations, green culture and behaviour may be adopted by all employees.

#### **6.3.6. Recommendation six**

The data analysis revealed other findings that will enhance a green culture behaviour at eThekweni municipality.

To start with, there is a low-level of awareness of what greening entails and how it affects their work operations. Therefore, it is recommended that there should be a broad and specific awareness campaign across all units and how environmental sustainability culture affects every employee. Initially, the awareness campaign should be aggressively done to push it into all employees' psyche, then later relaxed for the gradual introduction.

Also, the findings also revealed that each unit or departments work in silo and independent of each other. It is therefore recommended that there should be a cross integration of workplace units. It may improve team spirit among employees.

Additionally, the findings also revealed that some of the leaders, supervisors and managers do not understand the benefits of adopting green HRM or environmental sustainability in their operations. Since scholars affirmed that leaders and managers influence green behaviours among employees through their behaviours. It is therefore recommended that executives, senior managers, and supervisors are made aware of all available environmental knowledge and management practices (environmental leadership and management programs). Their knowledge should also be updated consistently, for them to inculcate and pass that knowledge and practices to their subordinates. This way, such green behaviours can be adopted by all other employees.

Furthermore, the findings also established that eThekwini municipality currently does not subscribe to any environmental regulation such as the ISO 40001. It is recommended that eThekwini municipality reviews all existing environmental regulations and subscribe, internalize and adapt it to their operations as this will guide their service renderings.

Moreover, the findings also revealed that green rewards and training had the most significant influence amongst all other green HRM practices. Therefore, more particular attention should be paid to both green practices in order to achieve green behavioural change among employees.

Alternatively, it was revealed that some project funding does not have any criteria set-in or attached. Therefore, each individual or team project funding can be tied to some green criteria and observed accordingly.

Conclusively, there should be a setting up of an implementation and enforcement task force that will ensure the proper implementation and enforcement of all environmental management policies across the municipality. This task force should comprise of all levels of employees and give regular reports to the management.

The study also revealed several challenges that may arise when implementing GHRM practices at eThekwini municipality. Their respective recommendations follow the challenges.

- **Non- engagement with stakeholders and cultural influences** – There should be adequate engagement with the actual stakeholders of the units or departments. This

process will help identify the diverse cultural influences within the units, while measures to correct the different will be done.

- **Inadequate funding for green projects and non-inclusion of green HRM as key performance areas (KPA) or key performance indicators (KPIs)** – It is recommended that green projects funding should be separated (if possible) from other operation funding. Also, it is necessary to include KPAs or KPIs on the expected green behaviours at eThekweni municipality.
- **Maintaining the commitment of drivers of green behavioural change** – There is a need to continually motivate the commitment of drivers of green behaviour champions at eThekweni municipality, because of fatigue or de-motivation that may set in sometimes. There are several ways this can be done, maybe by recognition or support for efforts.
- **Change management issues & inadequate understanding of the benefits of the change** – Managing change is often difficult because of the fear of the unknown. It is therefore recommended that the municipality management tries its best to make employees understand why change is needed and the benefits that come with the change. Their understanding will make the change go possible with fewer issues.
- **Political dynamics, this may be due to the political alignment of leaders** – it is recommended that politics and management of the municipality should be reduced to the barest level. There should be no interference whatsoever, and merit should always be upheld when it comes to making management decisions.
- **Red-tape during implementation** – This should be minimized and removed entirely from the decision-making process. There should be a standard operating process for all tasks involved that should be followed.
- **Task-team monitoring of green projects all around the city** – It is recommended that a task team be set-up to regularly monitor, evaluate and report all green projects or initiatives all around eThekweni municipality.

#### **6.4. LIMITATIONS OF THE STUDY**

The study was a cross-sectional study that focused on explaining green HRM from a South African perspective. There is a paucity of South African studies on green HRM in the public sector; much of previous studies had focused on the private sector organizations. This challenge

came to the fore when the researcher was searching for a public sector HR theory. This challenge was dealt with by the researcher by conceptualizing different models from HRM, change management and environmental management theory. The gap afforded the researcher to propose a best-practice conceptual model with a South African context.

Moreover, this study was limited to the HRM unit at eThekweni municipality. Ideally, this research should have been across all the units at eThekweni municipality. However, due to funding and feasibility constraints, this was not possible. Therefore, the findings of this study can only be generalised to eThekweni municipality. Should in case generalization are done, special consideration should be given to some unique factors of other municipalities

## **6.5. IMPLICATIONS FOR A GREEN MUNICIPALITY & HUMAN RESOURCE MANAGEMENT THEORY**

The attainment of environmental sustainability in a public sector organization requires rigorous and consistent pro-environmental behaviour and commitment from the management and employees. This research revealed that despite the awareness and threat of environmental degradation and climate change on the environment. There is still a dearth of behavioural change strategies from the management to the employees and organization. The study proposes an environmental behaviour change strategy for employees using GHRM principles. The municipality employee perspectives revealed that the level of awareness and practice of greening or environmental sustainability at the municipality is still low. Therefore, this study contributes by proposing a conceptual model strategy to build a green culture behaviour among employees at the municipality.

This research also revealed a dearth of green behavioural strategy at the municipality; therefore this study will contribute by advocating for the inclusion of a behavioural change strategy into the integrated development plan (IDP) for the municipality, as this will improve green behaviour structures and practice.

This study also contributed by ascertaining knowledge on the specific GHRM practice(s) is/are essential to be selected or grouped to influence a positive and significant employee green behaviour at the workplace.

The study also contributes to the existing knowledge in human resource management by conceptualizing and validating a framework to actualise GHRM in a public sector service institution within the South African context.

This study found that among the components of GHRM tested, only two (green reward and green training) were found to significantly influence green workplace behaviours. On the other hand, the AMO theory that underpinned this study showed that all components of GHRM needed to be applied together or simultaneously for optimum results.

On the contrary, the result of the findings cannot be generalized to other organizations because the HR department studied in this case had a different organisational structure compared to other organisations. For instance, a private service-based organisation structure will be different from that of a public service-based one. The difference may influence how the HR department perform their operations. The HR department at eThekweni municipality showed that each department in the organisation had their own mini-HR unit which handles all their HR operations or issues. Consequently, this difference will make some HR units of one department more influential than other HR units in another department under the same organisation.

These differences negatively impacted the practice of GHRM evenly across all department in the organisation. Other organisations that may have a different HR structure may easily implement GHRM initiatives across the organisation. Therefore, the findings of this study further confirm the AMO theory that all the components need to be applied evenly for adequate engagement.

## **6.6. SUGGESTION FOR FURTHER RESEARCH**

This study provided insight into the relationship between GHRM and employees green workplace behaviour at eThekweni municipality in Durban, South Africa. Research findings revealed that a significant relationship exists between GHRM practices and employee green behaviour. There is a need for other studies to consider other HRM functions apart from the ones that made up the current HRM functions, such as recruitment, training & development, reward & compensation, performance management and management support.

The study looked at GHRM and employee green workplace behaviour in a public sector or service organization in Durban, South Africa. Further research may explore GHRM practices and employee performance in a private sector service rendering organization, using a longitudinal research design.

This study investigated which of the GHRM practices had the most influence and buy-in by employees in the workplace. Future studies can investigate the reasons for the level of commitment and propose interventions on how to improve buy-in by employees.

## **6.7. CONCLUSION**

This study was aimed at developing a best-practice conceptual framework on GHRM for adopting by employees at eThekweni municipality. The conceptual framework was developed through a research questionnaire and an in-depth interview, responses were analysed using the Spearman ranking correlation coefficient, regression analysis and thematic analysis through the NVivo 12 software. The research questions and objectives were tested statistically and conceptually to develop the model. The following are the conclusions from the chapters and the tested research questions.

Chapter one was focused on the introduction and overview of the entire study, while chapter two was based on the review of works of literature on the topic of research. Chapter three discussed the research methodology adopted in the study, while chapter four was focused on presenting data and analysing it through both quantitative and qualitative data analysis methods. Chapter five was focused on a discussion of the findings from both quantitative and qualitative data analysis methods. Chapter six provided a summary of findings, recommendations, and conclusion of the study.

Conclusion one revealed that green recruitment does influence employee green behaviours. However, the influence was minimal, and then it has to include green recruitment structures like online recruitment, environmental on-boarding process and promotion of environmental projects for talent attraction.

Conclusion two, the data analysis indicated that even though green training had a positive and significant influence on employee behaviour, it did not exist at eThekweni municipality as it ought to. Therefore, suggestions were proffered for its application at eThekweni municipality.

Conclusion three, the results from the study revealed that non-monetary rewards & compensation was the most preferred, and that green rewards & compensation is very significant to influence green behaviours among employees at eThekweni municipality. The findings also revealed recognition as the only form of non-monetary reward in place but were

last used over three years ago. So, the researcher suggested a re-invigoration of the rewards program.

Conclusion four, green performance management (GPM) revealed a significant moderate influence on employee green behaviour at eThekwini municipality. Although, the qualitative and quantitative data analysis revealed there was no sign of GPM at eThekwini municipality. The conclusion informed the basis for its recommendation in the conceptual framework.

Conclusion five, the research findings showed that managerial support has a positive and significant influence on employee green behaviour at eThekwini municipality. However, managerial support was not existing at the workplace and was therefore suggested for implementation in the conceptual framework.

Conclusively, the empirical analysis also revealed that green training and green reward & compensation had an over-arching influence on employee green behaviour. Furthermore, green awareness and green behaviour practices at eThekwini municipality were miles apart from actualization. Moreover, the study showed that all five analysed GHRM variables were influential on employee green behaviours. Therefore, a need was necessary for a conceptual framework to help increase GHRM practice at eThekwini municipality.

The general conclusion, in summary, achieving employee green behaviours at the workplace indicates employees engaging in green practices in the course of their work responsibilities. For this to be successful, the management of the organizations needs to deliberately put in place a green strategy aimed at achieving environmental sustainability. This research provided a green behaviour strategy perspective by applying green HRM practices for employees at eThekwini municipality. The result was realised by empirically establishing the relationships between green human resource practices and green employee behaviours. The research objectives were answered using a range of statistical and non-statistical analysis, ranging from measures of distribution, factor analysis tests, spearman's ranking correlation, regression analysis test and thematic analysis (qualitative data analysis). The results of the statistical analysis revealed that GHRM practices had a positively significant relationship to green employee behaviours. However, the non-statistical analysis alluded to the existence of a relationship, but then highlighted the several challenges hindering the successful implementation of GHRM at eThekwini municipality. This research also proposed a best-practice conceptual model to implement green HRM at eThekwini municipality.

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## APPENDIX – A- INFORMATION SHEET & CONSENT FORM

Date: 13<sup>th</sup> September, 2019

### Information Sheet and Consent to Participate in Research

Greetings,

My name is Taiwo Hassan Ajadi from the School of Management, IT and Governance / HRM department, University of KwaZulu-Natal, Westville Campus. Email:

[213573926@stu.ukzn.ac.za](mailto:213573926@stu.ukzn.ac.za) Tel: + [REDACTED]. My Supervisor is Dr. Vuyokazi Mtembu - Hlophe. Tel: ([REDACTED]).

You are being invited to consider participating in a study that involves research titled 'The Place of HR in developing workplace green behavior model for EThekwini municipality in

Durban South Africa. The aim and purpose of this research is **to develop a best-practice model on workplace green behavior for employees of municipalities in South Africa; to**

*establish the role of HR in managing environmental sustainability with five HR practices, green recruitment, green training, green reward systems, green performance management and management support to help shape employee workplace green behaviors at EThekwini municipality.* The study is expected to include 66 participants in total, all from the HR department of EThekwini municipality Durban, South Africa, however 8 respondents from the 66, will also be interviewed to get proper perspectives on the environmental sustainability policies and its alignment with those of the HR department at eThekwini municipality. It will involve either the following procedures: self-administration of questionnaires or online administration by sharing the questionnaire links into their email address (depends on your preferred mode of participants). The duration of your participation if you choose to participate and remain in the study is estimated to be 10-13 minutes for self-administration & interviews and 7-10 minutes for online administration of questionnaire.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee approval number -HSSREC/00000377/2019.

### **HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban 4000 KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557- Fax: 27 31 2604609

In the event of any problems or concerns/questions you may contact the researcher at [213573926@stu.ukzn.ac.za](mailto:213573926@stu.ukzn.ac.za) Tel: [REDACTED] or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

The study does not involve any risks to participants. We hope that the study will create the following benefits such as; understanding how four main HR practices can be used to influence employee behaviors positively towards influencing workplace behaviors to promote environmental sustainability among municipalities in South Africa. The results of the study are intended to contribute to academic knowledge in HRM field about employee workplace green behaviors towards a sustainable environment, as well helping municipalities achieve environmental compliance.

BREC UKZN Oct 2008

**Your participation in the study is voluntary and by participating, you are granting the researcher permission to use your responses. You may refuse to participate or withdraw from the study at any time with no negative consequence. There will be no monetary gain from participating in the study. Your anonymity will be maintained by the researcher and the School of Management, I.T. & Governance and your responses will not be used for any purposes outside of this study.**

**If you have any questions or concerns about participating in the study, please contact me or my research supervisor at the numbers listed above.**

Sincerely



Taiwo Hassan Ajadi

Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

**CONSENT TO PARTICIPATE**

I.....have been informed about the study entitled (The Place of HR in developing workplace green behavior model for EThekweni municipality in Durban South Africa') by Taiwo Hassan Ajadi.

I understand the purpose and procedures of the study **is to develop a best-practice model on workplace green behavior for employees of municipalities in South Africa, through administration of questionnaires to HR department employees, and conduct interviews with environmental sustainability & HRM policy makers at eThekweni municipality, Durban South Africa.**

I have been given an opportunity to ask questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at ([213573926@stu.ukzn.ac.za](mailto:213573926@stu.ukzn.ac.za) Tel: [REDACTED]).

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban  
4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557 - Fax: 27 31 2604609  
Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

Additional consent, where applicable

I hereby provide consent to:

\_\_\_\_\_  
**Signature of Participant**

\_\_\_\_\_  
**Date**

## APPENDIX – B- QUESTIONNAIRE

### RESEARCH QUESTIONNAIRE SECTION A: Demographic Data

1. Gender

Male	Female

2. Type of Appointment

Permanent	
Contract	
Temp	
Others	

3. School / Department (Kindly indicate your school or department you work currently)

Department	
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4. Educational qualification

Matric	Diploma/ Certificate	Bachelor's degree	Honours degree	Master's degree	PhD

5. Work experience

Up to 5 years	6-10 years	11-15year	15-20 years	Over 20 years

6. Information Technology (I.T.) Skills

No skills at all	A few skills	Average skills	Good skills	Highly skilled

SECTION B:

1 GREEN WORKPLACE BEHAVIORS (GWB)

Indicate your agreement with the following statements regarding the practice of GREEN BEHAVIORS at work:

	Green Behaviours	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.1	I conserve energy at work by using energy (electricity etc.) below specified usage limits.					
1.2	I save water at work by consciously using it as sparingly as possible e.g. when washing hands etc					
1.3	I try where possible, to conduct all my correspondences electronically rather than using paper					
1.4	I use green recyclable office supplies as opposed to using non-recyclable office supplies when available					
1.5	I try my best to practice green behaviours in the workplace wherever possible					
1.6	I make use of recycling bins for all my office waste, where possible					
1.7	I make sure I switch off all computer & office equipment at the end of each day					
1.8	When commuting to and from work, I take into consideration the effect my travelling has on the environment by e.g. joining a car pool, using public transport, or cycling etc.					
1.9	I sometimes request to 'work from home' in order to avoid the effect my travel has on the environment					
1.10	I regularly share green workplace tips with colleagues so that green practices can become a habit in the workplace					

## 2 GREEN RECRUITMENT BEHAVIOR (GRB)

Indicate your agreement that the following PROCESSES were used when you were recruited

	Recruitment processes	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2.1	My job was advertised online					
2.2	I was asked to submit all documentation <u>on line</u> while applying for the position					
2.3	My interview was done online through skype / video calling / video conference (in case of a joint interview)					
2.4	In my interview, I was asked about any green initiative(s) I had undertaken before or in my previous workplace					
2.5	In my interview, I was asked if I would be comfortable working in a green environment where everyone practiced 'green' behaviors					
2.6	As far as I am aware, the amount of paper used through the recruitment process was kept to an absolute minimum					
2.7	Environmental activities important to the business were communicated to me during the recruitment processes					
2.8	The job offers included me mastering the 'green' policies of the organization					

## 3 GREEN TRAINING BEHAVIORS (GTB)

Indicate your agreement that you have received TRAINING on the following with regard to 'green behaviors' in your organization:

	Green behaviour initiatives	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.1	Recycling					
3.2	How to conserve energy					

3.3	How to reduce waste					
	Green behaviour initiatives	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.4	The cost benefits of applying green practices					
3.5	Technical training initiatives E.g. the triple bottom line, life cycle analysis, zero waste, cradle to cradle, green chemistry, natural capitalism, etc.					
3.6	How to solve issues in consideration of the environment					
3.7	Programs aimed at developing employees on environmental management and increasing environmental awareness, skills and expertise					
3.8	Programs aimed to get employees emotionally involved in environmental management					
3.9	Environmental education on how to develop preventative solutions					

#### 4 GREEN COMPENSATION & REWARDS BEHAVIORS (GCRB)

Indicate your agreement that the following REWARDS/COMPENSATIONS would influence you to behave in a 'green' manner:

	Rewards / Compensations	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
4.1	Monetary bonuses					
4.2	Time off work E.g. an afternoon off; a long weekend					
4.3	Reimbursement / travel grants for employees who reduce the effect of their travel on the environment by purchasing hybrid cars or used 'safe cars', or sharing transport (carpools, public transport) or cycling etc.					
4.4	Bonus incentive programs tied to financial rewards for meeting set green metrics in the organization, whether individually or as team members					
	Rewards / Compensations	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
4.5	Recognition-based award programs e.g. Different bonuses, prizes or perks					

4.6	Having an exclusive lunch with the president of the company;					
4.7	Rewarding employees with gift certificates					
4.8	Having point-based programs where the points can be redeemed when employees engage in green sustainable milestones for the company. (the points could be used e.g. for gym memberships or actual products and services or leave days)					

5 GREEN PERFORMANCE MANAGEMENT BEHAVIOR (GPMB)

Indicate your agreement that the following PERFORMANCE MANAGEMENT practices are carried out at your company:

	Performance Management Practices	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
5.1	There are specified set goals and targets on green behaviours in the workplace					
5.2	Performance targets for water usage are in place					
5.3	Performance targets for energy usage are in place					
5.4	Usage limits are set for printing on paper					
5.5	There are green monitoring teams that monitor and evaluate uses of all green office supplies					
5.6	Regular review and evaluation of green targets and goals is undertaken					
5.8	I get regular feedback about the impact I personally, have on the environment around me at work via an environmental impact report					
	Performance Management Practices	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
5.9	There are departmental or corporate wide environmental performance standards					
5.10	There is a green criterion in my performance appraisal					
5.11	There are green targets and goals that I personally, have to meet					
5.12	There is an environmental management information system (EMIS) that monitors					

	every employee's environmental performance					
5.13	Employees who do not comply or meet environmental goals are penalized in some way (e.g. fined, have points deducted, work overtime, etc.)					

## 6 Management Support

Indicate your agreement with the following statements about MANAGEMENT SUPPORT For Green management:

	Management Support	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6.1	Management shows adequate support for managing the environment					
6.2	Management supports environmental initiatives by promoting the initiatives wherever possible					
6.3	Management supports environmental initiatives financially					
6.4	Management ensures strict compliance with all environmental regulations					
6.5	Management support is evident in the amount they invest in environmental management					
6.6	Management supports environmental projects initiated by employees					

Thank you for your participation

## **APPENDIX – C- INTERVIEW SCHEDULE**

### **Interview schedule for HR managers or division heads at EThekwini municipality Brief explanation of green HRM concept**

Green HRM means all HR activities that involves the development, implementation and maintenance of a system, with the sole of objectives of making the operations and employees of the organization green.

It is the integration of all HR functions, goals and objectives of the organization's environmental goal, in order to have a green organization. HRM practices involves HR functions, processes and techniques that goes on in the HR department (Huselid and Becker, 2000). Therefore, when all HR functions, processes and techniques are combined and aligned with environmental sustainability policies or green policies, it becomes green HRM (GHRM).

#### Questions & topics

Green behavior conceptualization

1. What is your perception and understanding of green behaviors at the workplace?
2. Please kindly tell us some of the green workplace behaviors you know?

#### Green HRM functions

The HRM department performs several functions, among which is recruitment; training & development, rewards & compensation management; performance management just to name a few. The questions are:

#### Recruitment

3. How does HR integrate or align the 'recruitment function' with environmental sustainability?
4. How was recruitment done before, how is it done now at eThekwini municipality? Training
5. How does HR align training and development with environmental sustainability?
6. Please tell us about any past or present environmental sustainability training & development interventions organized by eThekwini?

#### Rewards and Compensation management

7. How can the 'reward and compensation' function be aligned with environmental sustainability at eThekweni municipality?

8. What is/are the best ways to continuously motivate pro-environmental behavior at eThekweni municipality?

Performance management system

9. How can employee's environmental behavior performance be measured or evaluated at eThekweni municipality.

10. What type of employee performance environmental assessment tool is used here at eThekweni municipality?

Management support

11. Does environmental sustainability (ES) enjoy support from the management?

12. What specific type of support does management give to encourage environmental sustainability behavior at eThekweni municipality?

13. What are the obvious challenges or obstacles that may come, if GHRM is to be implemented here?

**Thank you for granting me time out of your busy schedule for this interview.**

## APPENDIX -D- GATEKEEPER'S LETTER



Pod 1, Second Floor, Intuthuko Junction, 750 Mary Thiphe Street, Umkhumbane, Cato Manor, Durban 4001. Tel: 031 322 4513, Fax: 031 261 3405, Fax to email: 086 265 7160, Email: [mile@durban.gov.za](mailto:mile@durban.gov.za). Website: [www.mile.org.za](http://www.mile.org.za)

For attention:

Chair of Ethics Committee  
College of Law and Management Studies  
School of Management, IT and Governance  
University of KwaZulu Natal  
Westville Campus  
Durban  
4001  
10 July 2019

**RE: LETTER OF SUPPORT TO T.H AJADI , STUDENT NUMBER 213573926- GRANTING PERMISSION TO USE ETHEKWINI MUNICIPALITY AS A CASE STUDY**

The Corporate and Human Resources Unit and eThekweni Municipal Academy (EMA), have considered a request from TAIWO HASSAN AJADI to use eThekweni Municipality as a research study site leading to the awarding of a Doctor of Philosophy Degree in HRM entitled: *"The Place of Human Resources in developing workplace green behavior model for eThekweni Municipality Durban, South Africa."*

We wish to inform you of the acceptance of his request and hereby assure him of our utmost cooperation towards achieving his academic goals; the outcome which we believe will help our municipality improve its service delivery. The student is reminded of the ethical considerations at all times when conducting the research.

In return, we stipulate as conditional that he, accompanied by his supervisor, presents the results and recommendations of this study to the related unit/s on completion of his research study.

Wishing Mr Ajadi all the best in his studies.

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Collin Pillay

Program Manager: Municipal Institute of Learning (MILE)  
eThekweni Municipality

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I **TAIWO HASSAN AJADI**...hereby accept as conditional that I will comply fully as per the conditions stipulated above.

Signed:

A solid black rectangular box redacting the signature.

Date: **10/7/2019.**

## APPENDIX-E. APPROVED ETHICAL CLEARANCE

### APPENDIX- D – APPROVED ETHICAL CLEARANCE

21 October 2019

Mr Taiwo Hassan Ajadi (213573926)  
School Of Man Info Tech &Gov  
Westville Campus

Dear Mr Ajadi,

**Protocol reference number:** HSSREC/00000377/2019

**Project title:** The Place of Human Resource in developing workplace green behavior model for EThekweni Municipality Durban South Africa

#### Full Approval – Expedited Application

This letter serves to notify you that your application received on 05 September 2019 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**

**Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.**

This approval is valid for one year from 21 October 2019.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2-3 months before the expiry date. A close-out report to be submitted when study is finished.

Yours sincerely,



Dr Rosemary Sibanda (Chair)

/dd

Humanities & Social Sciences Research Ethics Committee  
Dr Rosemary Sibanda (Chair)  
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000  
Website: [http : research.ukzn.ac.za/Research-Ethi](http://research.ukzn.ac.za/Research-Ethi)

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

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