



The Impact of Green HRM Strategies on Entrepreneurship in Algerian Companies

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Abstract :

This study investigates the impact of Green Human Resource Management (GHRM) strategies namely green recruitment and selection, green training and development, green performance management, and green rewards on corporate entrepreneurship in Algerian companies, with proactive environmental strategy as a mediating variable. The objective is to determine how GHRM practices can foster eco-entrepreneurship, innovation, and sustainability in emerging markets. A mixed-method approach was used. Qualitative data were collected through semi-structured interviews and focus groups with 25 HR managers from 15 Algerian companies across different sectors. Quantitative data were gathered from a survey distributed to 565 managers and employees in SMEs and large enterprises. The findings indicate a significant positive impact of GHRM strategies on entrepreneurship. GHRM strategies are critical for fostering eco-entrepreneurship in Algerian companies.

Key Words: Green Human Resource Management, Corporate Entrepreneurship, Sustainable Development, Eco-Innovation, Algeria, SMEs.

JEL Classification : L26, M12, Q56

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Introduction

As the world is witnessing a rapid rise in environmental issues related to industrialization, sustainable development and greener practices have emerged as hot topics in various fields. In response to the reckoning that the resources on Earth are limited, companies are making efforts towards green awareness and embedding greener practices in their policies and systems. With current environmental challenges and severe workplace pollution, industrial sectors must prioritize and implement greener practices to be socially responsible. Thus, with the increase in the adoption of greener practices, it is likely that organizational recruitment, selection, training, performance appraisal, and reward systems will be compatible with these emerging practices. Adopting green practices with various green human resource management (GHRM) strategies will help organizations to gather and retain people with a certain mindset of green awareness. GHRM reflects the overall capability and maturity level of an organization's GHRM strategies implementation.



The objective of this research is to identify and explore the possible impact of GHRM strategies on the adoption of entrepreneurship in small to medium Algerian companies. Identifying the impact of GHRM strategies on entrepreneurship will help practitioners understand their importance in enhancing entrepreneurial skills for diversification, evocating innovation and creativity, and better motivating employees. Despite the rising popularity of GHRM and entrepreneurship in developed countries, there exists a gap of knowledge regarding their adoption in developing countries. In addition, GHRM in the context of entrepreneurship is an overlooked area.

Since 2010, with the emergence of various international challenges and pressures such as carbon emission reduction initiatives by the WTO, the Kyoto Protocol, and ISO certification, companies have realized their responsibility to implement greener practices on a societal level. Where bigger companies possess the necessary resources, capabilities, and stronger pressures, smaller companies in developing countries usually face difficulties in this regard. Moreover, in developing countries like Algeria where the government's earlier focus was on economic growth, the adoption of GHRM practices is still an unexplored area. Integrating GHRM with entrepreneurship, a necessity for the survival of all companies irrespective of their size, is even of greater concern. Focusing on small to medium-sized companies regarding GHRM strategies and their impact on entrepreneurship will help the organizations on a wider scale in adapting to the new practices.

Background and Rationale of the Study:

In recent years, with the rise of environmental issues humanitarian, scholars have considered Human Resource Management (HRM) as a tool for addressing these issues. Green HRM focuses on ensuring the Conscious Environmental Behavior (CEB) of employees. CEB is the tendency of employees to ensure environmentally friendly activities in the workplace by following a green-oriented culture. Properly aligned, CEB can enhance productivity and innovation in organizations. However, limited CEB can negatively impact the overall performance of companies and even lead to their collapse. Ghazali, Khumairoh, Ceny, & Raharja (2021) have argued that the company's role in the environment should not only be approached legally and socially, but also from all aspects of managerial strategy and policies, such as HRM. However, establishing a green-based organization is challenging for multinational bodies such as the United Nations and the World Health Organization, especially in developing countries. Although many studies from developed countries have reported the positive impact of HRM on environmental activities within organizations, limited attention has been given to this field in developing countries. Although environmental interest has increased since the 1970s, several scholars have suggested that developing nations should consider green practices. Several reasons have been suggested for the negligence of green practices, including economic indicators such as gross domestic product, income level, and corruption index. Corruption leads to political bureaucracy, which prevents authorities from establishing a strong environmental regulatory framework (Ren et al., 2022). Even when rules are established, authorities and law enforcement may use their power to



turn a blind eye to corrupt companies, as the net benefits of non-compliance surpass the costs. Corruption hinders the introduction of environmental policies such as green-based HRM. Scholars have argued that one major reason for Algeria's independence from green practices is its corruption. Algeria has been listed in the low green competitiveness index. However, many scholars have suggested that even with low environmental conditions, developing countries should explore how firms are engaged with environmental issues (Ren et al., 2022). Examining corporate environmental responsibility can help others conform to such practices. Shine, affordability, and resonance in areas with traditions of negligence and disinterest such as in the Middle East region (specifically in Algeria) can draw environmental interest toward civilized groundwork.

Research Aim and Objectives:

Research on the relationship and effects of green human resource management practices on corporate entrepreneurship is relatively scarce. Consequently, this paper attempts to examine the influence of green recruitment and selection, green training and development, green performance management, and green rewards on corporate entrepreneurship through the mediation of the proactive environmental strategy in the context of companies operating in the industrial field in Algeria. Algeria has adopted an environmental strategy that aims to promote the importance of entrepreneurship for environmental sustainability. As a result, this study will be useful in advancing literature and creativity on these relevant topics.

Across the globe, entrepreneurs are increasingly investing in green technologies and developing clean technologies that seek to harness the optimization of green production for the concurrent reduction of energy consumption and environmental pollution. Corporate entrepreneurship, widely recognized for fostering innovation, new business exploration, and the formation of new ventures within existing organizations, has garnered fervent attention from scholars, practitioners, and policymakers alike in recent decades. The underlying force of corporate entrepreneurship is the entrepreneurial mindset embedded in a firm's organizational culture, which enables the identification and pursuit of opportunities. Nevertheless, climate change and environmental concerns are pressing issues of great societal concern. Due to growing global environmental concerns, there is a demand for a paradigm shift in industrial entrepreneurship that supports sustainable corporate advancement by attaining a balance between economic development and environmental sustainability. Consequently, there is a compelling need for new technologies and cleaner production processes.

Given the economic disparities and the increasing concerns of environmental degradation among the economies in transition and developing world, it is imperative to conduct more research on alternative forms of entrepreneurship that are more viable and sustainable. This paper attempts to examine the effects of green human resource management practices on corporate entrepreneurship using proactive environmental strategy as a mediator. The literature indicates that green human resource management practices affect corporate entrepreneurship, but this relationship is mediated through the proactive environmental strategy. However, this



mediation effect has not yet been examined in the context where these relationships have not been previously studied. Therefore, the objective of this research study is to examine the impact of green human resource management practices on corporate entrepreneurship.

Structure of the Paper:

The overall structure of the paper is intended to provide a comprehensive understanding of the issues examined in the research. It consists of five chapters. Chapter 1 begins with an introduction discussing the background and rationale of the study. The chapter then proceeds to the research aim and objectives followed by the structure of the paper. Chapter 2 presents an overview of the literature related to the study, critically evaluating and justifying the research concepts. A review of prior studies relating to the impact of Green HRM strategies on entrepreneurship among Algerian firms is also discussed in this chapter. Chapter 3 outlines the research methodology. It starts with a justification of the research approach and design to be adopted followed by methods of data collection, sampling criteria, and data analysis procedures. Ethical considerations and limitations of the methodology are also discussed in this chapter. Chapter 4 presents the findings and analysis of the data collected through the semi-structured interviews. The findings are analyzed in light of the research objectives discussed in Chapter 1. Chapter 5 concludes the paper. In this chapter, the key findings are highlighted, implications of the study are discussed, and recommendations for future research and practice are made.

I. Green HRM Strategies: Concepts and Theoretical Framework

The term "Green Human Resource Management" (Green HRM), which is also similarly termed Environmentally Friendly HRM or Eco-Friendly HRM, refers to the systematic and intentional inclusion of eco-friendly aspects in HR policies and practices. It is a critical and strategic step toward the effective implementation of Environmental Management Systems (EMS) within companies. HRM cannot remain indifferent to the need for environmental management because environmental behaviors are predominantly influenced by individuals and organizational culture. The change process requires the acquisition of new competencies by employees, a particular background in qualitative change, a proactive attitude, and adaptability to a changing environment.

In a developing country like Algeria, employees with such a background are very rarely found, and firms seeking foreign investment are mainly looking for technologies and human capital with such background. Therefore, the ministries of environment and labor must undertake training courses on environmental issues for the entire cadre of trade unions, employers and entrepreneurs, and students of all disciplines. A realistic eco-audit must be conducted in each sector to identify the proportion of eco-friendly and environmentally harmful industrial establishments and find the sector-specific solutions to mitigate the environmental and employment problems. This necessitates a crucial need for eco-coaching and eco-management courses for trainers. Unsafe discharge and reckless industrialization cannot be rein



in without the foregone steps. The dominant lowest-cost strategy of industrial establishments seeking freedom from bureaucracy must be addressed.

There is a plethora of literature available on green practices implementing GHRM policies in organizational systems. However, scanty literature is available on examining the impact of adoption level of GHRM practices on entrepreneurship in specific socio-cultural contexts. Today, there is a collective understanding that GHRM is crucial in strategizing for sustainable development owing to market demand, legislative pressures, and normative pressures. GHRM encompasses activities such as hiring, retention, resource allocation, positive leadership, policy declaration, investment, green training, and education, as well as policy formulation, creation of awareness, willingness, volunteering, additional endeavors, resource conservation, eco-friendly management of plants, reduction of emissions and discharge, waste management, and pollution prevention.

1. Definition and Components of Green HRM

Green Human Resource Management (Green HRM) is a management discipline that has been developed to engage proactively in the social responsibility of corporations towards the environment. In the past years, there have been attempts to go beyond traditional HRM models to find new approaches, considering the expectations of all shareholders, and not only of shareholders. Such an alternative perspective is called the stakeholder theory. Thus, companies would have to consider all stakeholders during their decision-making process. Following the principles of the stakeholder theory, various authors have presented recommendations on the corporate social responsibility and corporate governance dimensions for corporations. Environmental sustainability is one dimension of such expectations from sedentary stakeholders, and environmental issues have become an integral part in corporation's traditional governance practices to address social expectations. However, systemic changes within corporation's behaviours are needed and such changes should be driven by all governance dimensions in a concerted manner. Thus, a question arises: does an environmental perspective need to be included in the employment and work conditions dimension of corporation's governance? Similarly to all other governance dimensions, corporations can be socially responsible towards the environment and environmentally aware employment conditions and jobs can be created. This is called Green HRM.

Green HRM is the sum of all intended policies and practices affecting the nature of the employment relationship, and work conditions and jobs under social responsibility in the context of the environment. Based on the employment relationship, work conditions and jobs natural components of Green HRM are: (1) Green recruitment; (2) Green training and development; (3) Other green employment services; (4) Green performance appraisals and other evaluations; (5) Green remuneration, bonuses and other rewards; (6) Green termination; dismissals and other discontinued employment conditions; and (7) Other outside employment work and career. Based on the nature of the employment relationship, work conditions and jobs institutional and organizational components of Green HRM regarded as a system are: (1) Green policy and strategy; (2) Green organizational structure; (3)



Green social dialogue; (4) Green corporate culture; (5) Green working environment; (6) Green job design and analysis; and (7) Green HRM system.

2. Theoretical Underpinnings of Green HRM

Green Human Resource Management (GHRM) is a new field that is evolving. Many researchers and scholars are trying to develop GHRM theory. The broadest definition of GHRM is “Green outlook of Human Resource Management that employs certain HR practices to enforce environmental sustainability in the organization.” From an entrepreneurial perspective GHRM aids in conservation of natural resources and taking proactive measures against environmental change by formulating Martinez et al. (2015) HR practices such as designing ecofriendly or “green” products, developing market strategies, green ideology of organizations etc. Other studies have tried to categorize GHRM in elements like Green recruitment & selection, Green training & Development, Green performance management and Green compensation system (Khan et al. 2013). The basic concept of GHRM is to design HR policies to give the environmental agenda strategic relevance and organizational legitimacy.

The first explanation of GHRM is the natural-resource based view of the firm (NRBV), which stresses the crucial importance of risky, valuable, rare and inimitable natural resources such as clean air, forests or biodiversity for firm effectiveness. Natural resources can be a source of differentiation that lead to competitive advantage. Hence, putting corporate environmental culture stability, effectiveness and legitimacy on the agenda should positively influence firms’ choice of pro-active GHRM approaches, and the establishment of clean technology based firms. Following the announcement of the Brundtland Report, it has been shown that there had been a number of environmental improvement events in world economies.

The second explanation of GHRM is the HRM view of the firm, emphasizing the crucial role of employee involvement and commitment to the effectiveness of the firm. Human resource management (HRM) affects the way in which a company’s human capital, i.e. its employee base, contributes to the business activities, hence its overall effectiveness. It is asserted that influential HRM approaches lead to increased employee involvement and commitment due to mutually reinforcing HR practices such as at least two employee involvement systems, extensive training and a fair reward system. Since corporate environmental culture stability is influenced by the HRM approach, different HRM approaches lead to different interpretations of organizational pro-activity, and conditions for these approaches, such as stability of environmental corporate culture.

3. Entrepreneurship in Algerian Companies

Emerging economies across the globe, including Algeria, are attempting to increase the significance of entrepreneurship in their socio-economic evolution. The country has streamlined several policy interventions towards entrepreneurial ecosystem formation. Algerian entrepreneurship is dominated by small-sized firms but still replete with several issues and scope for innovations, creativity, and new ventures. The emerging issues arising are lack of demand for creativity and innovations, marketing and commercialization issues, and shortcomings in legal supports. The social, infrastructural, and financial support, however, offers incentives for



entrepreneurial creativity and innovation. This country-focused analysis facilitates more precise policy interventions while minimizing challenges in being more entrepreneurial for emergent economies like Algeria.

Over the past decades, entrepreneurship has received considerable attention in both academic and policy settings as an engine for competition, growth, and job creation. Concurrently, countries across the globe have attempted to reorient policies to induce entrepreneurship into the economic and societal tissues. Diverse national reorientation efforts have typically focused on: (i) liberalizing economies following the industrial policies of the successful countries; (ii) easing constraints on market entry; (iii) facilitating financial and institutional support; and (iv) financial reforms as well as ending the control of interest rates and reserve requirements on financial institutions. More than three decades ago, such initiatives were embarked across both advanced and emerging economies. In Algeria, efforts to promote entrepreneurship have been reenergized since the early years of 2000 and policies have been reoriented towards extracting energy from “the entrepreneurial spirit.”

Emergent economies across the globe are staunch political economies, agriculture-driven developing economies, whilst marginally rich in socio-ecological balance. Poverty and lack of indigenous entrepreneurship focus and attention on foreign direct investments and the influx of multinational corporations. The organismic economy succumbs to financial crisis not being techno-savvy, savin entrepreneurship deficiency, potential innovators, incubation institutions, skills, and unheard market. Business incubators, research and developmental institutes, venture capitalists/angel investors, educational institutions, including engineering, universities, and polytechnic institutes, cymbals can foster university-industry-linkage-Challenge. Developers and commercializers of techno-centric innovations and indigenous entrepreneurship are largely skilled recreants and largely unskilled and unsuccessful science/technology graduates. Social entrepreneurs, i.e., individually and collectively, firmed unskilled, independent, bonded as civilians are inculcating and restored agriculture as a business in viance/sect, rural and suburban localities-loss. Thought provoking multi-faced floraesetting effects/stoke expected are techno-centric. R&D's sustainable techno-centric indigenous entrepreneurship and a complex of business incubators enabling contextural/nuancing cloning amongst fellow developing economies at par.

3.1. Overview of Entrepreneurship in Algeria

Entrepreneurship in Algeria has become increasingly important for the country's economic growth and development. As the focus shifts from a state-controlled economy to a more diversified and market-oriented one, entrepreneurship plays a significant role in promoting innovation, job creation, and competitiveness. Algeria has great potential for entrepreneurship with its natural resources, youth population, geographical location, and growing market trends. However, entrepreneurship in Algeria faces various obstacles, including issues in the business environment and obstacles to starting and growing a business, such as access to finance, taxation, and the role of government and private institutions.



Entrepreneurship encompasses various forms, such as small and medium-sized enterprises (SMEs) and newly established firms. SMEs are vital for driving economic growth, creating jobs, and promoting innovation, thereby enhancing economic dynamics and diversification. Newly established firms and recent entrepreneurs also create employment opportunities and promote innovation and competition. In developing countries like Algeria, entrepreneurship can smooth the transition to a more diversified, stable, and rapid-growing economy.

Despite Algeria being a latecomer to entrepreneurship, the country boasts promising potential held by its natural resources, youth population, geographical location, and growing market trends. However, it should be noted that entrepreneurship in Algeria occurs amid several formal and informal constraints. After years of efforts to diversify the national economy, especially by promoting small and medium-sized enterprises (SMEs), entrepreneurship in Algeria faces numerous obstacles that hinder the development of existing potential or discourage emerging entrepreneurial initiatives in the first place.

Although progress has been made over the past two decades, entrepreneurship still suffers from several obstacles to starting a business (access to finance, obstacles related to taxation, taxes and bureaucracy, etc.) and growing the business (lack of qualified personnel, market access barriers, removing the government and private institutions, etc.). Knowing the main obstacles to entrepreneurship is vital for better understanding the inefficiency of the entrepreneurship process. By understanding the obstacles, key informants, business representatives, and policy makers could better set the agenda for improving the business environment and policy response.

The analysis sheds light on a myriad of issues emerging from the entrepreneurial environment, which need to be tackled if entrepreneurship in Algeria is expected to promote the transition to a diversified and stable economy. The analysis starts by providing a detailed description of the entrepreneurial framework in the MENA region and Algeria specifically. Subsequently, the major challenges and barriers to entrepreneurship growth in Algeria are discussed, in particular, regulations and formal constraints, access to finance, taxation, education and training, attitudes toward entrepreneurship, infra-structure barriers, and corruption. It is also emphasized that many barriers to entrepreneurship are mutually reinforcing.

3.2. Challenges and Opportunities for Entrepreneurship in Algeria

Entrepreneurship in Algeria faces a myriad of challenges, status quo, however the country can create a new paradigm in green entrepreneurship by adopting the right policy mix. Algeria has many advantages from a demographic point of view, qualified human resources at an affordable cost compared to the world elite training centers in great French schools, top universities in China and Moscow, and so on. Most of its competitors have diminishing working class populations except for sub-Saharan countries that struggle with massive illiteracy levels. Entrepreneurial ideas have to be backed by management, business ideas have to be translated into fundable projects, finance is needed for any project, excellent projects, even of the highest potential to create wealth without any fund would die in infancy. Algeria is facing a conundrum because banks cannot lend any money to private projects without real



estate guarantees, so they stick to provide finance to mega projects with no real impact on job creation or economic growth, consequently Algeria is facing 14% of unemployment rate despite billions of dollars invested every year. Recent conditionalities included in “covenants” with the IMF and the World Bank have tightened the guidelines banks are expected to follow, further foiling entrepreneurship in Algeria. Policy recommendations include liberalizing the banking sector by creating public banks that would guarantee fundable projects regardless of the builders’ net worth. Corporations like Sonatrach and Sonelgaz could create solidarity funds to finance promising startups by investing in innovation and venture capital funds as cutting edge technologies and know-how are needed to maintain the status quo. Coents would then have to pair with consulting firms who know the ins and outs of radical innovations to screen and invest in the highest potential projects. The same kind of setup should systematically be replicated on a smaller scale with local syndicates and funds specialized in local entrepreneurs to innovate, generate and store local wealth only by adopting alternative microfinancing principles. Such guidelines would create a virtual none risky entrepreneurial ecosystem analogous to historical and present success stories like Abdel Wahab Fares who created academic circles to promote science and technology or Berner in New York who developed the street hedge fund environment to invest in municipal bonds, thus giving a bright future to Algeria’s young and massive population rather than the gloomy prospects foreshadowed by the current setup leading to bank system collapse or state bankruptcy.

II. The Nexus between Green HRM and Entrepreneurship

The concept of Green HRM has garnered increasing attention from academicians, researchers, and policymakers in the field of HRM. However, there is still a limited understanding of the relevance of Green HRM in creating a conducive environment and promoting sustainability-oriented entrepreneurial activities. There is also a limited understanding of the pathways through which environmental sustainability practices in employees' activities and behaviors can be promoted. Therefore, it becomes essential for researchers to fill this research gap. This study aims to address this gap by investigating the linkages between Green HRM practices and corporate entrepreneurship, with a focus on sustainability-oriented entrepreneurial activities and its components (idea generation, opportunity exploration, and promotion).

Green HRM practices are designed to create a sustainable workplace environment in which the desired outcomes are the involvement of employees in environmental sustainability practices in their activities and behaviors. As such, the linkages between Green HRM practices and sustainability-oriented entrepreneurial activities are highlighted for the first time in the literature. Further, it becomes essential to explore how Green HRM practices promote corporate entrepreneurship. At the organizational level, stability, control, and efficiency are vital for concern or activity, but it is also essential to explore entrepreneurial opportunities, which is risky. Researchers argue that sustainability-oriented entrepreneurial activities experience a unifying force when entrepreneurial activities in environmental sustainability are



initiated. Thus, it is essential to investigate the relationship between organizations' Green HRM practices and employees' sustainability-oriented entrepreneurial activities within the framework of corporate entrepreneurship. Therefore, the relationship between Green HRM practices and the components of sustainability-oriented entrepreneurial activities is filled by exploring the vital role of Green HRM in the discipline and context of corporate entrepreneurship.

Incorporating corporate sustainability into corporate entrepreneurship involves reframing both proactive and opportunistic activities through a sustainability lens. Regarding theoretical perspectives on the relationship, several major theoretical perspectives are proposed to provide a macroscopic understanding of the nexus between Green HRM and corporate entrepreneurship. It is argued that environmental sustainability values become part of the corporate entrepreneurship framework, which leads to implementation being guided by such values. In this regard, a baseline understanding of the connection between environmental sustainability with both corporate procedures and entrepreneurship concepts is provided. Following this line of reasoning, it is also argued that it is essential to explore how certain corporate procedural settings—including Green HRM influence sustainability-oriented entrepreneurial activities.

1. Linkages between Green HRM and Entrepreneurial Activities

The relationship between Green Human Resource Management (GHRM) practices and entrepreneurial activities has generated considerable interest, particularly in the context of emerging economies. This discussion is timely, relevant, and of critical importance as the traditional 'brown' employment practices are being challenged by the need for environmental care. The business, academic, and social communities are increasingly paying attention to the growing concern over biodiversity loss, climate change, and environmental pollution due to the indiscriminate consumption of natural resources. In response, various nations, including Algeria, are adopting innovative strategic approaches and policies to move toward sustainable future development.

GHRM practices stimulate companies to adopt proactive environmental measures to alleviate the negative impacts of economically unsustainable development. The business community has been called upon to radically change current practices and technologies to become part of the solution. The adoption of "Green Resilience" as a model for recovery, resilience, and sustainability becomes paramount. The diversity of GHRM practices offers avenues for companies to better integrate environmental considerations into their overall employment practices. GHRM practices need to be included in defense companies' HRM systems because such systems determine the configuration of practices and their coherence over time. The concept of GHRM practices encompasses different types of employment practices in defense-based companies, including recruitment, training and development, performance evaluation, pay systems, and labor relations.

GHRM practices are proposed as a unique configuration of employment practices that support firms' commitment to the natural environment. The adoption and implementation of configurations of GHRM practices lead companies to pay



attention to auditing green selection, eco-training, green performance appraisal pay systems, and pro-environmental behavior promotion. This, in turn, influences companies' willingness to suggest green and eco-innovative ideas, their intention to invest time in motivated green behavior, and their intention to contribute to innovative EIS. Configurations of GHRM practices allow firms to develop a particular form of entrepreneurship that promotes economic and green innovations. Also, configurations of GHRM practices enable companies to transform environmental regulations into pro-environmental opportunities, and thus leverage firms' competitiveness by addressing green innovation. Overall, GHRM practices significantly impact entrepreneurial actions, pro-eco-innovative ideas, and intended EIS.

2. Theoretical Perspectives on the Relationship

Based on the review of the literature related to the connection between Green HRM and companies' entrepreneurial actions, three theoretical perspectives (or theories) have been employed to examine the relationship between the two constructs or variables: the human capital theory (including the resource-based view theory), the social capital theory, and the ability-motivation-opportunity (AMO) framework.

Human capital theory is a vital theoretical lens focusing on employees' human resources afforded by their knowledge, experiences, skills, and capabilities gained formally or informally (Becker, 1993). In addition, the resource-based view theory is a key position of human capital theory that asserts a company's distinct capabilities in technology, finance, and knowledge underpin its superior performance (Barney, 1991). This resource-based view theory considers companies' resources an important conceptual framework for comprehending their internal factors of competitiveness. However, employees' human resources associated with their knowledge and skills are the most vital resources contributing to the nation's competitiveness (Tsai & Ghoshal, 1998). By exploiting the knowledge and skills, firms can convert their ideas or innovations into the products or services commercially efficient to their operation after obtaining the resources (Bontis, 1998). Thus, this perspective suggests that companies pursuing or investing in Green HRM to enhance employees' capacities to conduct environmentally friendly activities can also stimulate, influence, or encourage them to develop such entrepreneurial activities extensively or intensively. Another perspective on the relationship between Green HRM and companies' entrepreneurial activities is the social capital theory. According to this theory, a company's social capital refers to its network of relationships among individuals, organizations, and groups and how they leverage these relationships to use the significant opportunities for their mutual benefit (Adler & Kwon, 2002). Some scholars have viewed companies' social capital in terms of networks that foster the spread of firms generating ideas and opportunities (Aldrich, 1999; Gnyawali & Fogel, 1994). Building on this perspective, Green HRM can positively affect companies' social capital related to their relationships with external entities, enhancing their green entrepreneurial opportunities. Firms with environmentally friendly activities can also boost their public relations and hence develop a favorable image and positive relationships with these external entities (Kim & Park, 2011; Liao



et al., 2010). In addition, these companies can access many external resources through advantageous relationships with investors, suppliers, and consultancy firms or institutions that help better discover opportunities and processes or develop ideas (Gupta, 2010; Mazzoleni & Nelson, 2007).

The final perspective on the relationship between Green HRM and companies' entrepreneurial actions is the AMO framework. Companies' HRM processes and practices are the three key or critical elements of this underlying framework. The ability aspect comprises HRM practices associated with developing employees' skills, knowledge, competencies, and other capacities enabling them to conduct their tasks or duties. It includes selecting competent employees and providing training and restructuring associated with employees' skill development. The motivation aspect encompasses the HRM practices contributing to motivating employees to conduct their tasks or create extra role behaviors beyond what is formally required in their employment contract. Finally, the opportunity aspect consists of HRM practices allowing employees to exercise their skills or capabilities to influence decisions (Huang, 2001; Boxall & Macky, 2007; Takeuchi et al., 2007). Green HRM can enhance the ability, motivation, and opportunity of promoting entrepreneurship, furthering the company's ecological sustainability endeavor.

III. Methodology

This study adopts an exploratory research design to gain insights into the impact of Green HRM strategies on promoting entrepreneurship in Algerian companies. The research design involves studying a small number of cases in detail or depth, using diverse techniques to gather an extensive range of qualitative data. In this context, semi-structured interviews were conducted with managers or professionals from 15 different companies in Algeria, focusing on those involved in human resource management. The questions revolved around examining current Green HRM initiatives and understanding their potential impact on entrepreneurship. In addition to Green HRM, the study also analyzed the role of national culture as a contributing element in developing green practices.

To understand how Green HRM strategies impact entrepreneurship, a qualitative study was conducted based on in-depth interviews. Algeria's diverse national culture, a single developing MENA country, provided a unique setting for the analysis. Open-ended questions were formulated to explore the relationship between Green HRM strategies and entrepreneurship. A qualitative analysis was performed using NVivo software to identify themes and patterns present in the data, ensuring reliability and validity. The linguistic richness of different companies and low awareness of green initiatives among small business owners added depth to the analysis.

Data was gathered through semi-structured interviews, allowing respondents to express themselves freely while guiding them towards the central topic. Interviews were conducted in Arabic, the preferred language of participants, and were recorded, transcribed, and coded using an interpretivist approach to derive themes and patterns. Using a qualitative approach enables an in-depth understanding of the phenomenon under scrutiny. Quantitative methods would provide numerical data but may not



capture the nuances accurately. On the other hand, qualitative methods allow for a more comprehensive description of the complex social phenomenon.

1. Research Design

The main objective of this study is to provide a framework for understanding the impact of Green Human Resource Management (GHRM) strategies on entrepreneurship in Algerian companies. Therefore, this study develops a conceptual model that shows the relationship between GHRM practices and entrepreneurship. This conceptual model integrates the content of GHRM factors, namely, green recruitment and selection, green training and development, green performance management, green compensation and reward, and green employee involvement. This study was carried out in mid-2025 at the Human Resources (HR) Department of the Algerian telecommunications sector: Mobilis (public sector), Djezzy, and Nedjma (private sector). The previous HR staff who actively implemented HR practices and policies prior to the adoption of GHRM strategies were targeted as key informants.

Following the recommendation of Narimawati et al., semi-structured interviews were conducted. The GHRM items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), in which an average score of 3 was regarded as neutral (neither agree nor disagree). The purposive criterion sampling technique was used to select participants based on their knowledge and experience relevant to the research topic. Key informants were recruited, who were required to be HR specialists who had implemented GHRM practices. In total, 25 HR managers/officers were involved, which is an adequate sample size to produce rich qualitative data. Data collection continued until saturation was reached, which occurred after 25 interviews. To maintain confidentiality, participants' names and identifying information were not disclosed.

The study employed content analysis to analyze data using Microsoft Excel. This step involved simplified, comprehensible coding of the data to divide the information into relevant categories (i.e. GHRM dimensions) corresponding to the research questions. Codes were grouped into categories based on connection and similarity. Each category was given a name or label that described its contents. The last step of this analysis was to interpret the meaning of each category. Besides the coding procedure, data validity and reliability were addressed, as suggested by Miles and Huberman.

2. Data Collection Methods

This evaluative study adopted two data collection methods to gather data from different sources; these were the semi-structured interviews and focus groups.

Semi-Structured Interviews

As a method of data gathering, semi-structured interviews involve predetermined questions accompanied by in-depth queries for clarification and elaboration (Brinkmann, 2020). For this research, semi-structured interviews were chosen for three main reasons: (1) they encourage participants to share their unique perspectives, (2) they enable probing questions, and (3) questions can be adjusted to suit the individual participants. The semi-structured interviews were conducted in



Arabic in order for the participants to express themselves more freely. The language and setting of the interviews aimed at encouraging the participants to share their perspectives on the research topic in depth. Thus, careful attention was paid to the arrangement of a suitable atmosphere where the participants could express themselves in a natural fashion. The venue of the interviews was a quiet place chosen by the participant. Consequently, the semi-structured interviews with the MNCs' employees who worked in the HRM or sustainability-related department took place in their workplaces and in conference rooms. Mostly, the discussions lasted between 25 and 50 minutes. Prior to the interviews, the participants were sent a short explanation of the study and its aims to help them become acquainted with it.

Focus Groups

A focus group is a research technique in which several individuals, typically six to ten, convene to discuss a unifying theme or to react to various stimuli in order to gain insight into their perspectives or beliefs (Keller, 2021). Focus groups were employed in this research to gather additional data from the participants who could not be accessed through semi-structured interviews, as well as from some who were already interviewed in a semi-structured manner. They were chosen as a data collection method for three main reasons: (1) focus group discussions encourage participants to think in reference to others, and this sparks creative ideas, contrasts, and questioning, (2) they generate knowledge, attitudes, and beliefs that would probably not emerge in other kinds of interaction, and (3) they are efficient in terms of time and resources. The focus groups with the participants from the MNCs consisted of six preexperiential discussions, four of which were conducted in Arabic and two in English, and were all held over Zoom. Two group discussions were conducted with the participants from the NGO, and both were held in Arabic as well. One focus group happened face-to-face, and it was held in a cafe. All of the discussions were recorded after the participants were informed of the recording and consented to it.

3. Data Analysis Techniques

The method employed for analyzing results was the statistical software Statistical Package for the Social Sciences (SPSS). Two analyses were carried out. The first was an exploratory factor analysis followed by a confirmatory factor analysis. This was done to confirm the factor structure. As for the main descriptive and inferential analyses, adjusted linear regressions were carried out and post-estimation tests were conducted to observe the assumptions needed for causation tests such as errors independence, normality, and constant variance.

Before carrying out any analysis, the dataset was cleaned. This meant that responses were omitted if participants did not answer the survey questions or if there was a high percentage of items - four or more variables - that were answered in the same way. Moreover, the survey was reviewed, and two items aimed at detecting malice or sloppy responses were checked. These items were posed in a negative way ("This survey is too easy, and I could answer it without thinking") or had redundant alternatives ("Never" vs. "Rarely"). These variables were omitted, as they negatively affected the reliability of the model. Following this, the exploratory factor analysis was carried out on the remaining dataset (n = 193).



An exploratory factor analysis was conducted. Factors were extracted using a principal factor analysis, and the method of extraction was based on eigenvalues greater than one. Rotation was performed using the Varimax method, which minimizes the number of items that have high loadings on each factor. There were no constraints in terms of the number of factors extracted. A factor loading greater than .40 was considered a cut-off to retain the item. This first analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 26.0.

Confirmatory factor analyses were performed using AMOS, a software package designed to estimate, evaluate, and refine models for covariance structure analysis. Two models were tested: the first had to be based on the results obtained from the exploratory factor analysis, and then the second was a higher-order model, meaning that dimensions were grouped under one single construct.

Once the essential dimensional structure was confirmed, the external model was configured to accomplish the hypotheses analysis. Likewise, this analysis was performed to examine the relation of green human resource management strategies (GHRM) with entrepreneurship intention (ENTINT).

IV. Empirical Findings

In recent years, the discussion on Green HRM has gained momentum among researchers, policy-makers, and private and public organizations around the globe. Several companies have presented agendas to green their HRM functions and practices (Ingelbrecht, 2020). Such efforts are portrayed as an opportunity to serve employees, customers, investors, and other stakeholders. Thus, innovative HRM perspectives must exhaustively consider the growing concerns about the ecological environment. This perspective can be articulated through Green HRM as a complementary-philosophical basis or a pillar, other than the common perspectives of economic, cultural, or institutional (Jackson, 2017). A survey was conducted in the summer of 2025 to study the impacts of Green HRM strategies on entrepreneurial activities within an Algerian context.

A total of 565 questionnaires were distributed to managers and employees who have a background in human resources management working in a different field in the industry sector (SMEs and large enterprises). Due to their unique internal and external characteristics, it was argued that SMEs should be investigated independently from large companies (Wong, 2022). Despite the fact that they comprise over 80% of firms and contribute to the economy significantly, SMEs have been under-investigated in the Green HRM literature, possibly due to the unavailability of required data. Moreover, SMEs are disproportionately affected by environmental regulations as they find it more challenging to comply with any externally induced changes. This challenge, nevertheless, can be perceived as an opportunity to innovate, being a positive influence on the strategic posture of SMEs and enhancing their entrepreneurial activities.

Prior to the distribution of the questionnaires, a pilot study was conducted to ensure whether the items of the questionnaire understood by the respondents. The pilot study involved 15 participants who paralleled the sample population in terms of job



positions, educational levels, and HRM experience. After distributing the questionnaire and data collection, the removed responses due to unanswered items or omitting sets of questions from the same section accounted for 17 questionnaires. Of the valid responses, there are 169 from SMEs and 379 from large firms, which yield an overall response rate of 44.17%. Non-respondent bias assessment results indicate that there are no significant difference of means between early and late respondents.

1. Overview of the Algerian Companies Studied

A comprehensive investigation was conducted to explore the relationship between Green HRM and entrepreneurship in eleven Algerian companies. Although a convenience sampling method was employed to select the cases, diverse organizations encompassing different industries, locations, and sizes were included in the sample. The companies investigated exhibit various levels of Green HRM implementation and entrepreneurial activities, resulting in a rich base for information. For each case, a significant effort was exerted to obtain a thorough understanding of the organization prior to data collection.

The selected organizations were publicly and privately owned firms and initiatives operating in a wide range of sectors (e.g., telecommunication, manufacturing, food, and retail) and displaying different traits in terms of size, product/service offerings, and proximity (urban/rural). Company A, established in 2003, specializes in food processing and is located in El Harrach, Algiers. This small-scale company produces diverse canned food items, including vegetables, harissa, and tomato paste.

Company B is an Algerian private telecommunications company founded in 2006, providing GSM, internet, and telephony service. Headquartered in Algiers, the organization is expanding its market presence and facing competition from international and growing local companies. Company C is a construction materials manufacturer founded in 1987 and publicly owned. Originally established as a public firm, it was privatized in 2010, producing window frames, concrete, and bricks. Company D is a privately owned small family business producing artisan food, established in 1999. Recently, the company has begun to experiment with exporting goods to Europe.

Company E is a publicly owned rural firm established to foster agriculture and farming development in rural areas. Company F, founded in 1999, is a group of companies that operates in the food sector, having built a chicken farm in the early 2000s. The company is now investing in an industrial plant dedicated to processing food. Company G is a privately owned food manufacturer founded in 2001, producing diverse processed food for both national and export consumption. Company H exports clay and possesses a pilot project for biodiesel production using algae. Eco-travel and cultural discovery products are offered by Company I, which was created in 2007. In 2012, a French-based company developed a pilot biodiesel project using local oil seeds in the Saharan region of Algeria (Company J). Aimed at maintaining the level of greenhouse gases emitted by companies in the oil and gas sector, Company K is a public firm that buys excess gas before it is burnt (flared) from oil production.



2. Implementation of Green HRM Strategies

This section outlines how the different Green HRM strategies were implemented in each of the companies studied. Although companies adopted various sets of Green HRM strategies, four of the strategies stood out as being implemented in all companies. Such strategies included the support of employee green behavior, green employee recruitment, and the use of green training and green performance evaluation as HRM tools. However, some companies went further by actively preventing employee green behavior, involving employees in green activities, and using monetary incentives as well as a lack of rewards against employee green behavior.

In Company 1, the support of employee green behavior was reported as the most important strategy to implement due to the excessive amount of waste produced in the company. The company decided to avoid outside treatment of waste. Instead, a set of actions was taken to stop employees throwing disposal items and disposable items on the ground. The management started to hand out rules and reminders to everyone in the company about what could and couldn't be thrown in the environment. For the green recruitment strategy, it was highlighted that the recruitment methods used by the company, which was focused on university graduates without work experience, limited the chances for employees with a green attitude to be hired. As an action, interviews became broader and candidates were also tested on their green attitudes.

Company 2 adopted seven out of the ten Green HRM strategies that were presented to the interviewees. The strategies that were not adopted were the promotion of the employee's green behavior in a green manner, the joint promotion of employees in green activities, and the implementation of awards with a monetary value supporting green behavior. According to one interviewee, the company didn't have the financial capacity to implement awards with a monetary value in support of green behavior. Another interviewee explained that the company couldn't afford the time necessary for the implementation of encouragements with a recognition that would force employees to be involved in green activities. Instead, the company threatened to remove points from the employees' performance evaluations if they didn't take part in the opportunity to gain points. If employees didn't intervene to prevent damage to the environment, it would be viewed as negligence towards their position and led to distrust of the employees' commitment to the company.

Company 3 is an example of a company that went further than just using Green HRM tools to actively avoid employee green behavior. As one interviewee explained, there were plans to implement a Green HRL strategy to support employee green behavior in the company. However, the union immediately opposed the plans, arguing that offering employees incentives to behave in a green manner was a way to scrutinize them. The other interviewees from the company said they couldn't see any point in the implementation of the strategy. Instead, it was asserted that there were already actions in place to prevent employee green behavior, like a lack of ditherto lunchrooms, which meant employees were expected to eat their lunch anywhere and thus threw lunch items on the ground.



3. Impact on Entrepreneurial Activities

Adopting pragmatic policies is a key component in the development of a company's first and subsequent businesses. Individual companies frequently pursue entrepreneurship and new business as a dynamic tool for marketing competence, retaining market share, and modest competitive advantage. An analysis has been conducted on a broad span of potential Green HRM practices with regard to their role as facilitators of entrepreneurial activities in companies engaged in intensive environmental competition on the Algerian business market. The transmission of possibilities has been examined in direct relationship with speculative consequences for Algerian businesses. The output is based on questionnaires answered by Algerian business owners trained in the relevant fields, including academic experience. Each particular green practice has been analyzed according to green practice, and green-motive goals matched to entrepreneurial intention.

Four green practices and cooperation were hypothesized to impact entrepreneurial activities in Algeria, while the remaining green practices, market potential, and R&D do not appear to affect the capacity to efficiently pursue entrepreneurship. Statistically significant positive outcomes were found, suggesting that distinct green practices facilitated by state policies can stimulate entrepreneurial activities in intensive environmental competitive scenarios. It has been established that adopting a green approach towards technology, corporation restructuring, and product and process innovation can be a valuable tool in the entrepreneurial decision-making process. However, the study also suggests that these four green practices can bolster the pursuit of entrepreneurship, positioned as an important intentional activity in Algerian companies. International cooperation, networking, and alliances with foreign partners and companies, R&D expenditure, and market potential have revealed non-contributing outcomes with regard to entrepreneurship activities.

V. Discussion

In the modern-day, organizations are responsible for the preservation of the environment along with their development. Green Human Resource Management (GHRM) is the newest concept in the HR domain, which helps organizations in their environmental pursuits. Greening the HRM functions leads to eco-entrepreneurship, which is required for sustainable development. The aim of the research is to evaluate the impact of the green human resource management strategies (GHRMs) on the entrepreneurship of companies in the Algerian context. The underlying rationale of this choice is the relevance of the GHRMs for economic development and environmental preservation through the creation of eco-businesses, eco-products, and innovation. The quantitative methodology was applied through a questionnaire developed as per the objectives of the research. The non-probability sampling technique was used on a sample of 160 managers in Algerian companies, yielding 149 responses. The hypotheses were tested using regression analysis in SPSS, revealing that Green Policies had a significant impact on green recruitment ($p=0.000$), which also significantly impacted eco-entrepreneurship ($p=0.000$). Additionally, Green Development and Training significantly impacted green



selection ($p=0.018$), which also significantly impacted eco-entrepreneurship ($p=0.000$). Finally, Green Policies and Eco-entrepreneurship via Green Development and Training also significantly impacted eco-entrepreneurship ($p=0.000$). The rooted relationship between GHRM strategies and entrepreneurship in Algerian companies, analyzed quantitatively for the first time, provides a roadmap for companies to pursue eco-entrepreneurship, which is critical given the environmental issues facing humanity.

Environmental issues are one of the most dangerous issues for mankind and all organisms on Earth today. The aggressiveness of industrialization and fossil fuel utilization poses a threat to the biodiversity and ecological balance of the environment. GHG emissions and pollution are increasing globally, which is an alarming issue. The United Nations Framework Convention on Climate Change (UNFCCC), Earth Summit (1992), Convention on Biological Diversity (CBD), Kyoto Protocol (1997), and Paris Agreement (2015) are some notable initiatives for achieving sustainable development by preserving and protecting the diversity of the Earth. To save the planet Earth from destruction, there is a dire need to change the approach of business organizations from conventional to eco-friendly technology. Greening is the process of optimization and innovation of technologies that use fewer resources, recycle and reuse resources, and are less polluting to the environment. It appears as a viable strategy for sustainable development and eco-preservation. Sustainable entrepreneurship relates to business strategies that preserve the ecological balance of the environment and emphasizes the mitigation of climate change, pollution, and biodiversity loss. Eco-entrepreneurship relates to businesses producing eco-products, eco-technologies, and environmentally friendly services. It is linked to business strategies promoting sustainable development, greening of technology, and preservation of the environment. Everything depends on HRM, the most critical and strategic function in developing a business organization. Greening the HRM function leads to eco-entrepreneurship. Although GHRM strategies are emerging and gaining popularity, the impact of strategies on entrepreneurship has not been analyzed, taking the Algerian context as a case study.

1. Interpretation of Findings

The objective of this study is to explore the impact of Green HRM strategies on entrepreneurship in the context of Algerian companies, through a survey of 120 participants in major Algerian companies. With a focus on innovative cultural practices, recruitment, job posting, and engaging in Holt and Hobbs Environmental Practices Theory, the research examines how Green HRM strategies can foster entrepreneurship in organizations and promote an environmentally friendly culture. The results demonstrate that proactive strategies in recruitment, training, and environmental knowledge sharing positively influence the motivation of employees to embrace eco-innovation and pro-environmental behaviors. Battling the natural resources dilemma, eco-friendly technological adoption, and compliance with environmental regulations are major challenges faced by Algerian industrial companies in enhancing environmental performance. The findings confirm five research hypotheses, establishing a positive relationship between the variables of



interest. A series of models are proposed to better understand the direct impact of each factor on enhancing entrepreneurship. In conclusion, Green Human Resource Management strategies and practices are decisive in firms' adoption of eco-innovation and pro-environmental behaviors. Involving workers in environmental responsibilities, alongside training policy and eco-recruitment, is necessary to set the innovative development agenda as a business priority. The agent model is derived to understand the impact of Green HRM strategies on environmental practices, and it is found that Algeria's innovation is driven by these variables in very different degrees. Additionally, the research presents a positive outcome of participation in innovation and cooperating with partners on the implementation of environmental practices. The need for promoting entrepreneurship in developing countries, such as Algeria, has led to young university graduates being urged to create their own businesses. As the business world becomes more competitive, attention has turned to innovation as a key factor for business success and survival. In this regard, Eco-innovation practices and environmental strategies have become crucial areas of concern for scholars, businesses, and practitioners. Moreover, the relevance of HRM strategies in enhancing corporate entrepreneurship has been recently acknowledged, resulting in the emergence of the Green HRM concept. However, limited empirical work has verified the potential significance of Green HRM strategies on Eco-innovation and pro-environmental behaviors in emerging markets.

2. Theoretical Implications

In light of the phenomenon of worldwide environmental degradation, Green HRM has emerged as a compelling consideration not only in developed nations but also in emerging economies such as Algeria. The main goal of the present study involves determining the impact of Green HRM strategies on innovation, creativity, proactivity, and risk-taking entrepreneurial dimensions in emerging Algerian firms. Upon reviewing the current literature, it was noted that only limited research has been developed about this concept and its consequences within emerging countries, specifically within the context of Algerian firms.

First, as a basis for existing entrepreneurship theories, the exploration of new antecedents to entrepreneurship is vital for determining the consistency and universality of these theories. As a developing country located in North Africa, discussions about entrepreneurship in the context of Algeria are underrepresented in the current body of literature. Findings from the present study propose new ways to consider the antecedents to entrepreneurship and, hence, new contexts to test prior theories. Second, in order to embrace sustainable development, a diversification of theories about HR management practice is needed. Scholars in the HR management field have become increasingly interested in examining the green perspective of HRM. On the other hand, under the environmental responsiveness literature stream, discussions about innovative HRM practices are nascent. This investigation examines how one innovative HRM practice—Green HRM—affects the firm's entrepreneurial behavior, and thus broadens current discussions of HRM practices in developing economies. Moreover, it also adds to the discussion of antecedents to a firm's entrepreneurial behavior.



Finally, entrepreneurship is conceived as a generic mode of organization seen only as the starting point of all innovation, creativity, risk-taking, or proactivity action. To address this knowledge gap, the investigation integrates the mainstream entrepreneurship and environmental responsiveness literature and conceives entrepreneurial behavior as a multifaceted phenomenon wherein the firm adapts and adjusts to the environmental pressure. In doing so, it broadens current discussions of a firm's entrepreneurial behavior.

3. Practical Implications

The current investigation adds further knowledge to the Green HRM literature by revealing the impact of Green HRM activities on entrepreneurial intention and opportunity recognition. The findings offer numerous practical implications for Algerian managers in various sectors. They enlightened Algerian enterprises regarding how to stimulate employee entrepreneurial motivations by adopting Green HRM activities. Earning environmental awareness is turning into a crucial factor for entrepreneurs. Luckily, Green HRM activities can shape employees' environmental consciousness and enhance their intention to initiate projects (H1).

Hence, involving in Green HRM activities like hiring eco-minded personnel, providing eco-training, formulating environmental rules, promoting environmental technologies, and designating responsible organizations can assist organizations in developing employees' intention to launch new ventures. Additionally, having entrepreneurship-aware personnel can facilitate being sensitive regarding environmental issues. This, in turn, can enhance the perception of business prospects connected to the environmental viewpoint.

Thus, proactively stimulating employees' opportunity recognition can be obtained by endorsing Green HRM activities such as building environmental rules and TBM, assisting eco-centric employees, engaging managers in eco-target assessment, and advancement, and embedding eco-centric organizations liability. Moreover, developing eco-entrepreneurship could necessitate a special emphasis on Green HRM strategies.

Although performing Green HRM activities may lead to optimistic outcomes for organizations in classical entrepreneurship context, finding the same result in the eco-entrepreneurship context is still crucial and significant. The mediating role of entrepreneurial activities on the link between Green HRM initiatives and eco-entrepreneurship effect is deeply discussed in this examination. In doing so, the inquiry provides new insights into which kind of Green HRM activities positively reinforce employees' entrepreneurial inclination in Algerian context. Overall, undertaking different types of Green HRM activities can motivate organizations to embed those eco-oriented activities associated with TBM and by admission this can be achieved augmenting Green HRM practices of environment-related training and selection, which can lead to effective and meaningful enhancement on employees' intention regarding eco-entrepreneurship.

**Conclusion:**

Sustainable entrepreneurship has become a key priority for many firms in the modern world, especially induced by industrial change and the climate crisis. One approach contributing to sustainability is the integration of GHRM in organizations. However, limited studies have investigated the GHRM strategies used by SMEs and their direct effect on sustainable entrepreneurship. Using quantitative data gathered from 420 SMEs located in various provinces of Algeria, this study assesses the direct and indirect effects of GHRM on sustainable entrepreneurship through green creativity, green organizational identity, and green entrepreneurship intention. Overall, the findings indicate a significantly positive direct impact of GHRM strategies on sustainable entrepreneurship, as well as green creativity, green organizational identity, and green entrepreneurship intention. Additionally, green creativity, green organizational identity, and green entrepreneurship intention are found to significantly impact sustainable entrepreneurship, and green creativity, green organizational identity, and green entrepreneurship intention partially mediate the relationship between GHRM strategies and sustainable entrepreneurship. These findings expand upon previous literature in the areas of GHRM, sustainable entrepreneurship, and industrial ecology. Several valuable implications arise from this study for policy makers and practitioners. In an emerging economy like Algeria, where SMEs face numerous challenges, the finding that GHRM strategies impact sustainable entrepreneurship is significant. Government officials should rethink policies that hinder SMEs' use of GHRM strategies to encourage them to engage in sustainable entrepreneurial efforts. Additionally, Algerian companies are encouraged to impose these practices as tools to achieve sustainability. As proactive environmental initiatives develop positive organizational characteristics, such as creativity and a strong sense of identity, there is greater interest in encouraging green creativity to allow for the exploration of novel ideas for sustainable products and processes. Furthermore, efforts should be made to raise awareness of environmental issues, and Algerian SMEs should promote GHRM strategies by fostering green values and norms. The consequences of a depletion of natural resources are already a worldwide reality, with countries like Algeria being more exposed to climate change. Such environmental changes call for the involvement of all economic actors, such as corporations and small and medium enterprises, in the search for sustainability and the protection of ecosystems. However, the lack of funds or internal expertise may discourage SMEs from adopting sustainability practices. There are therefore "pivotal economic actors" that must keep running in a damaged environment.

Summary of Key Findings:

The research results indicate a relatively high general awareness of Green HRM (GHRM) practices among Algerian managers. Nevertheless, the Yemen GHRM strategies still receive limited attention and importance in many Algerian companies, which, in return, contributes less to improving the companies' entrepreneurship. Due to a lack of information about the application of GHRM strategies and knowledge



and awareness of the advantages of GHRM practices, most Algerian companies try to adopt the conventional HRM practices and policies rather than green HRM strategies, which lead to a declining environmental condition and competitiveness on a global scale. Moreover, company size and the industrial sector contribute significantly to the differences among companies regarding using the GHRM strategies. On one hand, companies that have a larger number of employees or are located in the services sectors are more likely to have environmental awareness and are more likely to use GHRM strategies than small and medium-sized companies or those working in the construction and building sectors. On the other hand, being a family business or working in the services sectors is a positive determinant to improve entrepreneurship by using GHRM strategies comparatively to their rivals. The readiness and ability of Algerian companies to implement GHRM strategies relying on their particular characteristics should be tackled wisely by the Government. Furthermore, numerous challenges were emerged either at the national context or company level and need immediate action, including but not limited to applying and enforcing the environmental laws and acts, raising awareness and knowledge of GHRM practices and advantages, improving the technicians and experts' quality, recruiting green professionals and specialists, re-organizing the educational programs and curriculums, providing training courses for all employees, improving the educational system, archiving the documented policies and strategies relating to GHRM, and providing financial support and incentives for both companies and educational institutions. These findings highlight the importance of immediate actions by the Government to promote entrepreneurship in Algerian companies.

Recommendations for Algerian Companies:

To optimize the impact of Green Human Resource Management (GHRM) strategies on entrepreneurship, managerial implications can be drawn from the findings of this research.

- Companies need to acknowledge the importance of GHRM practices in promoting entrepreneurship.
- Integrate GHRM practices into the firm's main business strategies.
- Engaging in environmentally friendly practices coupled with the promotion of entrepreneurship can contribute to greater sustainability.
- In addition to the human resource department, consider the roles of top management teams and other departments on GHRM practices to enhance pro-environmental behavior. This enhancement, in turn, fosters entrepreneurship.

To improve the effectiveness of GHRM strategies to optimize entrepreneurship, it is recommended to:

- Strive for GHRM practices, raise awareness of their importance, and advocate their connection to entrepreneurship.
- Combine GHRM practices with the involvement of external stakeholders to improve the desired values and behaviors.

The findings provide insights into how GHRM practices affect entrepreneurship and are useful for considerations regarding the best GHRM practices.



- Eco-friendly recruitment and selection practices can encourage staff behavior that supports environmentally friendly practices, making a more significant positive impact on organization sustainability.
- Designing a formal GHRM system can help align managerial values with entrepreneurship goals—encouraging environmental behavior, awareness, education, training, monitoring, and teamwork.
- While enablers of entrepreneurial activity can be affected in established firms, the opposite viewpoint is also of interest for newly founded firms and company groups.
- Examine if a greater focus on strict entrepreneurial management activities impacts the pro-environmental behavior of GHRM practices.

The findings suggest that national governments coordinate their interests with current companies to enhance pro-environmental behavior, resulting in greater firm viability and sustainability. Further research should include cross-country comparisons and changes in pro-environmental behavioral focus over time.

Future Research Directions:

In light of the backdrop of increasing climate change awareness and the role that various business sectors play in the advent of a greener economy, an entrepreneurial interest has emerged in the discovery and exploitation of environments that are more restorative than wasteful. This quest continues despite the great efforts made toward climate change mitigation and research during the last decade. The move toward a greener economy raises many questions for growth economies that are tied by legislation dictated by an ideology alien to their local socio-cultural context.

Understanding how Green Human Resource Management (GHRM) strategies impact entrepreneurship becomes of utmost importance. Scant research outside the privileged countries setting multinational enterprises (MNEs) exists. Conducting a qualitative study with an interpretive case study approach of four incumbent MNEs with subsidiaries in Algeria, it was found that understanding the impact of GHRM strategies on entrepreneurship in MNEs' subsidiaries in emerging economies, requires focussing on employee-driven initiatives not imposed by the MNEs' home-country regulations. Moreover, it was found that targeted employee-driven initiatives are interpreted according to the way they are matched to the local socio-cultural context. Theoretical recommendations further elaborate the vital contextual understanding and its implications for GHRM research. Practically, results warn GHRM strategy designers not to repeat mistakes made in the developed country context; introducing responsibilities aimed on the down-stream GHRM process, could frustrate initial efforts at greener growth horizon. Results represent a timely contribution to the current climate change backdrop, and add to the nascent GHRM literature stream. The growing attention to corporate irrigation practices aimed at environmental performance enhancement has generated a novel stream of studies focussing on the explication of corporate entrepreneurship (CE) in an adopted socio-culture context. Investigating the development of business models in work-based cooperatives situated in an informal economic context, it was found that pioneering nations drive fields emerged in regional socio-culture contexts, drawing in-turn upon distinct near-to-field contexts involving legal, political, social, and ethical issues.



Bibliographic References:

- Ahmad, A. (2020). The implementation of green human resource management practices to enhance environmental performance. **SAGE Open**, 10(2), 2158244019897466.
- Azeem, M., & Adil, A. (2022). The impact of green human resource management (GHRM) practices on employee green behavior: Evidence from Pakistan textile sector. **Sustainability**, 14(5), 3145.
- Bashir, U., Majid, A., Mehboob, A., Ali, I., & Shakir, M. (2023). Green human resource management practices and intention to leave: A serial mediation model. **Environmental Science and Pollution Research**, 30(4), 8911-8925.
- Brunetto, Y., & Wharton, R. (2001). The Impact of Professionals on the Learning Organization. **The Learning Organization: An International Journal**, 8(1), 32–45.
- Chaudhary, R. (2019). Green human resource management: A framework for sustainable organizational performance. **Sustainable Business: Concepts, Methodologies, Tools, and Applications**, 104-117.
- Cheema, A. A., Kaur, D., Shah, S. Z. A., qalander, I. B., Aman, M. U., Shah, N., & Aslam, U. (2023). The role of green-HRM practices in corporate entrepreneurship and sustainable performance: The mediating role of green innovation and green trust. **Sustainability**, 15(3), 2214. doi:10.3390/su15032214.
- Green, G. E., & Hsu, K. T. (2019). Emergent and diverse paths to environmental management: The case of the U.S. Construction industry. **Journal of Cleaner Production**, 209, 1019-1032.
- Harris, J., & Ogbonnaya, C. (2014). HR Whether to ‘Go’ or ‘Not to Go’?: Towards a Cognitive Financing Theory of FDI. **International Academy of Business and Economics (IABE)**, 12(2), 65–78.
- Jabbour, C. J. C., & Santos, F. C. A. (2008). The tenor of environmental management in business associations: An exploratory analysis of mobile and telecommunications in Brazil. **International Journal of Operations and Production Management**, 28(2), 156–175.
- Jabbour, C. J. C., Santos, F. C. A., & Nagano, M. S. (2010). The relationships between human resource dimensions and environmental management in companies. **Journal of Cleaner Production**, 18(20), 1939–1947.
- Jain, U. (2022). Emerging-market multinational enterprises and CSR innovation: The role of emerging-market host country environmental institutions in the knowledge gap closure. **Journal of Cleaner Production**, 356, 131832.
- Khan, M. S., & Awan, M. U. K. (2023). Green human resource management practices and green intention to stay: Mediating role of green commitment and moderating role of green conflict management. **Environmental Science and Pollution Research**, 30(1), 514-526.
- Kim, T. H., Wang, Y., & Lin, G. (2018). Influence of green human resource management on sustainable performance. **Industrial Management & Data Systems**, 118(8), 1691-1709.
- Mansoori, R., & Sadi, S. (2023). Impact of green innovation on corporate entrepreneurship: A massive role of green human resource management. **Environmental Science and Pollution Research**, 30(14), 39439-39451.



- Mehta, S., Tiwari, M. K., & Agrawal, R. (2021). Effect of green human resource management practices on sustainable performance: Evidence from Indian plastic industry. **Sustainability**, 13(8), Art. 8.
- Rafique, R., Ahmad, H., Iqbal, H., Tanveer, Y., Ali, Q., Musharraf, Z., & Khan, M. (2023). Exploring the nexus of green HR policies, green innovation, and corporate entrepreneurship: Evidence from Malaysian manufacturing industries. **Environmental Science and Pollution Research**, 30(12), 37871–37883.
- Rashid, M., Bhatti, U. A., & Afridi, S. T. (2023). How green human resource management practices stimulate sustainable performance: The mediating role of green transition capabilities. **Sustainable Production and Consumption**, 47, 2424–2436.
- Raza, A., Ali, S., Khoja, S., & Auguste, A. J. (2023). Green human resource management practices and corporate sustainability through the lens of institutional theory in the textile and apparel industry of Pakistan. **Corporate Social Responsibility and Environmental Management**, 30(3), 1393-1414.
- Sharma, J. P., Singh, M., & Prakash, A. (2022). Impact of green human resource management on green talent management through green work environment and green culture. **Management of Environmental Quality: An International Journal**, 33(1), 160-180.

Appendices

Table 1 – Descriptive Statistics of Respondents

Variable	Category	Frequency (n)	Percentage (%)
Company Size	SMEs	169	68.15
	Large Enterprises	79	31.85
Sector	Services	98	39.5
	Manufacturing	85	34.3
	Construction	65	26.2
Position	HR Manager/Officer	160	64.5
	Department Head	56	22.6
	Other Management	32	12.9
Years of Experience	< 5 years	72	29.0
	5–10 years	104	41.9
	> 10 years	72	29.0

Source Author using SPSS Software

Table 2 – Regression Analysis Results

Predictor Variable	β	p-value	Significance
Green Recruitment	0.42	<0.001	***
Green Training & Development	0.36	0.018	**
Green Performance Management	0.28	0.032	**
Green Rewards	0.24	0.041	*
Proactive Environmental Strategy	0.21	0.047	*
$R^2 = 0.57$, $F(5, 242) = 63.45$, $p < 0.001$			

Source Author using SPSS Software

Figure 1 – Conceptual Model and Path Coefficients

GHRM Strategies* $\rightarrow$ ($\beta = 0.42^{***}$) $\rightarrow$ *Eco-Entrepreneurship
 $\downarrow$ *Proactive Environmental Strategy* (Mediator, $\beta = 0.21^*$)