MODERATING ROLE OF SUPPORTING WORK ENVIRONMENT ON THE RELATIONSHIP BETWEEN GREEN TRAINING AND DEVELOPMENT, ORGANIZATIONAL LEARNING, GREEN LEADERSHIP, EMPLOYEE COMMITMENT AND GREEN PERFORMANCE OF PUBLIC FIRMS IN UAE

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by

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Appendix A Survey Questionnaire

PERANAN SOKONGAN PERSEKITARAN KERJA SEBAGAI PENYEDERHANA HUBUNGAN LATIHAN HIJAU DAN PEMBANGUNAN, PEMBELAJARAN ORGANISASI, KEPIMPINAN HIJAU, KOMITMEN PEKERJA DAN PRESTASI HIJAU DI FIRMA AWAM, UAE

ABSTRAK

Isu kelestarian ekologi telah mendapat perhatian penting daripada penggubal dasar, aktivis alam sekitar dan individu lain kerana kesan jangka panjangnya terhadap alam sekitar dan kehidupan seharian. Atas sebab ini, peranan organisasi sektor awam adalah jelas, kerana mereka mempunyai peranan utama dalam kemajuan ekonomi dan kesejahteraan sosial sambil menggunakan pelbagai sumber semula jadi yang boleh menyumbang kepada kerosakan alam sekitar. Atas sebab ini, perhatian yang besar diperlukan terhadap prospek prestasi hijau bagi firma awam. Tujuan utama penyelidikan ini adalah untuk mengkaji peranan kepimpinan hijau, latihan dan pembangunan hijau, pembelajaran organisasi, dan komitmen organisasi terhadap prestasi hijau firma awam sebagai bekerja dalam konteks serantau UAE. Ia seterusnya meneroka kesan penyederhanaan persekitaran kerja yang menyokong hubungan antara prestasi hijau dan penentunya. Menggunakan teknik kajian kuantitatif, data dikumpul melalui teknik soal selidik di mana sampel yang sah seramai 284 orang responden telah diuji secara empirik. Selain itu, analisis data telah dijalankan melalui statistik deskriptif, analisis korelasi, ujian normaliti, dan pendekatan dua langkah (iaitu, model pengukuran dan model struktur). Keputusan di bawah model pengukuran menggambarkan bahawa tidak ada isu yang berkaitan dengan kebolehpercayaan dan kesahan, ketekalan dalaman, kesahan konvergen, dan kesahan diskriminasi bagi konstruk terpendam. Selain itu, penemuan melalui Smart PLS untuk penilaian model struktur meliputi bahawa terdapat kesan ketara kepimpinan hijau, latihan dan pembangunan hijau, pembelajaran organisasi dan komitmen organisasi terhadap prestasi hijau firma awam di UAE. Pada masa yang sama, penemuan mengesahkan bahawa persekitaran kerja yang menyokong memainkan kesan penyederhanaan yang ketara terhadap hubungan antara latihan dan pembangunan hijau dan prestasi hijau, kepimpinan hijau dan prestasi hijau, dan pembelajaran organisasi dan prestasi hijau. Penemuan ini menentukan peranan membina persekitaran kerja yang menyokong sambil mengukuhkan hubungan antara kepimpinan hijau, latihan dan pembangunan hijau, pembelajaran organisasi, dan komitmen organisasi dan prestasi hijau untuk firma awam UAE. Penemuan ini akan menjadi sokongan yang besar kepada pelbagai penggubal dasar, pegawai kerajaan, pengurus jabatan dan khususnya organisasi alam sekitar untuk mempromosikan prospek prestasi mampan dengan bantuan pembolehubah penjelasan yang dinyatakan dan peranan penyederhanaan daripada persekitaran kerja yang menyokong. Selain itu, beberapa cadangan dan batasan yang bermanfaat juga dibincangkan untuk menentukan hala tuju masa hadapan.

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ABSTRACT

The issue of ecological sustainability has garnered significant attention from policymakers, environmental activists, and other individuals due to its long-term impact on the environment and daily life. For this reason, the role of public sector organizations is evident, as they have a major role to play in economic progression and social welfare while utilizing various natural resources that may contribute to environmental damage. For this reason, a substantial attention is required towards the green performance outlook for the public firms. The key purpose of this research is to examine the role of green leadership, green training and development, organizational learning, and organizational commitment towards green performance of public firms as working in the regional context of UAE. It further explores the moderating effect of supportive work environment on the relationship between green performance and its determinants. Using the quantitative research technique, the data was collected through a questionnaire technique where a valid sample of 284 respondents has been tested empirically. Moreover, data analysis has been conducted through descriptive statistics, correlational analysis, normality testing, and two step approach (i.e., measurement model and structural model). The results under measurement model reflect that there is no issue related to reliability and validity, internal consistency, convergent validity, and discriminant validity of the latent constructs. Additionally,

the findings through Smart PLS for structural model assessment covers that there is a significant impact of green leadership, green training and development, organizational learning, and organizational commitment on green performance of public firms in UAE. At the same time, the findings confirm that supportive work environment plays its significant moderating effect on the relationship between green training and development and green performance, green leadership and green performance, and organizational learning and green performance. These findings determine the constructive role of supportive work environment while strengthening the nexus between green leadership, green training and development, organizational learning, and organizational commitment and green performance for the public firms of UAE. The findings would be of great support to various policymakers, governmental officials, departmental managers and specifically the environmental organizations for promoting the sustainable performance outlook with the help of stated explanatory variables and moderating role from supportive work environment. Besides, some fruitful recommendations and limitations are also discussed to decide the future directions.

CHAPTER 1 INTRODUCTION

1.1 Introduction

This chapter focuses on the study background while covering the sustainability terms in the regional context of the UAE. It further discusses the problem statement while exploring the key variables. Moreover, both direct and indirect research questions have also been discussed under this chapter, followed by the study significance, scope, and organization of the thesis through five different chapters. Besides, key terms entitled as green performance, green leadership, organizational learning, organizational commitment, and supportive work environment have also been explained under this chapter.

1.2 Study Background

Over the time span of last three decades, organizations both at public and private sector have been observed with a growing pressure from environmental activists, policymakers and governmental officers regarding the impact of their operational activities on the nature and environment (Abbas & Sağsan, 2019). At the same time, there is a growing trend while creating awareness among the community members and general public for the declining natural resources, ecological footprints along with more pollution in the environment in the form of carbon emission and other greenhouse gases (Mohsin et al., 2021). More specifically, almost all types of organizations working in different domestic and international markets are dependently on those energy sources which are mainly coming from fossil fuel and coal. In this regard, higher level of carbon emission is mainly because of energy consumption and utilization of the other natural resources which reflect a major concern in the form of environmental degradations. For this purpose, focusing on the green performance

outlook is quite evident. At the same time, both local and international regulations are also getting more attention for preserving the natural environment (Zhao et al., 2022). Such regulations are more concerned with the corporate sustainable and green performance outlook while reducing the dependency on the traditional energy sources too (Davenport, 2018). For this purpose, different organizations have been assumed to work for the quality products and services under sustainable environment for which green and ecological utilization of natural and other resources is quite significant.

In addition, the green practices as followed by the corporation have some significant potential to deal with the environmental concerns (Amores-Salvadó, Cruz-González, Delgado-Verde, & González-Masip, 2021). More specifically, the idea of green performance or sustainable performance is mainly based on the introduction of new or improved products/process or services or all in a way that it helps in addressing the customers' needs while not damaging the natural environment as well (Yu & Huo, 2019). Meanwhile, green performance (GP) is linked with green organizational practices to mitigate environmental challenges. However, the concept of sustainable performance was introduced after sustainable development. In this regard, sustainable performance has been defined as the combination of the organization's economic, social and environmental performances (Chardine-Baumann & Botta-Genoulaz, 2014). At the same time, sustainable and environmental performance are other concepts that are interchangeably used to reflect the title of GP among different organizations. One of the key reasons to focus on sustainable environmental performance is that such output helps achieve competitive advantage and shape the organizational reputation too (Paillé, Chen, Boiral, & Jin, 2014). Meanwhile, there is a substantial difference between the ordinary firm performance and green performance, where the former is more concerned with the overall financial outcomes, operational

capabilities, market share and competitive advantage. However, the term green performance is more connected with explicitly focusing on the environmental perspective while dealing with the ecological challenges (Sharma et al., 2021).

To achieve sustainable and green organizational performance, various studies, both in theoretical and empirical perspectives, provide a valuable contribution based on the range of determinants and managerial resources. In this regard, various studies have recently focused on thehuman resource management practices under the shadow of a sustainable environment. More specifically, these practices have been regarded as true mechanisms in reflecting sustainable behavior to facilitate the employee engagement too (Yaacoub & Frangieh, 2019). At the same time, green human resource management practices help in facilitating environmental management through key dimensions like green training and development of the employees, green recruitment and selection, green participation and reward to the employees while achieving some sustainable goals (Ojo & Raman, 2019). Although there has been growing interest regarding the role of green HRM practices, some studies have called for more research on the drivers of green organizational performance in different industries.

In addition, to achieve a sustainable performance outlook, the role of green leadership has also been observed and regarded in recent years. The definition of green leadership (GLS) can be investigated from the context of environmental policies as determined by different organizational leaders (Boiral, Raineri, & Talbot, 2018). At the same time, GLS is also reflected in the employees' behavior when considering proenvironmental policies and practices. Importantly, some authors argue that GLS is very important for creating the organization's sustainable environment. Another notion regarding the GLS reflects that such leadership could reflect those policies, practices, and programs through which sustainable practices both at social and organizational

level can be achieved. In this regard, existing studies have covered the terms like sustainability leadership, eco-sensitive leadership, sustainable leadership and sustainability leadership to reflect the title of green leadership. At the same time, sustainable leadership is vital for fostering organizational success in the form of learning (Iqbal et al., 2020). The emergence of sustainable or green leadership is based on the core dimensions of climate change, cultural conflicts, and economic integration (Avery & Bergsteiner, 2011). It is well established that sustainable leadership has emerged as a comprehensive scope of complex inter-association between the business community, natural environment, and global demand while considering the long-term strategic decision regarding the ecosystem as a whole (Burawat, 2019).

Unquestionably, the phenomenon of organizational learning (OL) has been regarded as one of the core constructs in the field of organizational theory. In this regard, a range of conceptual terms have been provided to reflect the title of OL. For example, OL is believed to occur under the influence of interlinking between the organization and its environment while working through internal aspiration (Dodgson, 1993). Moreover, OL is explained as a cognitive and social idea that goes beyond the processing of information. Meanwhile, OL helps verify the existing body of knowledge and develop a new one (De Holan & Phillips, 2011). The empirical linkage between organizational learning and sustainable business practices has also been observed in different studies, yet on a very little note. In this regard, an empirical estimation conducted by Zgrzywa-Ziemak and Walecka-Jankowska (2020) justifies that organizational learning through a range of dimensions is regarded as a trustworthy and significant source for achieving more sustainable performance. For this reason, the association between OL and green or sustainable performance covers some significant interlinkage.

Moreover, one of the earlier view point regarding employee commitment (OC) towards their organization is explained by Lee and Miller (1999) who state that it is a form of manifest human resource practice. Meanwhile, suppose the employees in any organization believe that their firm is taking great care of their happiness and giving them proper rewards and incentive. In that case, consequently, employees will develop more positive ties with their organization (Orpen, 1995). Additionally, the OC of the employees towards their organization covers the action towards their organization. In this regard, one of the oldest notions is shared by Gouldner (1960) who claims that if any employee understands that his/her organization is committed toward him/her, the stated employee/s will also respond similarly based on attitude and behavioral factors. As a result, such employee commitment will help achieve higher organizational sustainable performance (Muslimat, Ab Wahid, & Erlangga, 2020).

Apart from that, the workplace environment plays a major role while sustaining the employees for longer. It is a well-established (Ashraf, 2019)phenomenon that the most precious organizational resources are the employees, hence accepted as the lifeblood of the organization too. Therefore, the retention of employees for better performance in the long run is quite necessary. However, for retaining employees within the organization, it is important to provide them with full support through different channels at the workplace. This idea is regarded as a supportive work environment (SWE). Suliman and Al Harethi (2013) claim that there is a possibility for creating strong ties between employees and employers with the help of a productive and favorable work environment. This is because the success and failure of the organizational significantly depend upon the internal environment provided to the employees (Kazmi & Naaranoja, 2015). It is further regarded that organizations may have higher performance outcomes with the help of higher organizational support

(Yusliza et al., 2020). However, the significance of SWE can also be investigated because it helps the organization to achieve sustainable performance measure through interacting with the green training and development, green leadership, learning dynamics, and commitment towards the organization.

1.3 Sustainability Issues and Trends in UAE

As stated under the study introduction, there is a growing need to address the environmental concerns both in developed and developing economies. From the context of UAE, various environmental issues have been observed in the form of invasive specifies, ecological footprints, limited water resources, waste generation, air pollution and degradation of nature (Govt. of UAE, 2022). It is believed that the environmental challenges to the UAE are immense in nature, where the protection of natural environment are among the government's top priorities. Meanwhile, rapid economic growth in the country has created several environmental challenges. The upward trend in population growth has also been observed as another determinant for polluting the natural environment due to more energy demand from the community and business groups. According to Our World in Data (2022), the annual carbon dioxide emission in UAE was 36.82 million in 1980, which is 150.27 million tons in 2020. This has provided the fact that there is an upward shift of approximately 114 million tons of carbon emission over the past four decades in the region of UAE.

At the same time, the cumulative carbon emission from fossil fuels and cement has been observed as 372.09 million tons (1980) and 4.70 billion tons (2020). Comparing the environmental pollution in terms of both production vs. consumption-based carbon emissions in UAE, the findings further reveal that it was 56.14 million

tons during 1990 which is now 201.76 billion tons for the consumption-based CO2 till 2020. Moreover, the production-based carbon emission was 51.70 million tons to 150.27 million tons during 1990 to 2020. Considering the annual share of global CO2 emission, the statistics confirm that it was 0.19% (1980) which is now 0.43% (2020) as stated by Our Word in Data (2022). Moreover, the concerns related to ecological sustainability in the regional context of the UAE can be reviewed through Ecological Footprint Per capita, Biocapacity, Ecological Deficit, and Ecological Reserves under Figure 1.1. It shows that during the 1980s, the ecological footprint per person in UAE was 6.03, which turned into 8.71 in 2022, indicating an upward shift.

Moreover, the highest EFP per person was 13.86 in 2001. Comparatively, to these values, Figure 1.1 also indicates a significant difference between ecological footprint and biocapacity, which is undoubtedly an alarming indicator of environmental degradation. Moreover, Figure 1.1 also reveals that the country faces a higher ecological deficit than its ecological reserves from 1980 to 2022. These facts reflect the concerns related to environmental damage and pollution in the natural environment of the UAE.

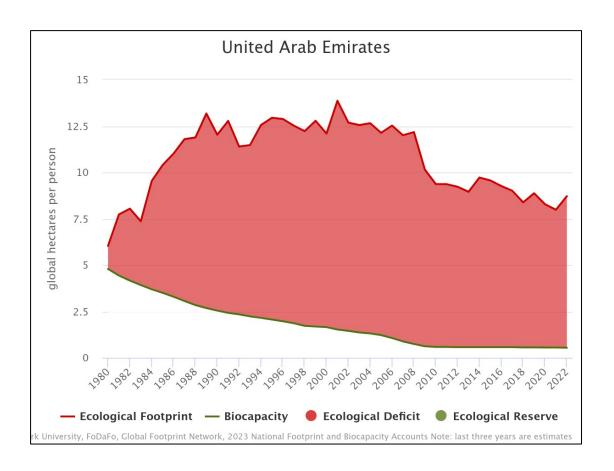


Figure 1.1: Trends in EFP (per person), Biocapacity, Ecological deficit and Reserves in UAE during 1980-2022

Source: Global Footprint Network (2022).

In response to the above-stated environmental threats, the government of UAE has taken several steps as well. For example, in response to the Paris Agreement on climate change action in 2016, UAE is found to be among the very countries that have started their efforts towards dealing with such issues. These efforts included using clean and green energy in the economy while reducing the dependency on the non-renewable energy sources and increasing the efficiency of the energy (Al-Tamami, 2022). At the same time, the launching of Vision 21 has also been recognized as another effort to deal with the environmental challenges while working for the sustainable development. Moreover, during 2015, the government has approved a green agenda while considering various steps towards the growth of green economy (Al-Tamami, 2022).

1.4 Problem Statement

Over the past couple of decades, public organizations have been encountered with a range of and unprecedented challenges which are entitled as rising demand for accountability in financial terms, lack of resources, dealing with changing public expectations (Martin, Gollan, & Grigg, 2016). However, the issue of environmental sustainability has been regarded as one of the most influential factor in the public organization in the recent years (Martin et al., 2016; Tasleem et al., 2019). The title of environmental sustainability has been regarded as showing some responsible paradigm towards economic, social, and environmental obligations while taking into account the products, process, services, and organizational performance (Calabrese, Castaldi, Forte, & Levialdi, 2018). For this reason, increasing the green performance outlook has been a significant area of concern for the public sector organizations due to fact that such performance dynamic has been threatened by various factors. Moreover, as stated under study background and overview of the environmental sustainability trend in UAE, it is observed that there are several ecological challenges in the form of more carbon emission both in the form of consumption and production, higher level of annual cumulative CO2 emission, and a substantial deficit in terms of ecological biocapacity as compared to ecological footprints (Figure 1.1). Meanwhile, other growing environmental concerns have been accepted as growing waste generation, environmental degradation and diminishing water resources in the region of UAE (AlShehail, Khan, & Ajmal, 2021).

In addition, environmental sustainability and green performance are becoming increasingly paramount concerns for public firms UAE due to their substantial contribution in the economic growth and other day to day economic activities (Alketbi,

2023). As the nation experiences rapid economic expansion and industrial advancement (Cherian, 2020), there is a growing acknowledgment of the necessity to harmonize economic progress with environmental governance and green performance dynamics.

More specifically, the Public firms in the UAE have been encountering distinctive hurdles concerning environmental sustainability, encompassing challenges such as heightened energy consumption, water scarcity, waste generation, and carbon emissions. With heightened environmental consciousness among stakeholders and escalating regulatory requirements, there is mounting pressure on public firms to embrace sustainable practices. In this regard, augmenting the green performance has emerged as a strategic imperative for the public firms of the UAE. This is because the public organizations are not solely responsible to mitigate environmental risks and adhere to regulations, but also to boost operational efficiency, while considering the wider interest of the environment and the society as well. Consequently, integrating environmental sustainability into corporate strategies and operations has risen to the forefront of priorities for UAE public firms. These concerns also determine the transformation of the traditional growth model into sustainable and green growth outlook for which the role of public firms of UAE is remarkably substantial.

Although the title of green performance outlook is equally important like the other performance measures, however, without the consideration of green organizational practices, sustainability performance is not achievable (Ojo & Raman, 2019). In this regard, recent trend has been observed in the existing literature regarding the green human resource management practices specifically in the form of green training and development, green performance management, green recruitment and

selection and green empowerment, respectively (Ojo & Raman, 2019). These practices have gained reasonable attention in the different sectors to reflect their impact and role towards sustainability performance. For example, Yong et al. (2020) support the nexus between green HR practices and corporate sustainability performance for the manufacturing industry, whereas Raut, Gardas, Luthra, Narkhede, and Mangla (2020) have focused on the automotive service sector. Additionally, Siyambalapitiya, Zhang, and Liu (2018) have taken into account the tourism industry for exploring the role of green human resource management while Hosain (2017) shows his concern towards service sector. All of these studies have shown a similar argument for the need of green human resource management practices towards achieving the sustainability performance outlook. However, one of the big issues as linked with the current literature till data specifies that none of the studies have been found for exploring the green training and development of the employees as core HR practices for achieving green performance among the public firms of UAE.

At the same time, sustainable leadership has also been regarded as a good source for promoting green performance. Iqbal et al. (2020) state that an effective leadership style to cope with environmental challenges. At the same time, for the creation of sustainable development, it is very important to receive support from green leadership. However, in the existing literature the association between green leadership and sustainable outlook has been observed as a missing part from the context of governmental organizations of UAE. The need for exploring the role of green leadership towards sustainable performance of public firms in UAE is equally important due the fact that approximately there are more than 44 governmental companies who are offering a range of services to the community members (Gulftalent, 2022). At the same time over one million employees are currently working in the public administration. These facts

are indirectly stating the fact that these organizations are directly responsible for utilizing a mega amount of energy from different non-renewable sources, hence directly contributing towards environmental pollution. However, to avoid such degradation and create sustainable performance in the entire region of UAE, the need of time is to explore the role of green leadership toward such practices.

Moreover, as stated earlier under study background, organizational learning helps in promoting some sustainable practices within the organization (Zgrzywa-Ziemak & Walecka-Jankowska, 2020). Meanwhile, the learning system within the organization helps in promoting sustainability dimensions (Smith, 2012). However, for promoting an environment of sustainable achievements while securing the natural resources and minimum consumption of energy, employees within the organization should be equipped with more learning capabilities. Therefore, the proper implementation of sustainable development among different corporations, it is quite necessary to necessitates OL (Siebenhüner & Arnold, 2007). More shift in learning process of the organizational would help to generate sustainable outcomes (Hermelingmeier & von Wirth, 2021). However, the investigation for the nexus between OL and green performance is yet to be explored from the context of public entities in UAE.

Lastly, the title of organizational commitment and supportive work environment also goes side by side in achieving sustainable business practices. However, one of the key issues is that a very little theoretical and empirical support has been provided specifically while keeping in mind the regional context of UAE. It means that the selection of employee commitment and more support from the organization towards achieving green performance is not something which can be neglected. Finally, the direct as well as moderating effect of supportive work

environment in justifying the trends in green performance among public firms is a new phenomenon in the literature.

In this regard, it is inferred that this research has a major focus on the public sector firms working in the regional context of the UAE. The focus of research on green performance outlook can be justified through several ways. For instance, public firms in UAE have mainly been focused to examine the environmental sustainability in their operations, strategies, and decision-making processes. Moreover, investigating public firms of UAE allows for a comprehensive examination of their environmental practices, disclosure mechanisms, and performance outcomes within the broader context of corporate sustainability. Moreover, the focus on the public firms of UAE also implies that such organizations are playing their major role in the conomic growth and social prosperity for which a range of stakeholders including the governmental officials, community members, environmental activists and other international bodies are directly or indirectly associated to them. Through empirical outcomes and the given theoretical framework, this research has contributed to advancing knowledge on green business practices, informing policy development, and promoting environmental responsibility among public firms of UAE.

1.5 Research Questions

- I. What is the impact of green training and development, green leadership, organizational learning and organizational commitment on green performance of public organizations in UAE?
- II. What is the moderating effect of supportive work environment on the relationship between green training, green leadership, organizational learning, organizational commitment and green performance of public organizations in UAE?

1.6 Research Objectives

- I. To examine the impact of green leadership, green training and development, organizational learning and organizational commitment on green performance of public organizations in UAE.
- II. To analyze the moderating effect of supportive work environment on the relationship between green training, green leadership, organizational learning, organizational commitment and green performance of public organizations in UAE.

1.7 Significance of the Study

This research has highlighted several dimensions to justify its literature significance. Details are given below:

- The first significance of this study can be demonstrated in a sense that it has
 provided a good theoretical framework for exploring the relationship between
 green training and development, green leadership, organizational learning,
 organizational commitment, and green performance for public firms in UAE.
 This would reflect that the stated framework has been observed as a missing
 part in the literature till date.
- The second significance of this study as been justified through theoretical support from the resource-based view and sustainability theory. The stated theories have reasonably justified the study variables.
- The third significance of current research justifies that the moderating effect of supportive work environment on the relationship between green training and development, green leadership, organizational learning, organizational commitment, and green performance in public firms of UAE. To the best of

researcher's findings, current literature has provided a literature contribution regarding the research on SWE specifically from the context of sustainable performance.

- The fourth significance of current research can be determined in terms of quantitative research design based on the deductive approach. This is because the majority of the primary data studies are based on the quantitative research design, hence having a wider policy implications and suggestions. Similarly, this research has properly considered the research process and research design as recommended by Zikmund, Babin, Carr, and Griffin (2013). Moreover, the implication of quantitative research design helps in testing the relationship between the variables of interest with the help of some advance data analysis methods and techniques.
- The fifth significance of this research expresses that it has filled the literature gap from the context of public firms as working UAE. An in-depth investigation of current literature confirms that none of the existing studies has mainly focused on the sustainable performance dimensions from the context of public firms of UAE.
- The sixth significance of current research justifies that this research has applied a range of data analysis techniques in a single work setting. More specifically, the stated data analysis methods have provided the overall layout of the data, interdependency between the variables, frequency distribution of the demographic dimensions. Additionally, the measurement model has covered the testing for the reliability and validity, internal consistency, convergent validity, and discriminant validity. However, the testing of the relationship between the variables (both direct and indirect) has been conducted through

structural model assessment which is indeed an up to mark data analysis approach.

- The seventh significance of current research is that it has covered the literature gap from the regional context of UAE through which policymakers, environmental activists, and other policymakers may develop some strategic guidelines for a range of stakeholders in the region of UAE.
- The eight significance of this research is based on the notion that it has provided some outstanding policy suggestions for the managers at public firms of UAE who are responsible for achieving more sustainable performance in their relevant departments and units.
- The ninth significance of this study claims that it has highlighted the need of
 more green training and development, green leadership, organizational
 learning, organizational commitment and sustainable performance for the
 public firms in the region of UAE.
- The tenth significance of this study is that has demonstrated several limitations based on the selection of the variables, mixed method research, and regional implications.

1.8 Study Scope

The scope of current study can be verified with the help of various points. First of all, this research has major focus on the public entities working in UAE in the recent year which indicates the organizational as well as regional scope of this study. Secondly, the main focus of this study is to explore the trends in sustainable performance of public firms of UAE which means the scope in terms of major endogenous construct. As the study's major focuses on the green performance of the public firms in UAE;

therefore, the unit of analysis is organization. Thirdly, the study scope based on the exogenous construct claims that green training and development, green leadership, organizational learning, and organizational commitment have been under the observation of the research. Fourthly, the study scope in terms of moderating variable claims that this research has selected supportive work environment. Fifthly, in terms of research design, it is expressed that the scope of this is based on the notion that it has applied deductive research approach while applying the various steps of research process. Sixthly, it is also expressed that this research is quantitative in nature while neglecting the qualitative methods and related procedures. Seventhly, the study scope in terms of data analysis justifies that this research has applied descriptive statistics, correlational matrix, measurement model and structural model, respectively.

1.9 Key Terms

1.9.1 Green Performance

Green performance has been regarded as an indicator which is used to measure the environmental goals of a business (Monish & Dhanabhakyam, 2021).

1.9.2 Green Training and Development

The concept of green training and development has been defined as the process of equipping the employees for ensuring the efficient utilization of the resources and reduction in environmental degradation (Lawal & Olawoyin, 2021).

1.9.3 Green Leadership

It is referred to as the behaviors of leaders who motivate followers to achieve environmental goals and inspire followers to perform beyond expected levels of environmental performance (Ayandibu, 2019).

1.9.4 Organizational Learning

The process of improving actions through better knowledge and understanding. enables firms to respond quickly and adapt. to the turbulent business environment (Namada, 2018).

1.9.5 Organizational Commitment

Organizational commitment is the degree to which the employee feels a part of the organization and the union of forces he has established with the organization (Senbursa, 2022).

1.9.6 Supportive Work Environment

A learning area/setting that learners feel comfortable and safe which enables interaction, participation, and self-confidence (Tharumaraj et al., 2021).

1.10 Organization of the Thesis

This study has been organized into five different chapters where the current chapter is entitled as chapter one covering the study background, sustainability trends in UAE, problem statement, research questions, research objectives and significance. It also covers the scope of the study, overall organization of the thesis and key terms. Additionally, chapter two covers the title of literature review for which the earlier and current studies based on the individual variables as well as their relationship with each other and key theories have been discussed in a reasonable manner.

Chapter three shows the title of research methodology where the initial step is based on the discussion regarding the research framework, study hypothesis, population, sample sampling strategy, measurement of the variables, and development

of the questionnaire. Moreover, it also covers the data analysis techniques and presting and pilot testing of the study.

Chapter four has covered the discussion related to empirical estimations as generated through SPSS and Smart PLS. Moreover, it has provided the response rate discussion, normality testing, correlational matrix, cross tabulation for demographics, and descriptive output, respectively. Additionally, the measurement model testing through validity and reliability findings has been discussed appropriately. Besides, the results based on the structural model for checking the direct and indirect relationship between the variables are also covered in the fourth chapter. Lastly, overall remarks about the study hypotheses have been provided before providing a chapter summary.

Lastly, chapter five has covered the title of conclusion under which conclusion of the thesis, conclusion of the results, key policies and recommendations for future directions, and limitations have been provided.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter covers a detailed review of the literature for which both theoretical and empirical studies have been discussed. Moreover, it also provides some critical discussion as linked with the individual variables based on their literature significance. Additionally, some related theories have also been discussed. Lastly, a literature table has been provided for the better understanding of the readers.

2.2 Green Performance

The concept of the green performance has been observed with a growing attention from the policymakers, ecological activists, and similar other individuals in the recent years. This is because a growing concern has been observed in terms of ecological damage and environmental sustainability. For this purpose, it is quite imperative for both the public and private sector organizations to focus on the green organizational practices which can ultimately be reflected in terms of performance outlook. The concept of green performance can be defined as some positive outcomes of the green initiatives on the natural environment both inside and outside of the organization (Zsidisin & Siferd, 2001). More specifically, the title of green performance includes the productivity of the energy, water productivity, waste productivity, carbon productivity, and green reputation as well (Corporate Knights Capital, 2015). Meanwhile, the concept of the green performance helps in providing the ecological impacts, organizational system, and regulatory compliance which further reflect the efficiency and effectiveness of the firm towards environmental actions. Additionally, it is believed that green performance refers to as the interaction between environment and the business (Wang, 2019). When manufacturing firms in any region face the environmental pressure from different groups and community members, the

managerial role revolves around creating a balance between two conflicting objectives.

These objectives have been entitled as achieving a higher level of eco-friendly performance although it has to face a lower level of the profit, as highlighted by Russo and Fouts (1997).

Considering the significance of the green performance, several studies have aimed to explore the dynamic trends in similar organizational performance outlook both in developed and developing economies covering a range of explanatory variables. For example, Muisyo and Qin (2021) claim that the previous research has documented the positive impact of green human resource management practices on a firm's environmental performance. However, one of the key gap as observed indicate that there is a lack of studies that have tested on empirical grounds the the moderating role of green innovation culture on the nexus between green human resource management practices and firm green performance. To address this research gap, their study establishes two primary objectives: firstly, to investigate the effects of GHRM practices and green innovation culture on firm green performance. Secondly, their study has examined the moderating influence of green innovation culture on the relationship between green human resource management practices and green performance among the manufacturing firms in China. For addressing the research objectives, data for this study were collected through an extensive survey conducted among 300 employees in manufacturing firms situated in the Jiangsu Province of China. The study findings indicate the fact that green organizational performance is mainly determined by the green human resource management practices. Additionally, green innovation in terms of green product and process innovation is positively influencing the green performance of the similar manufacturing firms.

In addition, the research work as conducted by Sun et al. (2024) have also signified the organizational need of focusing on the green performance outlook. Their study mainly highlights the fact that for achieving the green organizational outcomes, the organizations need to focus specifically on the unique environmental aspects for which different firms need to consider the environmental challenges along with the latest technologies to deal with the environmental issues. Rehman et al. (2023) claim that green performance provides some vital information as linked with the firms' system, regulatory compliance and natural influence for which the organizational resources play a substantial role. For this purpose, it is believed that green culture is among the significant organizational resources that can provide support for the green performance along with the competitive advantage in the marketplace. Therefore, the organizational significance of the green performance is not something which can be neglected.

2.3 Green training and development (GTD)

Green training and development (GTD) can equate employees with effective working methodologies that ensure waste reduction, proper resource utilization, energy-saving, and reduced environmental degradation (IGI, 2022). One of the leading challenges in organizations today is balancing green development strategies and organizational performance. The solution to this issue is based on green human resource practices for enhanced development and training of employees that are effective in organizational sustainability performance (OSP). Green human resource management encourages higher-quality employee awareness while committing to environmental sustainability (Pallewaththa & Kumarasinghe, 2018). According to literature evaluations, a comprehensive procedure to frame context for green human resource management has yet to materialize. An essential purpose of green human resource management is to

provide environmental training to organizational members to build required skills and knowledge. Balchat, Gusov, and Mohammed (2022) research shows that green human resource management variables, including green training, development practices, green learning, and recruitment, boost organizational sustainability significantly. Green training also encourages the sustainable utilization of natural resources in business organizations. GDT practices implemented by the HR department for employee attitude toward performance are seen as an essential factor for OSP (Yafi, Tehseen, & Haider, 2021).

Environment-conscious activities and the representation of organizational knowledge are two crucial parts of green HR. It also entails lowering carbon emissions. Green employment is an occupation that involves working directly with policies, ideas, resources, or technology that help to reduce environmental impact and that requires specific knowledge, skills, education, or expertise in these fields (Hussain, 2018). GHRM entails implementing environmentally friendly HR practices that lead to higher efficiency, cheaper costs, and improved employee engagement. Many roles in an organization's human resource department make up green human resource practices. GTD can help organizations in the following aspects:

- Workforce development is an important factor in coping with the emerging issues with the implementation of green organizational sustainability. GTD enables employees to deal with these changes at the workplace.
- The environmental performance of organizations can also be improved through GTD practices through effective GHRM.
- Organizational change can be managed through the green development of employees based on green training practices arranged at the organizational level.

In addition, organizations both in public and private sector domain are offering an effective training programs aimed at instructing employees on how to engage in green practices in order to reduce the environmental impacts in the form of low emission or environmental pollutants (Wijesingha et al., 2020). Moreover, such programs also aim to enhance managerial and technical skills for the preservation of the natural resources, hence leading towards the environmental sustainability over a longer period of time (Cook and Seith, 1992). However, only a limited number of organizations recognize the significance of implementing green training and development programs in terms of boosting the ecological sustainability (Pradhan, 2020). Meanwhile, one of the most challenging issues facing the business world is achieving economic growth while ensuring the sustainable development of organizations (Pinzone et al., 2019), for which the role of green training and related initiatives as taken up by the organizations are substantially required. Meanwhile, the green training sessions also play their role towards educating the employees about environmental troubles while fostering changes in attitudes and behaviors among both managerial and non-managerial staff (Jeruto et al., 2017).

Another contemporary challenge is the integration of the financial development and improvement with sustainable development (Pinzone et al., 2019). Moreover, there is a substantial need for the initiatives like environmental education for the employees with the core objective is to change the employees' attitude towards ecological concerns (Jeruto et al., 2017).

According to Paillé, Valéau, and Renwick (2020), effective green practices within an organization necessitate hiring talented employees, designing activities for employee involvement and development, training employees based on Green