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Research Title & Subtitle

**Contradictions in Green HRM: A Thematic Analysis on How
HR Professionals Develop Environmental Competencies**

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Submitted to the National College of Ireland,

10th August 2024

10th August 2024

Master of Arts in Human Resources Management

1. Abstract

This dissertation addresses a critical gap in the contemporary literature exploring how Human Resource (HR) professionals acquire environmental knowledge to implement green practices in the workplace. As climate change effects become increasingly evident, organizations are shifting their approach from mere Public Relations rhetoric to urgent, effective environmental practices. Consequently, HR professionals are now tasked with integrating green strategies across all organizational functions to help achieve economic and environmental goals.

Through exploratory research utilizing secondary data, the study employs qualitative and thematic analysis to examine literature, reports, and journals on Green HRM practices published between 2014 and 2024. The aim is to investigate patterns and contradictions in the research about green competencies and the preparation of HR professionals to fulfil the environmental responsibilities incorporated into their roles. The study also intends to uncover whether HR professionals have received adequate development to acquire the necessary skills for implementing green practices.

The sample of 47 articles was selected from 183 pieces extracted from secondary data targeted based on the pre-analysis of the topics Green HRM, Role of HR, Green Skills and Green Development. Findings from this analysis are expected to highlight the current state of HR professionals' development of environmental skills, providing insights and guidance for future research. This understanding is vital for supporting companies in achieving their environmental goals and contributing to broader sustainability efforts by prioritizing the development of HR professionals on knowledge of green agenda. The research underscores the need for specific training and development programs to equip HR professionals with the skills required for effective environmental strategy implementation. The collected data was organized and categorized through ATLAS.ti software, and Power Business Intelligence helped express the insights of this research in graphs.

KEYWORDS: *Green Human Resources Management (GHRM); Human Resource (HR) professionals; Sustainability; Green Skills; Skills development; Professional Development.*

Declaration

I, Maila Dias Balieiro, identified by the student number 22139991, hereby declare that this research has been composed by myself and all content presented in the thesis has been acknowledged and referenced correctly. This work has never been submitted to any institution or university for the award of Master's Degree.

Signature of research student: Maila Dias Balieiro

Date: 10th August 2024

Acknowledgments

This dissertation is the end of a seven-year personal and professional journey that started when I left Brazil and moved to Ireland.

Completing this cycle could have never been possible without the precious people I met on the way and without the encouragement, love, and prayers of my family, who was rooting for me from my hometown: my mom Debora, my sister Juliana, my brother Daniel, my sister-in-law Hellen, and my nephew Henrique.

During the COVID-19 pandemic when I provided home care to a special lady, her dedicated daughter introduced me to the courses available at NCI and motivated me to go back to college after 20 years since my first graduation. Thank you, Mary Rose.

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2. Introduction

2.1 Background

Prior studies, Rimanoczy and Pearson (2010) have already expressed concerns about the effects of industrial practices on the use of energy, fossil fuels, water and other natural resources, but also the amount of waste produced by the population (United Nations Development Program, 2007). A strong relationship between the pressure on the organisations to take action and the new HR responsibilities has been reported in the literature. From observer to a key player, Colbert and Kurucz (2007) pointed out that the Human Resource (HR) function was inevitably broadened once 68 per cent of the top 250 global organisations included in their agenda reports on sustainability and corporate responsibility. The discussion over sustainability and corporate responsibility goes back a few years earlier, in 1983, when the United Nations convoked the Brundtland Commission or the World Commission on Environment and Development (WCED) responsible for the report *Our Common Future* published in 1987, proposing a cornerstone for the global economy and organisations to adopt the sustainable development for both environment and society.

A strong relationship between the pressure on the organisations to take action and the new HR responsibilities has been reported in the literature. From observer to key player, Colbert and Kurucz (2007) pointed out that the HR function was inevitably broadened once 68 percent of the top 250 global organisations included to their agenda reports on sustainability and corporate responsibility. The discussion over sustainability and corporate responsibility goes back a few years earlier, in 1983, when the United Nations convoked the Brundtland Commission or the World Commission on Environment and Development (WCED) responsible for the report *Our Common Future* published in 1987 proposing a cornerstone for the global economy and organisations to adopt the sustainable development for both environment and society.

The following topic aim to provide definitions of the main subjects covered in this study as a broad background to understand the foundations of this research.

2.2 Definitions

The terminology related to human resources HR has evolved to include terms such as human capital, labourers, and people. These changes reflect the evolving approach of human resource managers in designing employee management strategies (Kadam, Luharia, Tivaskar, & Khatib, (2022). In prior studies, Rimanoczy & Pearson (2010) found that the so-called Personnel Department was responsible for managing the pay, benefits and industrial relations within organizations. It was later turned into the Human Resources Department, or the HR, as it became commonly known. Sims (2007) defines Human Resources Management (HRM) as the set of principles, rules, processes, and actions associated with an organization's staff. It focuses on tasks that help effectively attract, motivate, develop, and retain a top-performing workforce, leading to the organisation's success.

By definition, sustainability stands for the ability to generate development to attend to the current generation's needs with the guarantee that future generations will be able to meet their needs, too (Thomsen, 2013). In a broader context, Moore (2005) argues that sustainability can be a strategy, a goal, or a concept. To be called sustainable, an organisation must achieve its profit goals, preserve the environment, and work for social equity. The theme of sustainability became rapidly relevant to corporations in different aspects, such as their reputation from customers demanding responsibility; the concerns about reducing the risk of causing any damage to the company and the HR was eventually part of the sustainability scope by the recruitment and retention processes once candidates would see sustainable organisations as best employers (Rimanoczy & Pearson, 2010).

Regarding to specific knowledge of the environmental agenda, Cabral and Dhar (2019) define green competencies as a multidimensional construct comprised of green knowledge, green skills, green abilities, green attitudes, green behaviours, and green awareness. The most similar study with a focus on the HR professionals' capabilities was carried out by Du Plessis, Paine & Botha (2012). However, the research was not related to sustainability practices but actually aimed to establish the effectiveness of HR practitioners in New Zealand.

Therefore, the problem to be explored in this research aims to fill the existing gap in the literature and investigate the readiness of HR professionals to fulfil the green responsibilities incorporated into their roles to support companies in achieving their environmental goals. Bailey (2015) attributes the lack of knowledge from senior leaders about green practices or the perception that such activities are costly and have long-term return investments negatively impacts the investment in preparing HR professionals adequately by pursuing the necessary capabilities to implement green strategies within the organization, leading to the failure of environmental goals.

Through exploratory research utilizing secondary data, the study employs qualitative and thematic analysis to examine and transcript the most recent existing literature from academic articles, international reports and surveys, and journals on the topic. This research aims to prove that the appropriate development has not been provided to HR professionals, impacting engagement from the workforce and the lack of instruments to prove the results of green practices to top leaders/shareholders, which lead to the failure of the environmental strategies.

The research described in this paper, which is part of a wide literature study, emerged from these factors and other findings are broadly explored in the next chapters.

2.3 Significance of the research

a) Why should sustainability matter to HR?

Sustainability left the Public Relations (PR) and brand-building Marketing departments to be part of the business strategy agenda, bringing the possibility of new revenue and operational efficiency. Willard (2002) pointed out seven areas with high potential to benefit organisations, of which three fell under the responsibility of HR: reducing recruitment and attrition costs and increasing workforce productivity. However, the author reinforces that HR was involved in all seven areas, expanding HR responsibilities to cover matters such as reducing expenses with energy and water in manufacturing and commercial sites, strategies to grow revenue, and techniques to reduce risks facilitating financing.

Although the studies point out the importance of the HR leaders and their teams in delivering green practices within organisations, it is unclear how those professionals are prepared with the necessary skills to perform activities in an also developing area that requires specific knowledge, for example, to develop policies and comply with environmental legislations

b) Legislation changing organizations: EU, UK and IE

Sustainability regulation is evolving globally and it is an external driver of change for organizations to adapt and for HRM to incorporate it into their daily priorities. One recent key change in sustainability legislation that increases the pressure on organizations is the Corporate Sustainability Reporting Directive (CSRD) ([Harvard.edu, 2023](https://www.harvard.edu)) implemented by the European Union (EU) to enhance sustainability reporting for any company operating in the EU. The UK

has implemented Sustainability Disclosure Standards to report climate-related issues, and the US Security and Exchange Commission (SEC) is working on climate change disclosure rules. In Ireland, a webinar on the Corporate Sustainability Reporting Directive (CSRD) was held in January 2023 by the Minister of State with responsibility for Company Regulation at the Department of Enterprise, Trade and Employment, Dara Calleary, to introduce the directive, so Irish businesses can prepare for new European Sustainability Standards (Irish Government, 2023). According to the most recent literature including international journals, surveys and reports, HRM is responsible for a large part of this agenda, and it should support organizations to adapt to the new climate reality. However, one question remains: How can we implement those new regulations without the necessary knowledge?

2.4 Problem statement

This research explores how HR professionals have acquired corporate sustainability skills to handle the expectations, challenges and trends in HR functions to achieve the organisation's environmental goals. This research takes the form of an exploratory study, and while it focuses on HR, the findings can be relevant to a wide range of contemporary professions working in sustainability. Podgorodnichenko, Edgar, and McAndrew (2020) supports the idea that the HRM function in corporations and its integration into other areas lack attention. Unfortunately, their study is unsatisfactory because it explores only the conflicts, challenges and integration concerning Corporate Social Responsibility, not mentioning the sustainability itself and the practices that HR has incorporated. Nevertheless, the findings of the current study are consistent with those of Aust, Matthews, and Muller-Camen (2020), who found that Green HRM's primary concern is exactly how the environmental strategies will be integrated into the existing HR functions. This analysis encourages the study of the problem investigated in this paper as it suggests that there is a disagreement among HR professionals regarding whether achieving ecological outcomes should be part of the HRM function. Likewise, the most recent literature on HR's role evolution, from its arising to its latest responsibilities, studies reviewed little research on how HR professionals acquire the specific knowledge and skills to perform their role in the sustainability agenda, and the gap in the literature remains. This gap leads to the research question below: *How do HR professionals develop environmental competencies?*

2.5 Thesis overview

Following the constantly changing context inside and outside the organisations, HR has incorporated more responsibilities and developed new skills to support the businesses in meeting their needs. The CIPD report *People Profession 2030: A Collective View of Future Trends* (2020) points out that sustainability, purpose, and responsible business are some of the trends that HR professionals should reflect on regarding the next steps to take in the area. The present findings seem to be consistent with other research found where Podgorodnichenko, *et al.* (2020) show that professionals across the world recognise the necessary involvement of the HRM with the sustainability agenda, which is implicated in the development of best practices in the field to engage the workforce effectively, including sustainability objectives as part of performance management and rewards systems. The same study identifies the need to investigate the interconnection between sustainability and HRM by creating a sustainability strategy and recruiting talents with the expertise and motivation in this area to implement the required actions. This study highlights that HRM responsibilities have broadened and absorbed various activities, such as environmental practices.

Although the researchers mentioned in the following paragraphs show evidence of HR practices related to sustainability; they could not answer how these professionals are prepared with specific knowledge to implement such practices. Likewise, the most recent studies on Green Human Resource (HRM), reviewed little research on how HR professionals acquire the specific knowledge and skills to perform their role in the sustainability agenda, and the gap in the literature remains. This gap leads to the research question below: *How do HR professionals develop environmental competencies?*

Therefore, the literature review departs from the roles of HR in sustainability to better understand the concepts and practices of Green HRM, followed by the definitions of green skills and competencies. It ends by exploring what the literature shows about training provided to HR professionals related to environmental issues.

3. Literature review and hypothesis

3.1 The roles of HR in sustainability

The literature research explores the evolution of HR roles in the environmental agenda in recent decades. Sustainability is increasingly becoming a critical focus for organizations globally, and HR professionals are at the forefront of this transition. What defines these roles in organizations and to what degree have they undergone significant changes? According to the People Profession Report carried out by CIPD in 2023, there are several compelling reasons why sustainability should matter to HR professionals:

3.1.1 HR in ESG

ESG stands for Environmental, social and corporate governance issues to comply with international regulations after scandals involving high-profile corporations. The ESG is another strategy that has counted on HR to address environmental skills gaps in the organisations through rewards systems and behavioural and cultural change. It is also expected that HR professionals create and implement practical environmental policies on how employees can reduce the organisation's carbon footprint (Corden, 2022; O'Neill, (2023). Graves (2022) emphasises that ESG issues were extended from investor interest to involve all stakeholders, *increasing corporations' expectation on HR role*. With ESG performance becoming key to retaining and attracting employees, HR initiatives in addressing environmental may bring HR leaders to take part at the ESG table to represent the workforce.

3.1.2 Sustainable HRM

Houghton (2019) defines Sustainable HRM as a higher level of strategic performance with a holistic and multi-stakeholder model drawing attention in the academic field. The author also argues that in this context of insights and data about culture and behaviour in the workplace, there is enough room for HR to take action with their expertise. In that sense, Sustainable HRM is focused on the encouragement to gain an understanding of value creation and value capture in the long term, aligned to the interests of stakeholders, and recognising performance outcomes. Including environmental and social, this approach goes beyond the economic goals,

considering the contradiction of interests along the way. One major criticism of Houghton's article is whether Sustainable HR is a realistic change model or just a 'fad'.

On the other hand, the *HR Practices in Ireland* report, conducted by the CIPD (2023) pointed key findings on the issue of sustainability, encompassing climate sustainability and sustainable work, where 58% of employers have increased sustainable work activities as featured in **Figure 1** below:



Figure 1. Source: *HR Practices in Ireland*. Source: CIPD, 2023.

Ahmad (2015) emphasizes that Green Human Resources Management (GHRM) initiatives have led to increased efficiency, cost reduction, employee retention, improved productivity, and other tangible benefits. Hence, HRM managers are faced with increasingly complex responsibilities as they strive to address the evolving demands of today's workplace. HR professionals have gone beyond their traditional functions, incorporating a more strategic role, and far-reaching responsibilities are now added to their plate (Kadam, *et al.*, 2022).

3.1.3 Green HRM

Aust *et al.* (2020), state that Green Human resources Management (GHRM) is the new approach to Sustainable HRM. Studies on Green HRM have increased in the recent years from both practioners and scholars. (Garavan, *et al.*, 2022). Aust, Matthews and Muller-Camen's (2020) research reinforces the interest in this trend, arguing that this approach is different from Corporate Social Responsibility (CSR) as it focuses on the employee and their engagement in activities that improve the organisation's environmental outcomes. GHRM is concerned with how the workforce can be motivated to adopt an ecological behaviour, hence improving the

business's carbon footprint and its green certificates. The study reinforces the need to develop an environmental dimension in HRM. In 2013, Mampra emphasized the positive impact of Green HRM in enhancing employee satisfaction and morale within organizations. He defined Green HRM as the implementation of HRM practices and policies aimed at promoting sustainable resource use in businesses and advocating for environmentalism.

In contrast to the positive findings about GHRM practices such as green recruitment and selection processes and green pay and reward, green training was not associated with corporate sustainability as observed in Jamal *et al.*, (2021) study. The field of Green HRM presents promising opportunities for sustainable and environmentally friendly practices within organizations. However, as the findings of this research show, there is a noticeable gap in the amount of research conducted in this area compared to the level of interest it has generated, especially in relation to empirical studies. This disparity can be observed in the limited publications from both academia and industry practitioners. Muster & Scharder (2011) argue that the gap extends to green initiatives, their coverage within organizations, process models and research agenda.

Another author Ahmad (2015) details the various Green HR factors, such as Green Sleeves, Green Commute, Green Materials, Green HR policies, and Green Workplace. Green HR is involved in using HRM policies to promote the sustainable use of resources within organizations. Furthermore, it advocates for environmental sustainability. The framework developed by Tang et al. (2017) is to measure human resource practices for environmental management focusing on the effective use and implementation of Green HRM as shown in the **Figure 2** below:

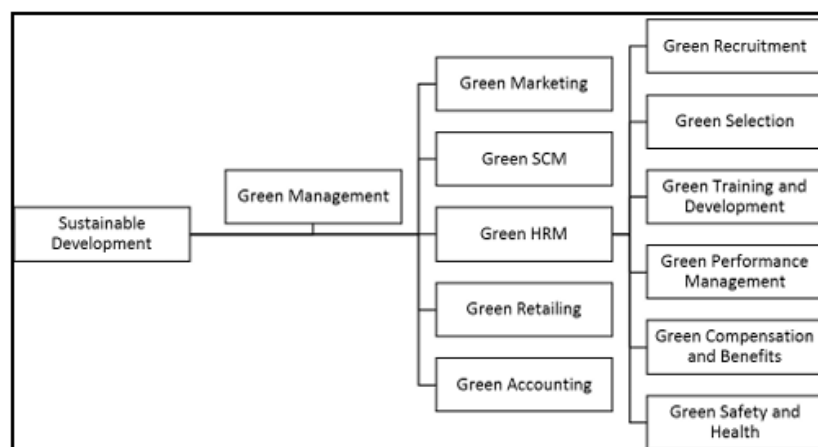


Figure 2. *Green HRM Model (Conceptual Framework)*, Tang et al. (2017)

Despite all the green practices listed in the Green HRM model above, the development of HR professionals with environmental competencies to implement such practices was not mentioned by Tang's *et al.*, (2017). Therefore, the next section explores another sub-question related to exploring what methods and resources do HR professionals use to acquire green skills. That investigation is based on the latest reports of the Chartered Institute of Personnel and Development (CIPD).

3.2 HR professional's development

CIPD is the professional body for human resources (HR), learning and development (L&D), organisational development (OD), and all people professionals. Therefore, considering the research, insights, and learning provided by CIPD is crucial to obtain a better understanding of the latest trends and priorities of HR professionals among more than 160,000 members globally.

3.2.1 CIPD and Workday, People Profession Report

The survey found that 89% of professionals engaged in some form of learning and development in the last year, with upskilling being a key priority to make the profession fit. The report highlighted positive aspects, such as collaborative work across the business and the positive contribution of HR professionals to organizational performance. It also identified key areas of development for the profession, including facilitating more flexible business operations and supporting line managers. Peter Cheese, chief executive of the CIPD, emphasized the crucial role of people professionals in supporting organizations through challenging periods and the importance of continued learning and development to ensure the profession is a future fit.

3.2.2 CIPD International Report: UK and Ireland

Insight into how global issues are impacting people professionals in the UK, Ireland, Asia-Pacific, MENA and Canada show a consistent area of focus across all regions is working more collaboratively with colleagues across different functions. Partnership with various business functions and alignment of the people strategy with broader business objectives are essential aspects of HR professionals' roles. Collaborative work with colleagues from different areas allows HRM practices to promote wider organizational changes, enforcing cooperation and knowledge-sharing. The data shows that although only 15% of respondents specialized in

organizational development, design, or change management, 67% had some responsibility in organizational development and 56% in organizational design. This suggests that these skills are increasingly important for HR generalists, even though specialization in these areas is uncommon.

The CIPD 2023 Report highlights several key insights from participants regarding the evolving role of HR professionals in the context of corporate social responsibility (CSR) taking prominence over traditional HR functions. This reflects a growing emphasis on creating inclusive, socially responsible workplaces that align with broader organizational values and societal expectations. The report underscores the importance of employee engagement and the critical role of Learning and Development (L&D). With a younger workforce that demands more from their roles, organizations must focus on engaging employees and providing ample opportunities for professional growth and development. Another finding is increased expectations from employees for Corporate Sustainability Responsibility (CSR) initiatives and transparency. Employees also want a more significant role in shaping their workplace, influencing how it operates and aligns with ethical and sustainability standards.

However, when participants were asked, “*How are HR professionals developing their capabilities and skills?*” the figures were significantly lower for areas such as organizational development, design, and change management. This indicates that many HR professionals have influence and decision-making responsibilities in multiple specialized areas, even if these are not their main expertise or where their professional qualifications are focused. Although developing skills and capabilities across the workforce is a top priority for organizations, skill development within the HR profession shows considerable variation across the global sample. HR professionals did not mention that development of green skills was a priority in the survey. In the Irish context, *The People Profession Report 2023* shows that the main priorities featured by practitioners in Ireland are, among other areas, upskilling and developing current talent and engaging with and retaining employees. The results confirm the need to develop current workers, including those working in HRM, as they are responsible for learning programs and driving change in the workforce. Therefore, any initiative related to upskilling and development must start with preparing HR professionals.

The findings from a recent People Profession Report (2023) carried out by CIPD emphasize the impact of organizational Changes on HR Roles and Responsibilities. HR professionals must adapt to these changes, aligning their strategies with the new organizational priorities and

ensuring workforce capabilities are developed to meet evolving business needs. With the role of people professionals changing, new skills are needed. The constant changes in society promote a cascade effect of changes in the business environment. The impact on HR professionals is inevitable. Hence, HR professionals are expected to go beyond managing employee terms and conditions to meet the organization's challenges (Ulrich *et al.*, 2010).

As the bar has been elevated on HR, some lament that HR professionals cannot meet these higher expectations. For HR professionals to respond to changing business conditions, they must demonstrate new competencies. This section shows that in the last three years of surveys conducted by CIPD in the UK and Ireland, HR professionals did not mention environmental issues in their priorities. Environmental competencies were not mentioned in the HR Practices in Ireland 2020 survey, and sustainability is not part of HR priorities in Ireland (CIPD, 2020). The last section of the literature review investigates what are the specific knowledge HR professionals should develop to support environmental practices.

3.3 Environmental Skills

To explore the third sub-question of this study, which regards the specific skills that are essential for HR professionals to support environmental practices, Daily and Huang (2001) highlight the requirement for employee training in both Quality Management Standards and ISO Environmental Management Standards (EMS). Research has indicated that Total Quality Management (TQM) and (EMS) efforts necessitate extensive on-the-job training and continuous educational endeavours to drive continual improvement. Successful EMS development similarly stresses the importance of comprehensive environmental training for employees. **Figure 3** illustrates the EMS-HR factors model. This model represents the important interaction of HR factors, such as top management support, training, employee empowerment, teamwork, and rewards, within the five basic elements of an EMS: policy, planning, implementation and operation, checking and corrective action, and management review.

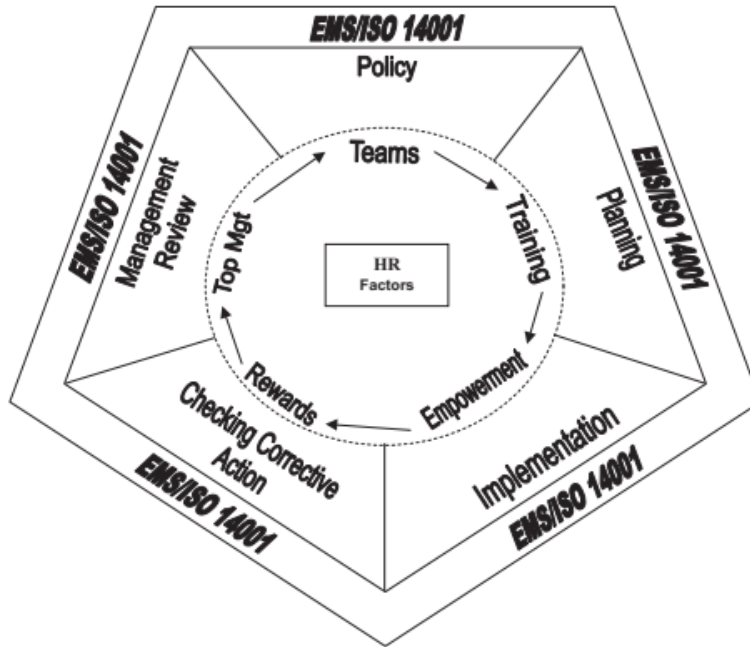


Figure 3. The EMS-HR factors model. Source: Daily and Huang (2001).

An HR factor may fall under more than one of the five basic elements of an EMS. For example, Daily and Huang (2001) argue that top management can affect the elements of planning, implementation, and checking and corrective action. Similar overlapping effects would also exist with training, empowerment, teams, and reward systems. Furthermore, like TQM, it is expected that the implementation and maintenance of an EMS would occur in a continuous improvement mode. Therefore, for an EMS to succeed, we would expect all HR factors to occur simultaneously and cyclically.

Another study carried out by Zubair and Khan (2019) emphasize the importance of Green Training and Development. They believe that employees should be educated and equipped with knowledge of environmentally friendly activities, the importance of Environmental Management initiatives, and ways to reduce waste and conserve energy (Zoogah, 2011). Training and Development programs should focus on developing employees' knowledge, skills, and abilities to solve environmental problems and become responsible citizens. Liebowitz (2010) stresses that HRM should concentrate on developing a sustainable culture in organizations to have a long-lasting impact. The 2009 Heldrich Center for Workforce Development (Rutgers University) pointed out that many jobs already have green sustainability aspects. The Heldrich brief also emphasized a pyramid of skills (see **Figure 4**) needed in the green economy (Konopnicki, 2009).

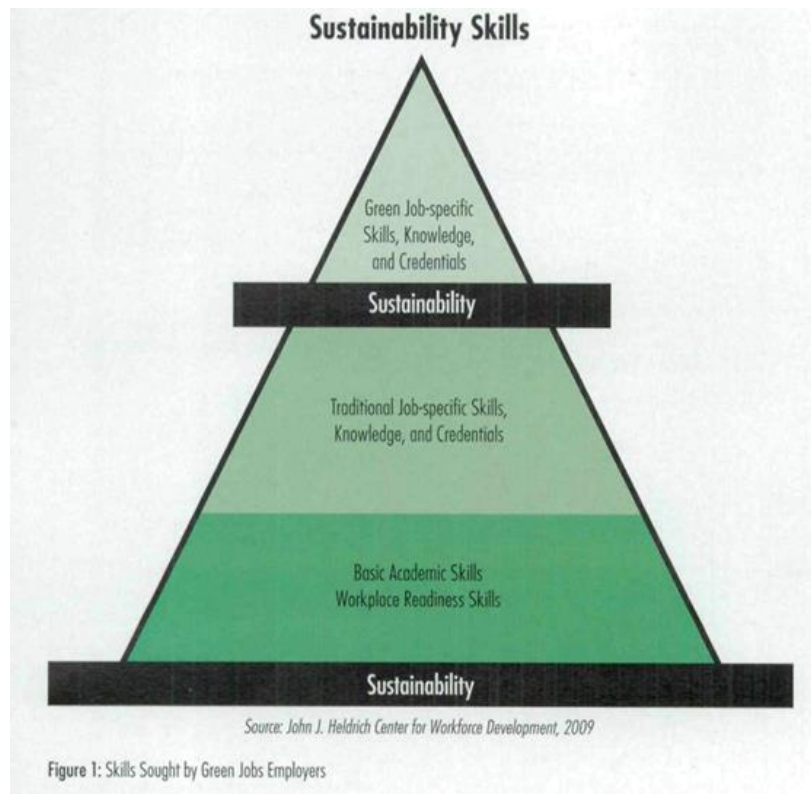


Figure 4. Source: The Heldrich Center for Workforce Development (Rutgers University), 2009

The conceptualizations of green skills range from narrow technical skills for specific jobs to a broad set of soft skills. UNEP et al., (2015) point out that employment and skills needs are affected in at least four ways as an economy becomes more sustainable: additional jobs will be created, some employment will be substituted, and some will be reoriented. Kellner, Cafferkey & Townsend, (2019) reaffirms the purpose of this study by pointing out that *Ability, Motivation, and Opportunity* (AMO) has been widely used in HRM to explain the relationship between how people are managed and their performance outcomes. This theory is aligned with this study as it suggests that organizations should implement HR strategies, such as promoting environmental knowledge, to develop the skills and competencies needed for effective operations. Following AMO principles, a strong organizational and environmental culture may enable firms to continually enhance their operations through ongoing staff development with the support of top management (Renwick et al., 2013).

4. Research question

As the literature review shows, HR has played multiple roles as a strategic business partner supporting the company's competitive advantages. It is also responsible for managing issues emerging from all functions, not to mention complying with the company's ethical and legal standards, developing training programs, and building an organisational culture able to provide the ideal context to achieve sustainability outcomes.

Although several authors mention that companies have integrated corporate sustainability issues into HRM borders, there is a gap in the literature review on how HR professionals have been prepared with the specific knowledge to implement such practices in the workplace. To explore this gap in the literature and examine the possibility of further investigation, the study's primary research question states as follows:

Central question:

How do HR professionals develop environmental skills?

Sub-questions

Exploratory research questions are designed to enhance the researcher's understanding of a specific topic of interest. They play a crucial role in this study by facilitating the exploration of ideas and laying the foundation for research analysis without introducing preconceived notions or assumptions. The sub-questions explore the specific skills and knowledge HR professionals need to support sustainability initiatives within their organizations. They also help investigate the training programs, educational resources, and experiential learning opportunities that HR professionals utilize to develop green competencies as follows:

- *What are the roles of HR in corporate sustainability?*
- *What specific knowledge is essential for HR professionals to support environmental practices?*
- *What methods and resources do HR professionals use to acquire green skills?*

5. Methodology

This section outlines the necessary data and information to address the research question, including the epistemology research paradigm that the study falls into, which is explained in more detail in the following topics of this chapter. The research is founded on secondary data gathered through an extensive review of existing literature from various databases, websites, and other accessible sources. To inform the study, a comprehensive and thematic analysis of the collected literature was conducted, seeking to access earlier reviews on the roles of HR in corporate sustainability in the environmental field by examining themes emerging in the HRM and green skills pieces of literature. As such, this study primarily seeks to fill the green skills for HR practitioner literature gap and also includes high-quality works to present a wider picture of green HR knowledge required to implement environmental practices in the workplace. Using accepted literature definitions, published papers on HRM and Sustainability fields in Green HRM themes. Using relevant web-based search facilities such as EBSCO, Researchgate, Sage and others identified over 300 potentially useful articles, books, chapters, and reports to ensure inclusion of the highest quality works herein, completed by reading such studies further. The investigations resulted in a final sample of 50 usable, among relevant articles, international journals and reports, which are detailed using the ATLAS.TI tools to organize codes, and themes from the data gathered for this study.

5.1 Research Philosophy

Saunders, Lewis, and Thornhill (2019) define research philosophy as the building of knowledge and the nature of that knowledge. The Research Onion diagram illustrates the options available to choose the most appropriate data collection approach and analysis method. This topic focuses on the first two layers of Saunders' (2019) *Research Onion*, which is concerned with the research philosophy and the research choice. The research strategy,

approaches and time horizon will be defined and explained in the following topics of this chapter.

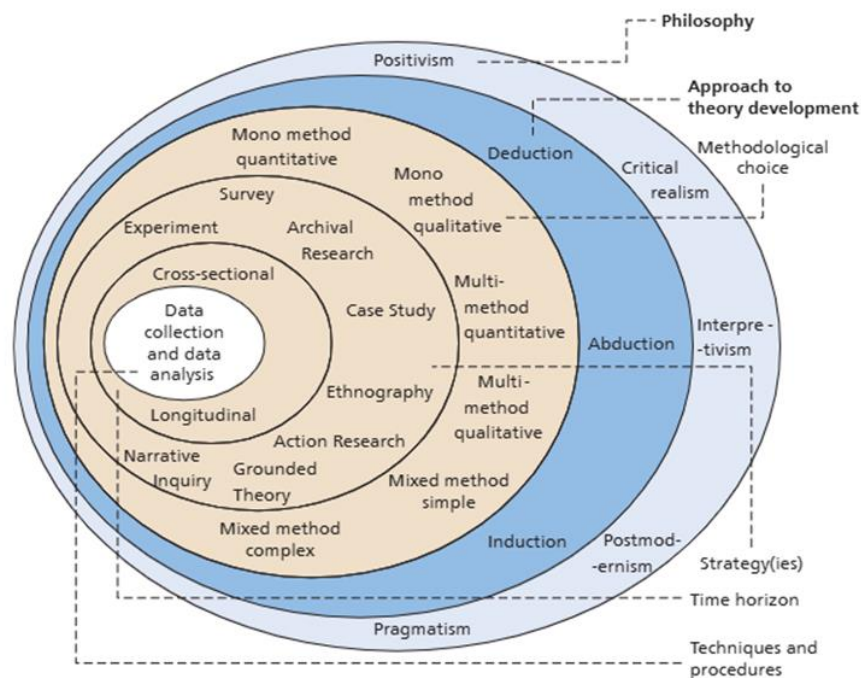


Figure 5: The research Onion (Saunders *et al.*, 2019).

One research approach is not better than another. The choice depends on the research question (s) the study seeks to answer (Saunders *et al.*, 2019). Before diving into specific research philosophies applied to this research, it is important to differentiate them. This can be achieved by examining the variations in the three assumptions commonly held by scholars within each philosophy: ontology, axiology, methodology and epistemology.

- **Ontology** is a branch of philosophy concerned with social beings (Saunders *et al.*, 2019). Creswell (2012) states that ontology relates to the nature of reality and its characteristics.
- **Anxiology:** In this assumption, researchers make their values known in the study and actively report their values and biases, as well as the value-laden nature of information gathered from the field (Creswell, 2012).
- **Methodology:** According to Creswell (2012), this philosophical assumption is related to the methods used in research. The research process utilizes inductive methods that emerge from the researcher's experience collecting and analyzing data.
- **Epistemology** is the research philosophy chosen for this study based on Kivunja & Kuyini (2017) definition of epistemology as how we come to know something, how we know the truth or reality. It focuses on understanding how we acquire knowledge and the researcher's

comprehension to deepen and extend understanding in a particular research field. That is the fundamental reason for choosing Epistemology for this research. Saunders (2009) point out three types of epistemological assumptions in business research: positivism, realism and interpretivism. Definitions of each research philosophy and a broader explanation of the one utilized in this paper are provided below:

Realism

Saunders et al. (2009) define realism as the belief that what our senses show us is the truth and that objects exist independently of the human mind. However, one's observation and knowledge of it can not provide a full understanding of it (Fleetwood, 2005).

Interpretivism

Interpretive research often seeks to empower participants by giving them a voice in the research process. Saunders et al. (2009) argue that understanding the differences between individuals is crucial in our capacity as social agents.

Positivism

According to Saunders *et al.*, (2009), business and management research often combines aspects of positivism and interpretivism. They consider positivism the most appropriate approach for natural science because it relies on existing theories to form hypotheses. Positivist researchers seek to identify causal relationships in their data in order to see and express generalisations (Gill & Johnson, 2010). Positivist researchers use existing theories to develop hypotheses, which are tested and confirmed or refuted, leading to further theory development and potential testing through further research.

As this research uses only secondary data to explore the research question, the positivist approach is the best choice, as supported by Saunders et al. 's (2009) concept that the researcher is external to the process of data collection, meaning that there is little possibility of altering the substance of the data collected (secondary data, in this case).

5.2 Research Approach

When examining research logic considerations, induction and deduction are the most common approaches applied to social sciences research (Rashid *et al.*, 2019). Choosing the right approach is crucial for any research. The approach chosen for this study is the Inductive approach. A brief definition of each approach and a broader commentary on the approach chosen for this study justify such a decision:

Inductive Approach

Inductive research is a qualitative approach that involves collecting data and developing a theory based on the data analysis. This method is the best fit for this study because it is particularly useful for exploratory research, where the goal is to gain insights into a particular phenomenon (Rashid *et al.*, 2019). Induction involves collecting data and then developing a theory based on the analysis of the data. Saunders, *et al.*, (2009) highlights the key attributes of inductive research which include focusing on the meanings that individuals attribute to events, closely understanding the research context, collecting qualitative data, having the flexibility to shift research emphasis, recognizing the researcher's involvement in the process, and placing less emphasis on generalization. These characteristics match the purpose of this project which is gathering and analysing existing data to investigate the gap in the literature related to the research question on the development of HR professionals in the green agenda.

Deductive Approach

In this approach, the research logic starts with an established theory and a research strategy is designed to test the hypothesis (or hypotheses) and arguments (Saunders et al., 2019). In the deductive approach, the main goal is to confirm or reject the hypothesis developed. Okoli, (2022) states that deductive theorizing begins with an existing theory and seeks to refine, support, or propose a new version of that theory. He also argues that traditional positivism refuses to fully embrace inductive and abductive reasoning because they lack the important deductive step. Based on the work of various authors on research logic, the '*Research Logics*' provided by Rashid (et al., 2019) was applied to this study following the different research phases to implement the induction approach, as shown in **Table 1**.

	Abduction (Systematic Combining)	Deduction	Induction
Aim	To understand social phenomena in terms of social actors' motives and understanding	To test theories, to eliminate false one, and to corroborate the survivor	To verify the theory by searching for the facts and to establish description of the patterns
Start	Related theories, observations of everyday accounts	Deduce hypothesis from a tentative theory	Tested theory
Finish	Tentative theory/framework	Hypothesis testing/theory testing	Theory verification and generalization/universal law
Researcher stance	Inquiry from inside	Inquiry from outside	Inquiry from outside
Researcher account	Respondent view explained by the researcher	Researcher's viewpoint	Researcher's viewpoint

Table 1. Research Logics Synthesized by Rashi *et al.*, 2019 from Blaikie (2000), Jarvensivu and Tornroos (2010), Dubois and Gadde (2002), Dubois and Gadde (2014), and Thomas (2010).

5.3 Research Strategy

Saunders, *et al.*, (2009) define research strategy as how the researcher will answer the main research question. The authors also point out a list of research strategies to describe, implement or explore pieces of research. This research adopts a qualitative methodology, focusing on the extensive and in-depth exploration of the existing literature gap on how HR professionals develop and implement green skills. This approach is appropriate because it offers flexibility in exploring emerging themes and patterns, which is crucial for exploratory research. It allows for the collection of rich, detailed data that can reveal insights not captured through quantitative methods that are publicly available. In this paper, the secondary data sources used include databases, reports, publications, and others, detailed in the following paragraphs.

Research Design

When distinguishing among research methods, Yin (2018) recognizes the importance of looking beyond hierarchical stereotypes. Although each method has its own characteristics, the boundaries between methods are not always clear-cut. Each research method can be used for exploratory, descriptive, and explanatory purposes. The goal is to avoid misusing a method when another may be more advantageous. The next paragraphs explain the methodology used to conduct this research.

Due to the limited research on the development of green skills among HR professionals, this study is exploratory in nature. Thus, exploratory research is ideal to investigate a relatively

underexplored area. This approach is employed to provide a broad and flexible examination of the topic. The most relevant reason for using exploratory research in this study is that it helps understand complex phenomena without prior research.

5.4 Research Choices

Due to the failure of the initial plan designed to obtain in-depth interviews with HR professionals for this study and to deal with time constraints, the mono-qualitative method was chosen as the most appropriate option utilising text analysis of secondary data. This method allows close reading and interpretation of a vast dataset obtained from the most recent existing literature, including academic articles, international reports and surveys, and journals on the topic. Applying thematic analysis makes it possible to identify themes, concepts, and patterns in the relevant data and objectives of this research.

5.5 Time Horizons

According to Saunders *et al.* (2019), cross-sectional research refers to the study being conducted at a specific point in time or over a short period. In qualitative research using secondary data, implies the analysis of data that has already been collected. Kelly, Martin-Peters, Farber, (2024) states that analysing secondary data can include cross-sectional or longitudinal data, geographic or regional data. The decision to use secondary data allowed the capture a snapshot of the phenomena and trends being studied as they exist in the data at the time of analysis, making cross-sectional the most suitable time horizon for this research being conducted through mono-method qualitative research using only secondary data.

5.6 Data Collection

The data collection process begins after developing the research design, as suggested by Adams *et al.* (2007). For this research project, secondary data was chosen based on the research questions and objectives. The data collection process took place in three major phases and followed Yin's (2003) suggestion to design a research protocol with the activities and their respective descriptions. Table 2 shows the main steps taken in the data collection and is based

on the format developed by Klein and Myers (1999). The following paragraphs provide detailed explanations of the process of collecting secondary data and the techniques utilized.

Activity	Description
Research questions	<p><i>How do HR professionals develop environmental skills?</i></p> <p>And sub-questions:</p> <ul style="list-style-type: none"> ○ <i>What are HR's roles in corporate sustainability?</i> ○ <i>What specific knowledge is essential for HR professionals to support environmental practices?</i> ○ <i>What methods and resources do HR professionals use to acquire green skills?</i>
Research method	Mono-qualitative method
Collecting data	The data collection process for this study was decided based on the research question, though the research objectives were also considered. Through exploratory research utilizing secondary data, examine literature, reports, and journals on Green HRM practices published between 2014 and 2024.
Research Techniques	The 47 articles selected as the sample for this research were available for public access in an online database. They were uploaded to the software ATLAS.ti to be organized and structured for the thematic analysis process. Each article could be analysed, determining groups and setting themes and patterns based on similarities.
Data Management	The 183 pieces of secondary data selected for the pre-analysis and literature review, as well as the 47 pieces defined as the sample of this research, were publicly available in various sources, including databases, reports, publications, and international surveys with free access.

Table 2. Research Protocol based on Klein and Myers (1999).

Gathering secondary data

Secondary data analysis is an important method for advancing knowledge in various fields of study. Glaser (1963) was among the first scholars to highlight the advantages of reanalyzing. Other authors recognize the range of valuable information available in existing datasets. Therefore, researchers can explore these existing datasets to answer new research questions, utilizing quantitative, qualitative, or mixed methods data and answer new research questions (Kelly et al., 2024). In recent decades, technological advances have significantly increased the availability of 'Big Data' obtained through various digital capture points. The COVID-19 pandemic also renewed interest in secondary data analysis due to the halt in primary data collection.

According to Bardin (1977) content analysis is a set of communications analysis techniques widely used in qualitative research, one of which is thematic analysis (Soratto et al., 2020). Various secondary data sources are utilized in this dissertation to explore how HR professionals develop green skills for workplace implementation. These sources include databases, reports, publications, and international surveys.

Here is an overview of the main types of secondary data sources used in this research:

- The National College of Ireland (NCI) Library provides access to academic databases, including Emerald Insight, EBSCOhost, and ScienceDirect, covering topics like HR management, sustainability, and skill development. NCI Moodle makes available the MA in HRM course materials, including lecture notes, case studies, research articles, and industry reports relevant to green HR practices.
- Industry reports and publications are available from sources like United Nations Environment Programm (UNEP), and European Strategy and Policy Analysis System (ESPAS), highlighting green initiatives within the business context.

Additionally, it was possible to access international surveys and reports from organizations such as The Chartered Institute of Personnel and Development (CIPD) and the World Economic Forum (WEF) about the future of jobs, green skills, and sustainability in the workplace. The Society for Human Resource Management (SHRM) was a source for this research to obtain professional publications and journals like Harvard Business Review and

Human Publications focusing on human capital trends and the integration of sustainability into corporate strategy.

Sample

After an extensive exploration of the data sources mentioned in the previous section, 183 pieces of secondary data were selected from academic articles, journals and professional reports on Green HRM practices published between 2014 and 2024, as this study focuses on the most recent literature. The sampling process was driven by the research question and objectives set for this project as initial parameters. Finally 47 pieces of data remained as the sample chose to be analysed in this research. More details of parameters and themes will be provided in the following paragraphs.

Decision-Making Based on Research Objectives

The techniques and procedures chosen for the data collection process were decided based on the research objectives. It is important to mention that the research question was also considered.

Data Analysis

Thematic analysis involves identifying key patterns or themes related to the investigated topic within qualitative data. This approach allows for the exploratory study of how HR professionals acquire sustainability skills, revealing sources of environmental knowledge, training programs, and best practices. Braun and Clarke (2006) emphasize that thematic analysis is a foundational qualitative method, valuable for its flexibility and utility in various analytical contexts. This method is especially beneficial for examining the development of sustainability skills among HR professionals, as based on Ayres (2008), thematic analysis is not restricted to a specific epistemological or theoretical framework.

The thematic analysis applied to this study is guided by the conceptual framework set to investigate the contradictions within the field of HR and sustainability. Exploring the context of learning new skills, thematic analysis helps capture the information on how sustainability skills are taught, learned, and applied within the HR sector worldwide. By identifying recurring themes in secondary data, insights emerged about the effective practices and common obstacles HR professionals face in integrating Green HRM practices into their function. This research

explores contradictions between environmental responsibilities and the appropriate development in sustainability provided to HR professionals. Thematic analysis is suitable for this study to enable an in-depth analysis of the content from secondary data and to interpret the data to better understand the phenomena under investigation in this paper.

Thematic analysis using ATLAS.ti

ATLAS.ti is a powerful computer program used by academics to locate, code, and annotate features within unstructured data, supporting qualitative analysis of textual, graphical, audio, and video data (ATLAS.ti, 2024). This software was used to manage the collected data in the same dashboard. It was helpful to organize, manage, structure, and analyze articles, PDFs, journals, and reports for this project selected to conduct a deep content analysis. Figure shows the phases of content analysis within ATLAS.ti:

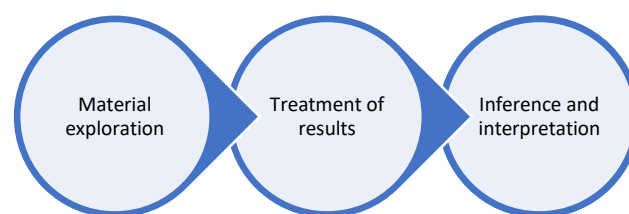


Figure 6. Applying the various phases of thematic analysis in ATLAS.ti Source: Soratto et al., 2020.

The toolset offered by ATLAS.ti helped to obtain insights through the data analysis to comprehend the phenomena explored in this research project. The data analysis for this study followed the three phases proposed by Bardin (1977):

1 - ***Pre-analysis*** is the phase where the researcher organizes data and chooses relevant documents to understand the studied phenomenon (Bardin, 1977). The hypotheses and objectives of the study can be formulated then. The indicators to substantiate the final interpretation are also generated at this stage. All data collected for this study was obtained through documentary study. After gathering around 300 pieces of data related to the research

topic, a project was created in ATLAS.ti, and 183 useful pieces of secondary data files were uploaded to this project.

2 - Analytical Description: In the second phase of this analysis, the data was coded and categorized, seeking to understand the text thoroughly creating codes (Soratto et al., 2020). Coding data means attaching labels to segments of data that classify what each segment is about (Charmaz, 2014). Naming something, Friese, (2019) states that researchers conceptualize and frame information by naming it. The coding process allowed the conception of analytic questions about the relevant data gathered for this project, which enabled comparisons between different segments of data.

The ATLAS coding function enabled the extraction and categorization of information from the 183 pieces of data and the selection of 47 of them as the most relevant to the study. By inserting inputs of relevant keywords into the ‘Word List’ tool, it was possible to export the word list to Excel and then determine the main themes for the study. The next step was to insert the themes into Power BI software to visualise them, as illustrated in Figure 7. During the coding process, it was possible to identify similarities and make comparisons of key aspects of this project raised from this study's research questions and theoretical framework.

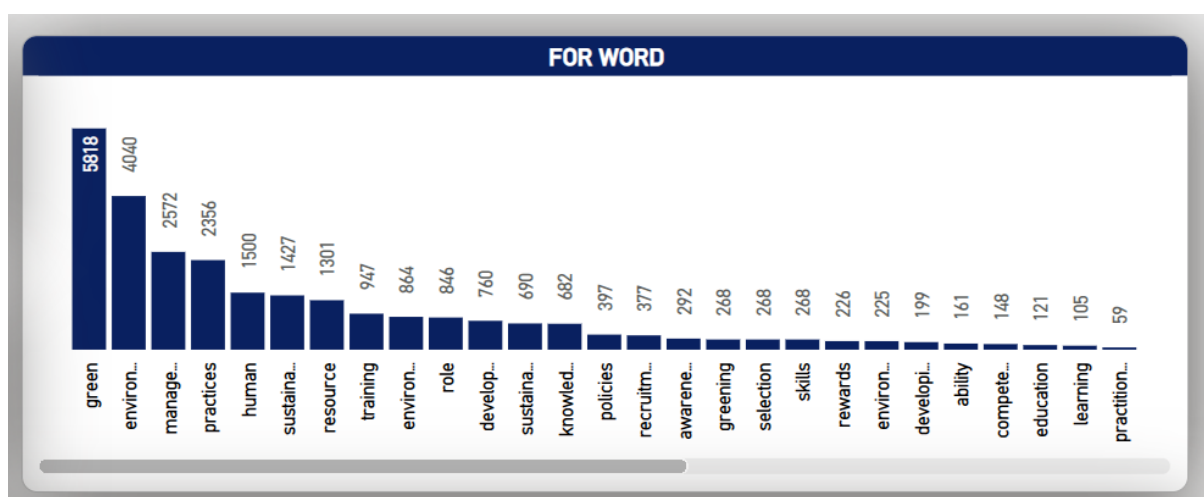
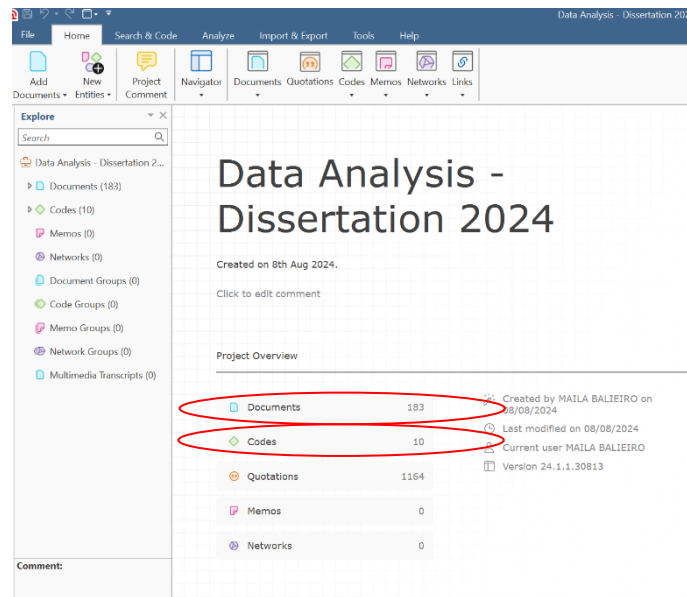


Figure 7. Word-frequency list view on Microsoft Power BI.

To better illustrate the two first phases of the data analysis using ATLAS.ti the Figure (??) shows the screen featuring ‘Documents’ (183 units), ‘Codes’ (10 units) and previous *Quotations* (1,164 units) highlighted by researcher in the pre-analysis. Data coding was processed using the keywords: Human Resources Management, HR professionals,

Sustainability, Sustainable HRM, green HRM, Green Skills, skills development, HR Competencies, Professional Development, and Training.



3 - Inferential Interpretation . According to **Bardin (1977)** this is the last stage of data analysis. It is the time to interpret what the researcher found, make inferences, and state conclusions based on the analysed data. After concluding the two first phases of organising and structuring data in codes by similarities using ATLAS.it, the interpretation was made by inserting the coded data as inputs in the *Power BI* (Business Intelligence) software available as part of *PowerPoint Microsoft* toolset. This software allowed the visualization of the codes and their frequency to determine patterns and interpret relationships between them.

Soratto et al., (2020) state that processing data reviews what is meaningful and valid to the study, allowing the researcher to set the results of tables, diagrams and figures as their choice. Themes were determined for this study based on Patton (1990) suggestion that in the inductive approach themes must be strongly linked to the data. Therefore, after analysing the similarities in the word list generated through prompts to ATLAS.ti, it was possible to identify only 3 key themes and the percentage of frequency they appear in the analysed data (see **Figure 8**). These key themes were named: “Green HRM”, “HR Professional”, and “Skills Development”. Visualizing the themes was helpful to see the frequency of each theme and identify initial findings. The frequency of themes results in tables that quantify the findings, offering the

possibility to interpret the qualitative data behind the numbers as explained in the Findings chapter.

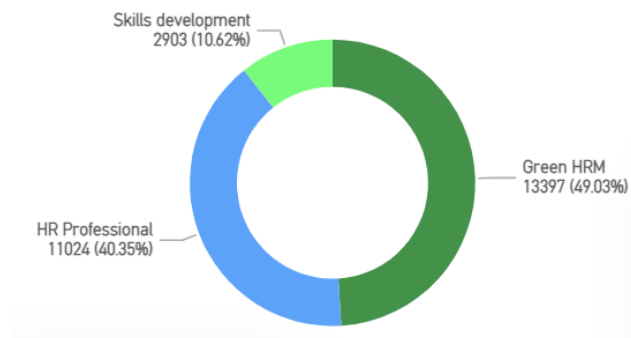


Figure 8 illustrates the 3 key themes in ATLAS.it.

Research Ethics

This paper follows the National College of Ireland principle that research conducted by students or related to their rights as participants, the purpose of the study, the list of all procedures that will take part, and the list of risks and benefits of participation, which does not apply to this research as it utilized only secondary data publicly available.

6. Findings

Aiming to find answers to the central research question – how HR professionals develop environmental skills - what was found in analysing the 47 pieces of secondary data sampled for this research generated four main topics as stated below:

1. There are contradictions in the Green HRM practices.
2. Green skills require specific knowledge.
3. There is no evidence of training provided to HR professionals to implement environmental practices in the workplace.

Following the premises of exploratory research, the data analysis aims to generate initial insights and hypotheses for future research. Saunders (2019) suggests that the theory used in a research project should be explicit in the presentation of the findings and conclusions. These are the theories that support the findings of this study:

6.1 There are contradictions in the Green HRM practices.

In contrast to the positive findings about GHRM practices such as green recruitment and selection processes and green pay and reward, green training was not associated with corporate sustainability as observed in Jamal's *et al.*, (2021) study. This contradiction is confirmed by the percentage of articles (49%) that mention roles attributed to HR in delivering green practices in comparison to data exploring skills development, which corresponded to only 10,62% of the sample.

6.2 Green HRM practices lack measurement.

Tang et al. (2017) argued that it is urgent to develop measurement tools to evaluate Green Human Resources (GHRM) to gain a deeper understanding of its impact on individual or organizational performance. He presented the first valid instrument to measure GHRM in five dimensions: green recruitment and selection, green training, green performance management, green pay and reward, and green involvement. There is no evidence of measurement tools in data analysed.

6.3 Green skills require specific knowledge.

Ali, Malik, Yaqub, Jabbour, Jabbour & Latan (2023) emphasize that the investment in green knowledge by encouraging and enabling employees to enhance their environmental awareness and abilities is vital not only for the business's success but also for its survival in the market. Another study carried out by Kellner, Cafferkey & Townsend, (2019) reaffirm the purpose of this study as they suggest that organizations should implement HR strategies by promoting environmental knowledge, to develop the skills and competencies needed for effective operations. Again, there was no evidence of specific training in green skills for to capacitate HR professionals. Bailey (2015) attributes the lack of knowledge from senior leaders about green practices or the perception that such activities are costly and have long-term return investments negatively impacts the investment in preparing HR professionals adequately by pursuing the necessary capabilities to implement green strategies within the organization, leading to the failure of environmental goals.

These findings may positively impact how HR professionals can support organizations in achieving this sustainable development. Moreover, this research has the potential to confirm an existing knowledge gap in preparing HR professionals adequately by pursuing the necessary capabilities to implement green strategies within the organization, leading to the failure of environmental goals. HR professionals who would have been successful in previous decades would not be effective today unless they are possessed with a new set of skills and competencies. Therefore, this dissertation attempts to explore the gap between researchers' expectations and HR practitioners' reality in developing a green skillset. Raising awareness on this topic may reinforce the need for future research and support companies in achieving their environmental goals and contributing to broader sustainability efforts.

The present findings demonstrate consistency with previous studies conducted by Podgorodnichenko, *et al.*, (2020) that professionals worldwide acknowledge the essential role of HRM in promoting sustainability. They show that professionals worldwide recognise the necessary involvement of HRM in the sustainability agenda. This includes developing specific environmental skills and knowledge to effectively engage the workforce and integrating sustainability objectives into HRM practices. The study also highlights the importance of exploring the relationship between sustainability and HRM through the development of a

sustainability strategy and the recruitment of talented individuals with the expertise and motivation to implement necessary actions in this area.

The current study's findings are consistent with other research demonstrating a crescent in the number of trends in which sustainability issues are associated with HR scope. However, the researchers mentioned in the previous paragraphs corroborate the previous findings and show evidence of HR practices related to sustainability; they could not answer how these professionals have developed the skills to implement such practices, as shown in the literature review chapter.

7. Discussions

This chapter is focused on exploring the findings obtained from the data analysis following the research questions and sub-questions stated below:

Central question:

How do HR professionals develop environmental skills?

Sub-questions

1 - What are the roles of HR in corporate sustainability?

2 - What specific knowledge is essential for HR professionals to support environmental practices?

3 - What methods and resources do HR professionals use to acquire green skills?

7.1 What are the roles of HR in corporate sustainability?

A strong relationship between the pressure on the organisations to take action and the new HR responsibilities has been reported in the literature. From observer to key player, Colbert and Kurucz (2007) pointed out that the HR function was inevitably broadened once 68 percent of the top 250 global organisations included to their agenda reports on sustainability and corporate responsibility. The discussion over sustainability and corporate responsibility goes back a few years earlier, in 1983, when the United Nations convoked the Brundtland Commission or the World Commission on Environment and Development (WCED) responsible for the report Our Common Future published in 1987 proposing a cornerstone for the global economy and organisations to adopt the sustainable development for both environment and society.

Sustainability should matter to HR professionals because they play a pivotal role in addressing skills gaps, leading organizational change, planning for future workforce needs, and developing the competencies required for a sustainable future, but they need to be prepared with such

knowledge first and foremost. As organizations around the world commit to net zero emissions and embrace sustainability, HR professionals must be prepared to lead these transformative efforts in supporting.

7.2 What specific knowledge is essential for HR professionals to support environmental practices?

According to a study by Fawehinmi, et al. (2020), the lack of knowledge about sustainability among the workforce has been found to hinder the implementation of green practices within organizations. When there is a lack of action-related environmental knowledge, it can result in a lack of environmentally friendly behavior among lecturers, potentially impeding environmental management efforts. Research has indicated that green Human Resource Management (HRM) plays a crucial role in the development of environmental knowledge. However, there is a lack of evidence regarding how HRM is equipped to provide such knowledge.

However, a critical gap remains in understanding how HR professionals develop the necessary skills to implement sustainability practices. While the current study, along with others, confirms the increasing integration of sustainability within HRM, it also highlights a need to further explore the mechanisms by which HR professionals acquire and enhance these specific competencies. This gap suggests an opportunity for future research to focus on the educational and training pathways that equip HR practitioners with the tools to lead in sustainability.

7.3 What methods and resources do HR professionals use to acquire green skills?

The WFPMA Report 2023 highlights the importance of upskilling and reskilling at scale. This strategy involves identifying the necessary competencies and assessing upskilling and reskilling needs to provide training programs that help employees acquire new skills for their current positions or transition to different roles. Additionally, the report emphasizes the establishment of various digital applications and services, such as organizational learning academies, to support this goal. The report also underscores the significance of change management capabilities. It emphasizes the need for HR professionals to support holistic organizational changes and major transformations by ensuring employee buy-in, readiness, and engagement. Furthermore, it highlights the importance of enabling leaders to navigate

challenging situations effectively, thereby fostering a culture of adaptability and resilience within the organization. Moreover, the WFPMA Report stresses the importance of HR staff capabilities. It outlines the need for HR to forecast and develop the right mix of skills, individuals, and roles to enhance the quality and impact of HR work. This approach aims to future-proof the HR function, ensuring that it remains effective and relevant in addressing the evolving needs of the organization.

In conclusion, this study contributes to the ongoing dialogue about the intersection of HRM and sustainability, underlining HR's essential role in this area. It also points to the need for further research and practical interventions to build HR professionals' capacity to integrate and advance sustainability effectively within their organizations.

Recommendations

To build on the findings of this research, several next steps are recommended:

1. **Focus on Skill Development:** Future research should delve into the specific educational programs, certifications, and training opportunities that can equip HR professionals with the skills required to advance sustainability in their organizations. This could involve case studies of successful programs or the development of new competency frameworks tailored to sustainability.
2. **Longitudinal Studies:** Conducting longitudinal studies could provide deeper insights into how HR professionals acquire and apply sustainability-related skills over time, and how these competencies impact organizational outcomes.
3. **Broaden the Scope of Research:** Expanding the geographic and sectoral scope of future research would allow for a more comprehensive understanding of how different contexts influence the integration of sustainability into HRM practices. Comparative studies between different regions or industries could yield valuable insights.
4. **Practical Implementation Frameworks:** Developing practical frameworks that guide organizations in embedding sustainability into HR functions could be beneficial. These frameworks should be grounded in empirical research and offer actionable steps for HR practitioners.

This research contributes to the current knowledge by not only reaffirming the critical role of HRM in sustainability but also by identifying a key gap in the understanding of how HR

professionals develop the necessary skills for this role. While previous studies have established the importance of HRM in promoting sustainability, this research brings to light the need for a more focused exploration of the pathways through which HR professionals can effectively acquire and apply sustainability-related competencies. By highlighting this gap and suggesting avenues for future exploration, this research adds a new dimension to the ongoing discourse on the intersection of HRM and sustainability, offering a foundation for future studies that can further advance both theory and practice in this area.

8. Conclusion

8.1 Summary of the Research

This research underscored the critical role that Human Resource Management (HRM) plays in advancing sustainability within organizations, a conclusion that aligns with previous studies by Podgorodnichenko et al. (2020). The findings confirm that HR professionals globally recognize their essential involvement in embedding sustainability into organizational practices. Overarching themes that emerged include the need for HRM to actively integrate sustainability objectives into its core functions, the importance of developing specific environmental skills and knowledge among HR professionals, and the strategic role HR can play in recruiting and motivating individuals to drive sustainability initiatives. The study also highlights a significant gap in the existing literature: while there is widespread recognition of the growing association between HRM and sustainability, there is limited understanding of how HR professionals develop the competencies necessary to implement these practices effectively. This gap points to the necessity of further research focused on the educational and professional development pathways that can prepare HR practitioners to lead in sustainability efforts.

8.2 Limitations of the Study

Certain limitations must be considered when conducting literature reviews and setting research agendas. These limitations include selecting topics, time frames, and areas of emphasis. Using secondary data may be challenging as someone else previously collected it. It may not be suitable for the exact purpose of the study and may have different definitions, measurements, or categories. However, this study analysed secondary data to ensure that it does not reflect the biases of those who collected or published it, which could have limited what can be found or how it is interpreted. The focus remained on the gap in the literature using the research question as a guide.

In some cases, casting a wider net during the review research process may reveal complementary or contradictory studies. Furthermore, different scholars emphasizing various detailed research studies may present alternative analyses. However, despite these limitations, the review and research agenda presented here emphasizes the most contemporary and relevant studies as well as current research issues. While this study has attempted to cover various

aspects of the phenomenon under investigation, there are still important details that require further investigation.

Utilizing secondary data was important to save considerable time working on the alternatives available to conclude this research after the failure of the initial methodology designed to gather primary data. Some financial challenges occurred along the way due to health issues. The investment in the Grammarly subscription cost 90.00 euros for the last three months. Also, to be able to manage, organize and categorize a heavy load of secondary data, it was necessary to subscribe the software ATLAS.it which cost 13.00 for 30 days of subscription with the student discount.

8.3 Implications for Practice

Considering the wide investigation of the recent literature conducted in this research, incorporating environmental sustainability into HR efforts is a multifaceted process. The implications for practice based on this research are substantial, providing HR professionals with actionable insights and strategies to foster environmental sustainability within their organizations. This involves:

1. **Investment in Green Training Programs focused on preparing HR professionals** with environmental sustainability knowledge, covering topics such as sustainability principles, environmental regulations, and green practices so they will be ready to develop and implement training programs. This will ensure that HR professionals have the necessary knowledge and skills to support environmental initiatives.
2. **Creation of Competency Frameworks that outline the skills and knowledge required for green HRM practices.** These frameworks can guide recruitment, training, and performance management processes to ensure alignment with environmental goals.
3. **Strategic Integration.** Ecquiped with the right environmental knowledge, HR could play a key role in integrating environmental sustainability into the organizational strategy. This includes embedding sustainability goals into corporate values, policies, and performance metrics. HR professionals can lead by example, demonstrating commitment to sustainability in all HR functions.
4. **Implementation of Measurement and Metrics.** HR departments should develop and utilize metrics to measure green HRM practices' impact on environmental and financial

performance. This data can be used to demonstrate the value of investments in sustainability initiatives.

5. **Ensuring Compliance with Policies and Regulations.** HR professionals must stay informed about relevant environmental policies and regulations and ensure organizational compliance. This involves updating HR policies, providing training on regulatory requirements, and conducting regular audits.

8.4 Suggestions for Future Research

Despite significant contributions from the recent studies explored in this paper additional research is needed to fully address the agenda of preparing HR professionals for environmental management. Future research should investigate how HR professionals can be equipped with the necessary knowledge and skills to effectively implement environmental practices in the workplace. This is crucial for advancing the role of HR in supporting organizations in achieving their environmental goals successfully. For instance, current GHRM literature could be enriched by integrating perspectives and insights from green recruitment, competency development, and employee participation practices. Future research should focus on competency frameworks that identify the specific skills and knowledge HR professionals need to promote and manage environmental initiatives. Furthermore, studies on educational and training programs are able to equip HR professionals with knowledge of sustainability, environmental laws, and green practices. One of the gaps in the literature regards the lack of specific metrics to measure the impact of green HRM practices on both environmental and financial performance, ensuring that sustainable practices contribute to the bottom line.

9. CIPD Requirements for MAHRM Dissertation Students

Considering the wide investigation of the recent literature conducted in this research, incorporating environmental sustainability into HR efforts is a multifaceted process but it should start from equipping HR professionals with the specific knowledge on the green agenda. These are the recommendations for practice based on this research to add insights and strategies that support environmental sustainability within their organizations:

1 - Invest in Green Training Programs to prepare HR professionals with environmental sustainability knowledge, covering principles, regulations, and green practices to develop and implement training programs, ensuring they can support environmental initiatives.

2 – Design Competency Frameworks that outline the skills and knowledge required for green HRM practices. These frameworks can guide recruitment, training, and performance management processes to ensure alignment with environmental goals.

3 - Implementation of Measurement and Metrics. HR departments should develop and utilize metrics to measure green HRM practices' impact on environmental and financial performance. This data can be used to demonstrate the value of investments in sustainability initiatives.

If they have the appropriate competencies and knowledge, HR professionals can significantly support organizations to achieve their environmental goals.

Personal Learning Statement

This dissertation journey has been a transformative experience that has deepened my understanding of sustainability in Human Resource Management (HRM) and expanded my academic and professional skills. The research process, from the initial stages of topic selection to the final analysis and writing, has provided me with invaluable insights into both the subject matter and the broader research process. More specifically, the MA in HRM helped me reflect on how the theory becomes practice in the business context.

One of the most significant lessons I learned during this dissertation was the importance of integrating sustainability into HRM practices by prioritizing HR professional's development. Initially, my understanding of sustainability in the workplace was somewhat limited to environmental practices like recycling or reducing waste. However, as I delved deeper into the literature and analyzed the data, I realized that sustainability in HRM goes far beyond these

surface-level practices. It involves a fundamental shift in how organizations operate, requiring HR professionals to develop specific environmental competencies and integrate sustainability into every aspect of HR strategy and operations.

The theories I explored, particularly those emphasizing the role of education, training, and organizational support in developing green competencies, have reshaped my perspective on the responsibilities of HR professionals. I now understand that HR plays a crucial role in driving the sustainability agenda within organizations. This role is not limited to compliance with environmental regulations but extends to fostering a culture of sustainability, developing green skills, and aligning HR practices with broader sustainability goals.

Another key learning from this research is the complexity of developing environmental competencies within organizations. The multidimensional nature of green competencies, as discussed in the literature, highlighted the need for HR professionals to possess a diverse set of skills and knowledge. This understanding has made me more aware of the challenges organizations face in cultivating these competencies and the critical role of continuous learning and development in overcoming these challenges.

On a personal level, this dissertation has significantly enhanced my research skills. The process of conducting a mono-method qualitative study using secondary data required me to become proficient in data analysis and synthesis, as well as in critically evaluating existing literature. I learned how to identify relevant themes, draw meaningful conclusions from complex data, and articulate these findings clearly and coherently. These skills will benefit me in my professional career.

10. Reference list

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