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Human Resource Management Practices for Promoting Sustainability



Sulaiman Olusegun Atiku and Tinuke Fapohunda

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Human Resource Management Practices for Promoting Sustainability

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Table of Contents

Preface	xv
Acknowledgment	xxi
Chapter 1	
Green Human Resource Management Practices and Organisational Sustainability.....	1
<i>Kabiru Ishola Genty, Lagos State University, Nigeria</i>	
Chapter 2	
Green Human Resource Management: A Review and Future Directions	20
<i>Richard Afedzie, Pentecost University, Ghana</i>	
<i>Richard Brace, Pentecost University, Ghana</i>	
<i>Fidelis Quansah, University of Professional Studies, Accra, Ghana</i>	
<i>James Attah-Panin, Pentecost University, Ghana</i>	
Chapter 3	
Understanding Green Human Resources in Healthcare.....	38
<i>Terrence Duncan, Liberty University, USA</i>	
<i>Emad Rahim, Bellevue University, USA</i>	
<i>Darrell Norman Burrell, The Florida Institute of Technology, USA</i>	
<i>Brian Hurd, Washington University, USA</i>	
Chapter 4	
Succession Planning as a Developmental Tool for Sustainability	56
<i>Abiodun Bakare, HavEngagement LLC, USA</i>	
Chapter 5	
Green Recruitment Practices.....	73
<i>Lawrence Abiwu, University of KwaZulu-Natal, South Africa</i>	
<i>Grace Nketiaba Nunoo, University of KwaZulu-Natal, South Africa</i>	

Chapter 6	
Green Selection Practices	94
<i>Lawrence Abiwu, University of KwaZulu-Natal, South Africa</i>	
<i>Grace Nketiaba Nunoo, University of KwaZulu-Natal, South Africa</i>	
Chapter 7	
Human Capital Development Strategy for a Sustainable Economy	116
<i>Sulaiman Olusegun Atiku, Namibia University of Science and Technology, Namibia</i>	
<i>Ibrahim Olanrewaju Lawal, Kwara State University, Malete, Nigeria</i>	
Chapter 8	
Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector	134
<i>Neeta Baporikar, Namibia University of Science and Technology, Namibia & University of Pune, India</i>	
Chapter 9	
Greening the Compensation Design and Management of the Human Resource Function.....	157
<i>Tinuke Fapohunda, Lagos State University, Nigeria</i>	
Chapter 10	
Green Health and Safety Management System.....	176
<i>Vivence Kalitanyi, University of Johannesburg, South Africa</i>	
Chapter 11	
Promoting Circularity Through Sustainable Leadership	197
<i>Hylton James Villet, Namibia University of Science and Technology, Namibia</i>	
Chapter 12	
Flexible Work Arrangements for Green Manufacturing	212
<i>Idris Olayiwola Ganiyu, University of KwaZulu-Natal, South Africa</i>	
Chapter 13	
Employee Green Behaviour in Ghanaian Public Sector Organisations	229
<i>Richard H. Afedzie, Pentecost University, Ghana</i>	
<i>Bellinda Omari Asante, Pentecost University, Ghana</i>	
<i>James Aller, Georgia Southwestern State University, USA</i>	
Chapter 14	
Workplace Green Behavior for Sustainable Competitive Advantage	248
<i>Emmanuel Imoh Uwem, Nobel International Business School, Nigeria</i>	
<i>Ola Olusegun Oyedele, Federal University of Agriculture, Abeokuta, Nigeria</i>	
<i>Olasoji Timilehin Olubiyi, Babcock University, Ilishan-Remo, Nigeria</i>	

Chapter 15	
Green Human Resources and Sustainable Business Solutions	264
<i>Ibrahim Olanrewaju Lawal, Kwara State University, Malete, Nigeria</i>	
<i>Femi Stephen Olawoyin, Kwara State University, Malete, Nigeria</i>	
Compilation of References	278
About the Contributors	321
Index	325

Detailed Table of Contents

Preface..... xv

Acknowledgment xxi

Chapter 1

Green Human Resource Management Practices and Organisational Sustainability..... 1

Kabiru Ishola Genty, Lagos State University, Nigeria

Researchers and practitioners have argued that human resource management practices have a positive impact on environmental outcomes. This is because green human resource management practices enhance a firm's environmental performance. Although studies do not explain how green initiatives can enable organisational sustainability, this chapter examines the influence of green human resource management practices on organisational sustainability in the context of Nigeria. The chapter adopted a discourse content analysis as a method of data collection. The chapter holds that organisational sustainability relies on green training intervention as the means of understanding and redressing the human environment with a view to achieving and sustaining a better quality of life. Conclusively, green human resource management practices target protecting the ecosystem, among others. The chapter recommended that sustainability could be achieved through employee green behaviour and eco-innovation at the industrial level.

Chapter 2

Green Human Resource Management: A Review and Future Directions 20

Richard Afedzie, Pentecost University, Ghana

Richard Brace, Pentecost University, Ghana

Fidelis Quansah, University of Professional Studies, Accra, Ghana

James Attah-Panin, Pentecost University, Ghana

This chapter explores the vital role of human resource departments in organisations and their contributions towards environmental sustainability in the nations of sub-Saharan Africa. It posits that the role of HR in recruitment, training and development, learning, rewards, employee relations, and appraisal of employee performance should be conducted with environmental sustainability in mind. It affirms that instilling a culture of environmental awareness into every activity of organisations has a great return on productivity, attracting the best talents, and minimizing the harm of environmental degradation. It contends that organisational policies and behaviour on environmental responsiveness should be of greatest priority to the 21st-century businesses in sub-Saharan Africa.

Chapter 3

Understanding Green Human Resources in Healthcare..... 38

Terrence Duncan, Liberty University, USA

Emad Rahim, Bellevue University, USA

Darrell Norman Burrell, The Florida Institute of Technology, USA

Brian Hurd, Washington University, USA

Human resource management plays an integral role in developing capital for the triple bottom line. In the Fourth Industrial Revolution, human resources now shift their focus to advancing communication and connectivity versus focusing purely on technological advances. As the Fourth Industrial Revolution continues, communicating the effectiveness of human resource management and human capital development should be considered as an essential area of interest. As healthcare practitioners continue to provide treatment and care for those in need, human resource managers need to learn green practices to create a more sustainable environment that contributes socially and economically while adhering to the demands of the international stakeholders. As healthcare continues to be either one of the most significant expenditures or needs for numerous countries, consideration in this field provides potential holistic benefits for stakeholders.

Chapter 4

Succession Planning as a Developmental Tool for Sustainability 56

Abiodun Bakare, HavEngagement LLC, USA

The chapter present a practical guidance based on four simple-to-use models of developing a succession plan. It also highlights current best practices of succession planning based on literature. Succession planning is a critical leadership tool for organizational growth and sustainability; it alleviates substantial gaps in organizational knowledge and leadership through strategic replacement of key personnel. Using succession planning as a developmental tool will allow the organization to determine what and whose knowledge is most important to capture and help them to identify critical positions. It is very important for organizations to grasp the meaning of succession planning before implementing a succession plan as a developmental tool for organizational sustainability. Based on the definitions of succession planning, this chapter defines succession planning as a proactive approach to managing talent, and the development of a leadership pipeline to meet an organization's need-based demand for sustainability.

Chapter 5

Green Recruitment Practices..... 73

Lawrence Abiwu, University of KwaZulu-Natal, South Africa

Grace Nketiaba Nunoo, University of KwaZulu-Natal, South Africa

Today, scholars, governments, organisations, and practitioners from a variety of fields such as business, politics, and public policy have begun to show much interest in environmental issues. There exist different green HRM practices, but this chapter focuses on green recruitment practices. Green recruitment is the procedure of hiring people having behaviour, knowledge, and skills of environment management systems in the organisation. An important rationale behind green recruitment practices in most organisations is to reduce recruitment costs by automating the process and also make a green difference starting at the online career site. Green recruitment practices minimise energy use and pollution associated with manufacturing, transporting, and recycling paper products. Therefore, green recruitment practices should be supported by organisational policies and government regulatory frameworks.

Chapter 6

Green Selection Practices 94

Lawrence Abiwu, University of KwaZulu-Natal, South Africa

Grace Nketiaba Nunoo, University of KwaZulu-Natal, South Africa

Presently, the global world is facing numerous social, political, economic, and ecological challenges that require urgent attention and solution through innovative ideas. Among these challenges, ecological has received much interest from scholars and practitioners in recent times. Due to the adverse effects of environmental hazards, most countries and organisations have started to realise the importance of safeguarding the environment. To promote sustainability, many firms have adopted green practices in all their functional areas. Green selection is a process of hiring candidates who have green consciousness, conscientiousness, and agreeableness. The review of empirical studies reveals that the green selection process helps organisations to meet their environmental obligations by choosing candidates who have pro-environmental behaviours as well as sufficient knowledge of environmental management.

Chapter 7

Human Capital Development Strategy for a Sustainable Economy 116

Sulaiman Olusegun Atiku, Namibia University of Science and Technology, Namibia

Ibrahim Olanrewaju Lawal, Kwara State University, Malete, Nigeria

The current production and consumption systems have created many social and environmental issues in the global business environment. These issues are of concern for many policymakers across the globe. The essence of the policy framework on sustainability is to transform the global economy into a more sustainable economy. Human capital development is central to economic transformation. This chapter examines the human capital development strategy for a more sustainable economy. A desktop research approach was adopted to investigate the relationship between human capital development strategy and sustainable economic development. For an effective transition into a sustainable economy, this chapter upholds an alignment of human and organisational development strategy, as well as a national development plan with the economic, social, and environmental pillars of sustainability. Therefore, human capital development strategy is a holistic approach to explore the four greens (green savings, green opportunities, green talent, and green places) for a more sustainable economy.

Chapter 8

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector 134

Neeta Baporikar, Namibia University of Science and Technology, Namibia & University of

Pune, India

The insurance sector consists of two branches: life and non-life. Non-life is commonly referred to as general insurance. Insurance is a service industry and client retention influences growth and business sustainability. Being a service industry managerial skills for client servicing is essential for effectiveness in the insurance sector. Further, middle-level management directly deals with clients. So, to mitigate the challenges of privatization, competition, stakeholder's expectations, etc., appropriate managerial skills for middle management is critical. A mixed-methods approach was adopted, primary data collected through questionnaires and secondary data from published records. The sample consists of middle-level managers of the general insurance industry from the Pune region, India. The analysis was done using descriptive statistics. Findings reflect that higher managerial quotient is associated with client servicing quotient.

Chapter 9

Greening the Compensation Design and Management of the Human Resource Function..... 157

Tinuke Fapohunda, Lagos State University, Nigeria

There is a rising necessity for the incorporation of environmental management into human resource management (HRM) practices. This attempt is recognized as the Green HRM initiative. An organization's human resource function can be powerful in aiding an all-inclusive approach to building a culture of sustainability. The strategy entails executing transformations to the diverse functions of HR like determining employee compensation. Gaps continue to exist in the literature on the green aspects of compensation and reward systems. This chapter considers the environmental management features of the compensation and reward system and factors a mould of the procedures entailed in green compensation and reward system. it cores on examining green reward management systems practices from the standpoint of subsisting research in the area and proposes inventive process moulds in green reward management systems. The green reward management system is presented as a smart and superior method of reward management systems.

Chapter 10

Green Health and Safety Management System..... 176

Vivence Kalitanyi, University of Johannesburg, South Africa

The objective of this chapter is to fulfill the aim of the book by developing two of its major topics, green health and safety management, and to show their positive impact on the business success and sustainability. A number of factors, including environmental consideration, as well as the well-being of the human capital at workplace, must guide the current business practices. Today, business centers are becoming spaces where people spend most of their times as either managers, employees, shoppers, bankers, or eaters, as well as many other different activities that push people to visit the shopping malls. For these reasons and many others, businesses are becoming more complex, multicultural, and multifaceted resulting in green business practices more imperative today than ever before.

Chapter 11

Promoting Circularity Through Sustainable Leadership 197

Hylton James Villet, Namibia University of Science and Technology, Namibia

This chapter looks at leadership in the transition to, the adoption, the implementation, and ultimate success of the organisation in the sustainable economy. The chapter reflects on the differences between the linear and the circular economy and advances that the leadership requirements for the sustainable economy may be different from the leadership requirements of the linear economy. It further posits that effective leaders in this new economy may require different approaches to ensure a successful transition from the linear to the sustainable economy or when starting a new venture in the circular economy. From the vast and expansive field of leadership, the chapter explored the current leadership discourse and then zoomed in on transformational and eco-leadership. The chapter further looked at leadership and organisational culture with the view to unpack the role of leadership and organisational culture as a potential barrier to the transition to and adoption of a sustainable and circular business model.

Chapter 12

Flexible Work Arrangements for Green Manufacturing	212
<i>Idris Olayiwola Ganiyu, University of KwaZulu-Natal, South Africa</i>	

Scientists and environmental activists have constantly emphasized the need to take action against the devastating effect of greenhouse gas emission, which is resulting in immense damage to the environment. The role of flexible work arrangements in ensuring the greening of manufacturing processes globally has not been fully explored by researchers. Aligning employees' green workplace behaviour, technological innovation, and flexible work arrangement could help promote green manufacturing. This chapter employed a conceptual review of literature to examine flexible work arrangement for green manufacturing. Findings revealed that the adoption of flexible work arrangement for green manufacturing could enhance the greening of the production process and employees' ability to achieve a balance between work and family domain.

Chapter 13

Employee Green Behaviour in Ghanaian Public Sector Organisations	229
<i>Richard H. Afedzie, Pentecost University, Ghana</i>	
<i>Bellinda Omari Asante, Pentecost University, Ghana</i>	
<i>James Aller, Georgia Southwestern State University, USA</i>	

This chapter explores the role of employees' green behaviour in public sector organisations in Ghana. The enactment of the Renewable Energy Technologies Act by Ghana's legislative body in 2012 has drawn considerable attention to the essence of embarking on a sustainable energy policy agenda. Public sector employees have been tasked by the government to be prudent in conserving energy in all its organisations. A qualitative research approach was adopted. A semi-structured interview was employed to examine how employees' routine activities considered green behaviour in the performance of their tasks at the workplace. Purposeful sampling was adopted in choosing 16 employees within selected public sector organisations. The data analysis revealed two seminal themes, which resulted in three key conclusions. Organisational policies such as replacing old office equipment with new energy-saving equipment to conserve energy are essential. Second, annual training on employee green behaviour has a long-term impact on creating environmentally conscious employees.

Chapter 14

Workplace Green Behavior for Sustainable Competitive Advantage	248
<i>Emmanuel Imoh Uwem, Nobel International Business School, Nigeria</i>	
<i>Ola Olusegun Oyedele, Federal University of Agriculture, Abeokuta, Nigeria</i>	
<i>Olasoji Timilehin Olubiyi, Babcock University, Ilishan-Remo, Nigeria</i>	

Enhancing sustainable competitive advantage in terms of quality service delivery is key for environmental sustainability. Most organizations are bedeviled with toxic behavior of the workforce which have unpredictable concerns for sustainable initiatives parameters such as decline in profits, environmental degradation, and health deterioration. This chapter utilized the ability, motivation and opportunity theory, and relevant literature to examine the influence of workplace green behavior on sustainable competitive advantage, and the implication for environmental sustainability. The conclusion revealed that workplace green behavior in form waste recycling, going paperless, and embracing renewable

energy predicted sustainable competitive advantage in terms of producing green products and services. The study recommended initiation of green organizational culture and creativity as panacea for green behavioral responses and sustainable goals.

Chapter 15

Green Human Resources and Sustainable Business Solutions 264

Ibrahim Olanrewaju Lawal, Kwara State University, Malete, Nigeria

Femi Stephen Olawoyin, Kwara State University, Malete, Nigeria

This chapter discusses green human resources (HR) and its impact on sustainable business solutions. It embraces work area research and writing audit way to discover the connection between green HR and sustainable business performance. This chapter examines the influence of human resources (HR) as a fundamental capacity in an organisation. The role of HR in the organisation has moved beyond focusing on realising organisational objective but into the integration of corporate strategy with environmental sustainability through environmentally friendly practice. The study explores instrumental theory, which focuses on both shareholder and stakeholders' interests of an organisation. Therefore, organisations need to align its operational objectives with environmental sustainability objectives through effective green HR practices to achieve sustainable business solutions.

Compilation of References 278

About the Contributors 321

Index..... 325

Preface

There is an ongoing request for ecological modernisation and responsible business practices amid issues surrounding climate change across the globe. As a way of combating global warming and other environmental challenges, there is a need for Human Resource Management Practices for Promoting Sustainability. The United Nations Sustainable Development Goals (for example, “12. Responsible Consumption and Production: Ensure sustainable consumption and production patterns; and “13. Climate Actions: take urgent action to combat climate change and its impacts”) also support the need for responsible business solutions in various sectors of the global economy. Promoting sustainability through human resource practices focus on the alignment of Human Resource Management and the Environmental Management (EM) field of study. Research focusing on both areas of study informs Green Human Resource Management (GHRM) practices, which could produce positive impacts on organisational and environmental outcomes.

GHRM is the use of HRM philosophies, policies, and procedures in promoting sustainable use of resources in business organisations by increasing employees’ awareness and commitments on the sustainability practices, produce eco-friendly goods and services to keep a healthier environment. GHRM provides an opportunity for organisations to embrace the full range of green HR practices to increase their efficiency and promote workplace green behaviour (Atiku, 2019; Renwick, Redman, & Maguire, 2013). Incorporating green initiatives into HR practices will increase the positive environmental impacts of organisations (Arulrajah, Opatha, & Nawaratne, 2015). Therefore, GHRM practices should be promoted by HR specialists to add value to the organisation through pro-environmental performance (Atiku, 2019). The main objective of this publication is to provide an in-depth understanding of the full range of GHRM practices, thereby expanding the scope of HRM. This publication is also essential in realising the United Nations Sustainable Development Goals from the GHRM perspectives. Human resource management practices for promoting sustainability is an effort towards ensuring sustainability in the fourth industrial revolution. The publication serves as reference material to conventional and corporate universities on GHRM and provides a perspective shift in HRM based on sustainability challenges in the fourth industrial revolution.

OBJECTIVE OF THE BOOK

The scholarly value of this publication is on the need to advance GHRM practices for sustainability in the fourth industrial revolution. Also, there is a need to showcase an elaborate discussion on green human capital, collective green intelligence, and competencies that are essential to cope with the challenges in

the industry 4.0. The book seeks to provide a basis for the green recruitment and selection processes as a way of promoting pro-environmental behaviour in various sectors of the world economy. Due to the current level of demand for eco-friendly products and services, there is a need for green training and green human resource development to spring up green creativity and eco-innovation for sustainability. Hence, this book seeks to fill this gap by incorporating green initiatives into all aspects of HRM practices.

The publication is a qualified Reference book to its proposed target market, which expands the knowledge in HRM, organisational development (OD), and EM discipline. The proposed topic for publication will not only facilitate benchmarking GHRM policies but help the conventional and corporate universities in meeting Sustainable Development Goals. It will also aid the institutions of management education to focus on developmental programmes essential for responsible business solutions and sustainability in the fourth industrial revolution. The proposed publication tends to provide a guideline for policymakers in designing and implementing green creativity and eco-innovation based on a wide range of global issues confronting sustainability in the fourth industrial revolution.

TARGET AUDIENCE

The primary intended audience is scholar-practitioners who require qualified Reference material regarding the subject matter of the proposed publication as outlined above. The secondary intended audience is managers, organisation development specialists, consultants, educationalists, policymakers, and undergraduate/graduate business students who require the same Reference material.

TOPICS DISCUSSED IN THE BOOK

The chapters of the book address key topics on human resource management practices for promoting sustainability such as:

- Green Human Resource Management Practices and Organisational Sustainability
- Green Human Resource Management: A Review and Future Directions
- Understanding Green Human Resources in Healthcare
- Succession Planning as a Developmental Tool for Sustainability
- Green Recruitment Practices
- Green Selection Practices
- Human Capital Development Strategy for a Sustainable Economy
- Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector
- Greening the Compensation Design and Management of the Human Resource Function
- Green Health and Safety Management System
- Promoting Circularity through Sustainable Leadership
- Flexible Work Arrangement for Green Manufacturing
- Employee Green Behaviour in Ghanaian Public Sector Organisations
- Workplace Green Behaviour for Sustainable Competitive Advantage
- Green Human Resources and Sustainable Business Solutions

ORGANISATION OF THE BOOK

This book is structured into 15 chapters. A brief description of each of the chapters featured in the book is presented below:

In Chapter 1, “Green Human Resource Management Practices and Organisational Sustainability,” researchers and practitioners have argued that human resource management practices have a positive impact on environmental outcomes. This is because green human resource management practices enhance a firm’s environmental performance. Although, studies do not explain how green initiatives can enable organisational sustainability. Therefore, this chapter examines the influence of green human resource management practices on organisational sustainability in the context of Nigeria. The chapter adopted a discourse content analysis as a method of data collection. The chapter holds that organisational sustainability relies solemnly on green training intervention as the means of understanding and redressing the human environment with a view to achieving and sustaining a better quality of life. Conclusively, green human resource management practices target protecting the ecosystem among others. The chapter recommended that sustainability could be achieved through employee green behaviour and eco-innovation at the industrial level.

Chapter 2, “Green Human Resource Management: A Review and Future Directions,” explores the vital role of human resource departments in organisations and their contributions towards environmental sustainability in the nations of sub-Saharan Africa. It emphasises the place of HR in recruitment, training and development, learning, rewards, employee relations, and appraisal of employee performance in promoting environmental sustainability. It affirms that instilling a culture of environmental awareness into every activity of organisations has a return on productivity, attracting the best talents, and minimizing the harm of environmental degradation. It contends that organisational policies and behaviour on environmental responsiveness should be of priority to the 21st-century businesses in sub-Saharan Africa.

Chapter 3, “Understanding Green Human Resources in Healthcare,” assesses the role of human resource management in developing capital for the triple bottom line. In the Fourth Industrial revolution, human resources now shift their focus to advancing communication and connectivity versus focusing purely on technological advances. As the Fourth Industrial Revolution continues, communicating the effectiveness of human resource management and human capital development should be considered as an essential area of interest. As healthcare practitioners continue to provide treatment and care for those in need, human resource managers need to learn green practices to create a more sustainable environment that contributes socially and economically while adhering to the demands of the international stakeholders. As healthcare continues to be either one of the most significant expenditures or needs for numerous countries, consideration in this field provides potential holistic benefits for stakeholders.

Chapter 4, “Succession Planning as a Developmental Tool for Sustainability,” presents practical guidance based on four simple to use a model of developing a succession plan. It also highlights the current best practices of succession planning based on literature. Succession planning is a critical leadership tool for organizational growth and sustainability; it alleviates substantial gaps in organizational knowledge and leadership through strategic replacement of key personnel. Using succession planning as a developmental tool will allow the organization to determine what and whose knowledge is most important to capture and help them to identify critical positions. It is very important for organizations to grasp the meaning of succession planning before implementing a succession plan as a developmental tool for organizational sustainability. Based on the definitions of succession planning, this chapter defines

succession planning as a proactive approach to managing talent, and the development of a leadership pipeline to meet an organization's need-based demand for sustainability.

Chapter 5, "Green Recruitment Practices," focuses on green recruitment practices. Green recruitment is the procedure of hiring people having behaviour, knowledge, and skills of environment management systems in the organisation. An important rationale behind green recruitment practices in most organisations is to reduce recruitment costs by automating the process and make a green difference starting at the online career site. Green recruitment practices minimise energy use and pollution associated with manufacturing, transporting, and recycling paper products. Therefore, organisational policies and government regulatory frameworks should support green initiatives and pro-environmental behaviour.

Chapter 6, "Green Selection Practices," examines the importance of the green selection process in safeguarding the environment. Given the environmental impact, many firms have started to adopt green practices in all their functional areas with the aim to protect the environment. One of the green initiatives is the green selection process, which involves the process of hiring candidates who have personality traits such as green consciousness, conscientiousness, and agreeableness. The chapter holds that the green selection process helps organisations to meet their environmental obligations by choosing candidates who have pro-environmental behaviours as well as sufficient knowledge of environmental management.

Chapter 7, "Human Capital Development Strategy for a Sustainable Economy," holds that the current production and consumption systems have created many social and environmental issues in the global business environment. These issues are of concern for many policymakers across the globe. The essence of the policy framework on sustainability is to transform the global economy into a more sustainable economy. Human capital development is central to economic transformation. This chapter examines the human capital development strategy for a more sustainable economy. A desktop research approach was adopted to investigate the relationship between human capital development strategy and sustainable economic development. For an effective transition into a sustainable economy, this chapter upholds an alignment of human and organisational development strategy, as well as a national development plan with the economic, social, and environmental pillars of sustainability. Therefore, human capital development strategy is a holistic approach to explore the four greens (green savings, green opportunities, green talent, and green places) for a more sustainable economy.

Chapter 8, "Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector," examines the relationship between managerial skills and client servicing. Insurance is a service industry and client retention influences growth and business sustainability. To mitigate the challenges of privatization, competition, and stakeholder's expectations, appropriate managerial skills for middle management are critical. Results show that higher managerial quotient is associated with client servicing quotient.

Chapter 9, "Greening the Compensation Design and Management of the Human Resource Function," considers the environmental management features of the compensation and reward system and factors a mould of the procedures entailed in green compensation and reward system. It cores on examining green Reward Management Systems or practices from the standpoint of subsisting research in the area and proposes inventive process moulds in Green Reward Management Systems. The green Reward Management Systems is presented as a smart and superior method of Reward Management Systems in promoting employee green behaviour in contemporary workplaces.

Chapter 10, "Green Health and Safety Management System," examines a number of factors, such as environmental consideration, and well-being of the human capital in an organisation. Business centres are becoming spaces where people spend most of their time as either managers, employees, shoppers, bankers, or eaters, as well as many other different activities that push people to visit the shopping malls.

Preface

For these reasons and many others, businesses are becoming more complex, multicultural, and multifaceted resulting in green business practices more imperative today than ever before. The chapter submits that green health and safety management exerts a positive impact on business success and sustainability.

Chapter 11, “Promoting Circularity Through Sustainable Leadership,” advances that the leadership requirements for the sustainable economy may be different from the leadership requirements of the linear economy. It further posits that effective leaders in this new economy may require different approaches to ensure a successful transition from the linear to the sustainable economy or when starting a new venture in the circular economy. From the vast and expansive field of leadership, the chapter explored the current leadership discourse and then zoomed in on transformational and eco-leadership. The chapter further looked at leadership and organisational culture with the view to unpack the role of leadership and organisational culture as a potential barrier to the transition to, and adoption of a sustainable and circular business model.

Chapter 12, “Flexible Work Arrangement for Green Manufacturing,” examines the role of flexible work arrangements in green manufacturing. Aligning employees’ green behaviour, technological innovation, and flexible work arrangements could help promote green manufacturing. This chapter employed a conceptual review of the literature to analyse flexible work arrangements for green manufacturing. Findings revealed that the adoption of flexible work arrangements for green manufacturing could enhance the greening of the production process and employee’s ability to achieve a balance between work and family domain.

Chapter 13, “Employee Green Behaviour in Ghanaian Public Sector Organisations,” explores the role of employees’ green behaviour in public sector organisations in Ghana. The enactment of the renewable energy technologies Act in 2012 by the legislative body in Ghana has drawn attention to the essence of sustainable energy policy. Public sector employees have been tasked by the government to be prudent in conserving energy. A qualitative research approach was utilised. A semi-structured interview was employed to examine how employees’ routine activities considered green behaviour in the performance of their tasks at the workplace. Purposeful sampling was applied in choosing 15 employees within selected public sector organisations. The data analysis revealed two seminal themes in drawing the conclusion. First, common organisational policies such as replacing old office equipment with new energy-saving equipment conserve energy. Second, annual training on employee green behaviour has a long-term impact on creating environmentally conscious employees. Recommendations and future research in the field of management are offered.

Chapter 14, “Workplace Green Behaviour for Sustainable Competitive Advantage,” examines the influence of workplace green behaviour on sustainable competitive advantage, and the implication for environmental sustainability. The conclusions revealed that workplace green behaviour in form waste recycling, going paperless, and embracing renewable energy predicted sustainable competitive advantage in terms of producing green products and services. The study recommended the initiation of green organisational culture and creativity as a panacea for green behavioural responses and sustainable goals.

Chapter 15, “Green Human Resources and Sustainable Business Solutions,” examines the influence of Human Resources (HR) as a key capacity in an organisation. The role of HR in the organisation has moved beyond focusing on realising organisational objective but into the integration of organisational objective with environmental sustainability through environmentally friendly practice. The study explores the instrumental theory, which focuses on both shareholder and stakeholders’ interests throughout organisations’ practices. Therefore, organisations need to align their operational objectives with an environmental objective to ensure sustainable business solutions.

Concretely, the collection of chapters in this book aimed to provide insights on the need to incorporate green initiatives into all aspects of human resource management practices in a variety of industries. The book delivers a discussion on green human capital, collective green intelligence, and competencies that are essential to cope with the challenges in Industry 4.0. It also provides a basis for green recruitment and selection processes as a way of promoting pro-environmental behaviour in the labour markets. While highlighting a broad range of topics such as employee relations, knowledge management, and recruitment, this book is suitable for executives, entrepreneurs, human resource managers, academicians, researchers, and students. The book is also essential for conventional and corporate universities looking forward to achieving sustainable development goals. It provides a guideline in designing and implementing green creativity and eco-innovation based on a wide range of global issues confronting sustainability in the Fourth Industrial Revolution.

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Chapter 1

Green Human Resource Management Practices and Organisational Sustainability

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ABSTRACT

Researchers and practitioners have argued that human resource management practices have a positive impact on environmental outcomes. This is because green human resource management practices enhance a firm's environmental performance. Although studies do not explain how green initiatives can enable organisational sustainability, this chapter examines the influence of green human resource management practices on organisational sustainability in the context of Nigeria. The chapter adopted a discourse content analysis as a method of data collection. The chapter holds that organisational sustainability relies on green training intervention as the means of understanding and redressing the human environment with a view to achieving and sustaining a better quality of life. Conclusively, green human resource management practices target protecting the ecosystem, among others. The chapter recommended that sustainability could be achieved through employee green behaviour and eco-innovation at the industrial level.

INTRODUCTION

From historical hindsight, many Africa companies with local content without global flavor collapse like packs of card immediately after demise of the emperor, while some businesses go into extinction within the first two or three years of their start-up in this part of the world. Azeez (2016) put it that no matter how well organized a business is, goals, visions and missions cannot be achieved in isolation without harmonious alignment of key stakeholders such as organisation leaders, employers, customers, regulators and competitors. Therefore, for any business or organisation to stand the taste of time and continuous existence, the aforementioned factors should be taken into consideration in order to achieve sustainability purpose.

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Organisational sustainability mean having the leadership, talent, global insights and change strategies necessary to rise to unique challenges facing contemporary organisations. Organisational sustainability is an issue of concern to many present day organisations both profit and not-for-profit. According to Gehman and Lefsrud (2018), one way by which organisations contribute to sustainability either for better or worse is through their practices. Thus, previous studies have considered wide varieties of organisational practices to enhance sustainability (Essien & Akpan, 2010; Azeed, 2016; Gehman & Lefsrud, 2018). For instance, labour practices, sustainability reports, role of sustainability certifications as well as discursive understandings on responses to climate change among others.

Similarly, other researches emphasized on organisational sustainability from the paradigms of cultural factors, institutional pressures, regulatory changes, social movements and media pressure (Fields & Atiku, 2017). Picking up on these themes, it is crystal cleared that labour practices and employee green behaviour played a pivotal role in the sustainability of the organisation. This can be attributed to the significant activities of human being in production system. No wonder Roscoe, Subramanian, Jabbur and Chong (2019) argued that human resource management practices have a positive influence on environmental outcomes. Therefore, green human resource management (GHRM) practices enhance a firm's environmental performance (Roscoe et al., 2019).

Although existing studies does not explain how GHRM initiatives can enable organisational sustainability rather the studies concentrated on GHRM and performance (Gehman & Lefsrud, 2018; Roscoe et al., 2019). It is on this note that this chapter examines the effects of GHRM practices on organisational sustainability in the context of Nigeria.

BACKGROUND

Prior to Sustainable Development Goals (SDGs), the attainment of the Millennium Development Goals (MDGs) has been the concern of global countries and some scholars (Essien & Akphan, 2010; Dauda, 2016; Fajana, 2019) have questioned its achievement in the context of Nigeria. This is because in the attainment of MDGs the critical role of education, training and development of human element is very imperative.

Human Capital Management (HCM) is the most globally accepted label of activities relating to people management. Hence, human capital management describes “an academic discipline and an area of industrial practices with contents in concepts, theories, models, policies, strategies, plans, programmes, rules and regulations, and other activities that are connected with the acquisition, maintenance and effective utilization of people towards the achievement of organisational goals for overall organisational effectiveness and sustainability” (Fajana, 2019, p. 4).

Therefore, organisational sustainability relies solemnly on education and training as the means to understanding, controlling, altering and redressing human environment with a view to achieving and sustaining a better quality of life (Essien & Akpan, 2010). This is because HCM increases the number of knowledgeable workforce by enhancing their skills and enabling them to confront new challenges since SDGs is a planning tool that guarantees good life both now and in the future.

In the year 2015, the United Nations crafted 17 SDGs as the veritable tool to equate development around the world. The sustainable development emerged as a planning tool across to maintain the already established MDGs and global poverty elimination programmes (Dauda, 2016). However, the achievement

of the MDGs has been undermined by socio-economic, political and moral problems as well as lack of commitment and corruption of the political elites to the implementation of the agenda.

According to Dauda (2016) the SDGs targets range from ending hunger and poverty, inequality within and between countries, **protecting the ecosystem**, promoting good governance and peaceful societies among other. Protecting the ecosystem is in tandem with Goal No.8 of SDGs that emphasized on decent work and economic growth whereby Governments collaborated with International Labour Organisation (ILO) to write out social protection instruments.

The SDGs provide a common universal and global vision of progress towards a safe, just and sustainable space for all human beings to thrive. Dauda (2016) argued that based on moral principle that no one and no country should be left behind and every one should be regarded as having a common responsibility for playing their part in delivering global vision (P. 255). It is worthy to note that SDGs could not be achieved without employee green behaviour, and eco-innovation at the industrial level, therefore proper and effective human resource management is required especially in the area of green challenges. Thus, GHRM initiatives is necessary to avert green challenges because the green challenge is number one global poverty challenge that is expressed today among the mega-challenges if greater sustainability is to be achieved.

ORGANISATIONAL SUSTAINABILITY

In other to reduce emission of greenhouse gases, various governments have formulated sustainability criteria that the industries are expected to comply with in their operations (Bindrabari, Bulter & Conijn, 2009). In achieving these criteria Khalili, Ismail and Karim (2017) review 13 contemporary models and initiatives for sustainable development (SD) and refer to sustainability as the action oriented variant of sustainable development.

The scholars argued that there are mixed results regarding identification of the main dimensions of sustainability but critically compare the dimensions to show the similarities and dissimilarities aspects (Khalili et al., 2017). Khalili et al (2017) found out that organisations are focusing on diversified aspects rather than identical or uniform strategies when dealing with sustainability issues. Both the economic and environmental sustainability are becoming global concern by many enterprises because sustainability is one of the important strategies for a sustainable competitive advantage (Atiku & Fields, 2019; Khalili et al., 2017).

No wonder Jin, Jungbe and Kim (2017) argued that being green and sustainable in the routing has become mandatory. This argument is attributed to environmental problems as well as costs reduction in order to realise competitive improvement in global business. Therefore, organisational sustainability can be referred to as a firm's economic, environmental and social initiative in ensuring the future (Norazlan, Habidin, Roslan & Zainudin, 2014). This implies that effective performance measurement will help employees carry out their task efficiently, work under control, ensure customer satisfaction, and achieve goals.

Organisational sustainability is an emerging megatrend that requires organisations to adapt and innovate or be swept aside by forces of changes such as response to turbulence and rapid changes that have been occurring in the global economy (Perrott, 2014). Rodriguez-Olalla and Aviles-Palacios (2017) defined organisational sustainability as “a multidimensional phenomenon that focuses on maintaining

results, generating knowledge, building capacity, establishing experiences with partners, and producing services and products based on the concept of efficiency and effectiveness”.

However, there is no universally agreed definition of sustainable organisation performance because organisational sustainability comprises of main components namely economic, social and environmental. The Chartered Institute of Personnel and Development (2010) defined sustainability as the organisation’s people, financial, environmental and societal (PFES) contribution over time. Yaeger and Yeh (2011) argued that no matter what challenges organisations suffered, employees are the foundation and the trigger to drive changes. Thus, organisation sustainability comprises organisational identification, commitment of employees and employability (Yaeger & Yeh, 2011). In the context of this chapter, organisational sustainability is examined from the paradigm of human capital using green initiatives as well as the financial capital, which is economic in nature.

Economic sustainability represents the need to guarantee economic success to a company. *Social sustainability* involves benefits that have an impact both outside a company (benefit that company bring to the surrounding society) and inside a company (supporting workers health and safety and well-being, encouraging future generations to develop skills and capabilities and promoting a high quality of life). *Environmental sustainability* on the other hand is concerned with reducing environmental impact through more efficient use of materials and natural resources and pollution prevention. Thus, the chapter takes a clue from both environmental and social sustainability components to explain the relationship between GHRM and organisational sustainability because both components of sustainability have positive and negative effects on environment and social initiatives. Therefore, for possible synergies with environmental and social programme like GHRM in the organisation, it is imperative to study the dimensions of organisational sustainability in order to enhance organisation performance, competitiveness and employee’s commitment (Miller, Pawloski & Standridge, 2010).

The International Development Research Centre (IDRC) in the year 1997 referred to organisational sustainability as the ‘Egg of Sustainability Model’. The model illustrates the relationship between people and ecosystem as one circle inside another like the yolk of an egg. It implies people are within the ecosystem and ultimately one is entirely dependent upon the other (Khalili et al., 2017). This model will be explicitly discussed in the next subheading because human capitals are the pivotal of sustainability in the organisation base on green initiatives and policies towards workplace green behaviours from environmental awareness perspective.

Models of Organisational Sustainability

There are 13 different models for sustainability, namely; people, financial, environmental and societal (PFES) model, triple bottom line concept model, Yeh model, the prism of sustainability model, three pillar basic models, Egg of sustainability model, Atkission’s pyramid model, the Amoeba model, sustainability triangle model, Philippine model, eight business model prototype, sustainable evaluation model for cement industry, and the contemporary model for sustainable development (Khalili et al., 2017).

These models take into consideration three (3) factors such as economic, environmental and social when developing the models because the main components of organisational sustainability emanated from theoretical explanation of the three dimensions. The logic of model building is linked to the theoretical concept, thus organisational sustainability is developed from practical transformation mechanisms. Therefore, sustainable development is a combination of human and ecosystem well-being.

Social dimension as the second indicator of organisational sustainability sees society as a structure with interrelated parts designed to meet the biological and social needs of the individuals in that society. Fajana (2019) gave a reasonable conclusion of this dimension that a society may experience disequilibrium of some sorts, but the system, comprising functional parts working together, is capable of achieving an ultimate restorative balance. Therefore, social determinant offer human capital building as the strategic cure for each challenge that may arise from sustainable goal attainment. Human capital building includes all investments in people, at all levels, individual, household, corporate, regional, national and global, to increase capacity for the execution of set objectives (Fajana, 2019).

Agrawal, Kumar and Rahman (2017) put it that “businesses are finding it hard to align sustainability in their strategy as their approach is mostly driven by cost and output,” which are economic in nature. Thus, organisations integrate sustainability into their market orientation strategy in order to overcome economic sustainability challenges rather than social and environmental sustainability challenges. This is because social and ecological sustainability have been marginalised to reduce expenses and increase revenue.

Lately, extant literature on sustainability has focused mainly on social issues and environmental issues with scanty writings about economic issues. Although environmental issues particularly in the area of pollution, waste, greenhouse gases emissions among others appear as the main sustainability concern and are at the forefront. Carpenter and Lozano (2020) argued that sustainability policy must harmonise economic, environmental and cultural interests when taking forward progressive change. This is because such harmonization does not take place in short-term economic interests rather long-term sustainability is less likely to occur when given priority.

Furthermore, the integration of aspect of economic viability, environmental orientation, and social orientation is necessary to achieve holistic sustainability in every endeavor of work-life. Therefore, working collaboratively of the dimensions of sustainability (economic, environmental, and social) in the short, medium and long term will assist in achieving a more sustainable organisations that will improve economic security, a reduction in pollution and emission related to climate change, and waste generation as well as providing jobs in the area of green revolution such as GHRM.

Having explored the explanation of economic, social and environmental approached to sustainability; the chapter shall adopt *Egg of sustainability model* among the aforementioned models to explain the relationship between GHRM and organisational sustainability. This is because egg of sustainability model illustrates the relationship between people (workers) and the ecosystem (surrounding of the industry). People are within the ecosystem and ultimately one dependent on each other. The people (workers) can only prosper if they adapt themselves to the limits of environmental carrying capacity while the Ecosystem is regarded as a superordinate system to other dimensions of social, economic and institutional (Lozano, 2018; Khalili et al., 2017; Perrott, 2014).

Thus, social and economic development can only take place if the environment offers the necessary resources such as raw materials, space for new production sites and jobs, constitutional qualities etc. Based on the above postulation, Amrina and Vilsa (2015) proposed a set of key performance indicators (KPI) for evaluating sustainability. The scholars argued that in evaluating sustainable performance of an organisations, depend on the goal and factors influencing the organisation. The three (3) basic factors highlighted like the previous scholars are the economic, environmental and social factors.

Apparently, of these approaches, social factors were considered appropriate to evaluate organisational sustainability from the paradigm of GHRM due to its indicators such as accident rate, labour relationship, training and education, occupational health and safety among others. In other words, social approach

must be seen as a vital factor of organisational sustainability model by considering its primary role in supporting actions towards a more green revolution. No wonder, Perrott (2014) posited that human resource strategies are focused mainly on creating and maintain a complaint workforce. This argument will be discussed further in the subsequent section to explain the interconnectedness that exists between human case and green case.

Determinants of Organisational Sustainability

Lozano (2018), argues that most organisational sustainability efforts are techno-centric and focused on managerial ploys with little or no consideration for organisational system or change process. This is unconnected with the significant of Information and Communication Technologies (ICT) as a change agent in organisational sustainability debate, thus GHRM are all embedded in technological innovation especially in the management of human activities in the organisation.

Since organisations are an integral part of modern societies, therefore it could be construed as a subsystem of a larger environmental system because organisations provide jobs in the society. In this capacity represent a new social form and have rights and resources that are independent of its individual members (Lozano, 2018). Organisations are seen as a system whereby some resources enter, some resource exit and some remain in the system. For example, those resources that enter are the employees when they arrive to work, raw materials and energy, while the resources that exit the organisations are emissions and effluents, waste energy, products and by-products, employees when their work is finished. This implies that organisational sustainability is a dependent of employee green behaviour, thus, changes must be balanced among the multiple stakeholders in the organisation.

Lozano (2018) highlighted the following as the determinants of organisational sustainability. These are:

- Individual organisations global environment relations;
- Organisational culture within the context of corporate sustainability;
- Initiatives to embed sustainability into company;
- Organisational change management for sustainability; and
- Reporting organisational change management.

The scholar concludes that organisational culture in which values, norms, and principles encourage behaviours that are sensitive to environmental and social issues are essential for sustainable competitive advantage.

It is clear that Lozano determinants of organisational sustainability are from the environmental dimension paradigm, which is vital to sustainability accomplishment. The *size of the organisation* also plays a key role in deciding whether organisations to engage with sustainability or not (Alonso-Almedia, Llach & Marimon, 2014). This is also under environmental dimension.

Ives, Freeth and Fischer (2019) posited that another determinant of organisational sustainability under the social dimension is the *people's inner worlds*. That is, people emotions, thoughts, identities and beliefs. The scholars argued that preoccupation with external phenomenon and collective social structure has made researchers on organisational sustainability to neglect people personal characteristics, which mark individual expression of sustainability. Therefore, organisational sustainability researchers should take into consideration people inner life such as language, spirituality, contemplation, and transformation

challenges when addressing sustainability (Azeez & Genty, 2018). This is because planetary trajectories remain deeply unsustainable due to human experience.

According to Mukherjee and Kumta (2016), knowledge management also played a pronounced role in SMEs. Sustainability, therefore propose a knowledge management model for organisational sustainability. This is because effective knowledge management approaches are crucial to processes of knowledge creation, sharing and dissemination, which in turn support sustainability. Knowledge management is about people learning faster, deeper, continuously, collaborating and being creative all the time. In order to grow and sustain business, there is need for nurturing the human resources using both formal and informal methods such as the use of information and communication technologies (ICT), quality services, mentoring and storytelling for information dissemination and sharing. This is achievable when such enterprise goes green.

Similarly, education has been debated as a determinant of organisational sustainability because it actively involves learning process, which multiple stakeholders in change follow to achieve sustainability. The process involves five key components namely visioning, critical thinking and reflection, participation in decision-making, partnership and systematic thinking (Hunting & Tilbury, 2006; Fajana, 2019). Thus, help people to make informed decisions and create ways to work towards a sustainable world.

In another study conducted in Czech Republic by Urbancova et al (2020) on the impact of age management and organisational sustainability depict the significant important of Age management as part of strategic human resource management practices, which in turn lead to a competitive advantage and promote organisational sustainability. The empirical result of their study show that organisations with the application of age management practice achieved a competitive advantage and sustainability regardless of the size or sector of such organisation (Urbancova et al., 2020). This is because application of age management helps to achieve sustainability of both human resources within the organisation and relatively lasting competitive advantage.

The study shows the correlation between performance and age with green hiring and training to soften stress level for older employee before they retire (Urbancova et al., 2020). Therefore, the implementation of GHRM practices influences the sustainable performance of the organisation especially in the area of green hiring. This is so because green recruitment is an important part of GHRM dimensions among other dimensions like training, performance management, pay and reward, and involvement. Apparently, as part of many companies' environmental responsibility, the use of green criteria is usually adopted when choosing new employees as well as attracting candidates with a pro-environmental attitude. This aids in reducing carbon footprints, decrease pollution and minimize waste, hence more responsible towards society.

GREEN HUMAN RESOURCE MANAGEMENT

GHRM is defined as those HRM environmental-friendly policies and practices that are focused to make the organisation green (Roscoe et al., 2019). It is the application of HRM policies and practices to sustain effective use of resources within the organisation (Jackson et al., 2011; Mandip, 2012). Also, GHRM involves the systemic planned alignment of typical HRM Practices with the organisations environmental goals (Ahmad, 2015).

GHRM can also be referred to as using every employee touch point/interface to promote sustainable practices and increase employee awareness and commitments on the issues of sustainability. It involves

undertaking environment-friendly HR initiatives resulting in greater efficiencies, lower costs and better employee engagement and retention which in turn, help organisations to reduce employee carbon footprints by the likes of electronic filing, car-sharing, job-sharing, teleconferencing and virtual interviews, recycling, tele commuting, online training, and energy-efficient office spaces.

Opatha and Arulrajah (2015) have explained GHRM as the policies, practices and systems that make employees of the organisation goes green for the benefit of the individuals, society, natural environment and the businesses. In GHRM, various human resource practices such as recruitment and selection, performance appraisal, compensation and training, are designed in a manner to create a workforce that understands and promotes green behaviour in the organisation. Green initiatives within HRM form part of wider programs of corporate social responsibility. Green HR essentially consists of two major elements namely environment-friendly HR practices and the preservation of knowledge capital (Mandip, 2012).

Renwick et al. (2013) elaborate that within an organisation, human resource and their system are the foundation of any business, be it financial business or sustainable business. They are the ones responsible for planning and executing those eco-friendly policies to create a green atmosphere. Therefore, without facilitating the human resource and implementing sustainable policies, going green would be a hard nut to crack (Ahmad, 2015)

Similarly Jackson et al. (2011) suggests that GHRM focuses on the selection, training and rewarding employees for their positive attitude and behaviour towards the protection of the environment in order to generate a culture of environmental protection. The nature and scope of GHRM is based on the extension of the basic HRM practices to green concerns. These include Green Recruitment and Selection, Green Performance Management, Green Human Resource Planning, Green Training and Development, Green Employees Participation and Engagement, Green Reward Management among others. Roscoe et al. (2019) suggest that GHRM is the best model for solving environmental problems in the organisation. Jackson et al. (2011) on the other hand describes GHRM as the alignment of HRM functions such as recruitment and selection, human resource planning, performance management, training, rewards and compensation to the overall organisational green management mission and objectives.

GHRM incorporate environment-friendly HR commencement and practices for sustainable use of resources that resulting in more efficiencies, less wastage, improved job related attitude, improved work/private life, lower costs, improved employee performance and retention which help organisation to reduce employee carbon footprints by the mean of GHRM practices such as flexible work scheduled, electronic filing, car-sharing, job-sharing, teleconferencing, virtual interviews, recycling, telecommuting, online training, energy efficient, and office space. (Prasad, 2013).

In essence, GHRM can be understood as a manifesto, which helps in the creation and development of Green employees. Opatha and Arulrajah (2015) have identified four roles for the purpose of becoming a Green Employee. They are preservationist, conservationist, non-polluter and maker. Accordingly, the purpose of GHRM is to create, enhance and retain green insights within each employee of the organisation so that he or she can give the maximum contribution on each of these roles. Furthermore, they stated that the Green HR requirements include Green Competencies, Green Attitude, Green Behaviours and Green Results. As per them, these are needed to achieve the corporate environmental objectives.

Renwick et al. (2013) states that GHRM has been augmented to enhance green behaviours, attitudes and capabilities of employees, motivate workers to think green, and to provide opportunities for employees to build knowledge and skills associated with environmental sustainability. Renwick et al. (2013) and Wehrmeyer (2017) have explained that GHRM involves an integration of company's environmental management objectives to the HR processes of recruitment, selection, training and development,

performance management and evaluation, rewards and recognition. Renwick et al. (2013) analyzed the separate literature of Environmental management and HRM and constructed a list of GHRM activities. These classifications of GHRM activities shall be discussed elaborately in the next subheading of this chapter. Opatha and Arulrajah (2015), states that in order to make sure that the organisation gets right employee green inputs and right employee green performance of the job, it is indispensable that HRM functions are adapted or modified to be green.

GREEN HUMAN RESOURCE MANAGEMENT PRACTICES

Several studies have been carried out on GHRM practices where many indicators have been used (Zoogah, 2011; Mandip, 2012; Renwick et al., 2013; Ahmad, 2015; Opatha & Akpan, 2015; Wehrmeyer, 2017). In this study however, green recruitment practices, green training and development, and green compensation structure representing the components of GHRM are used to predict the outcome of the study towards achieving a great organisational sustainability. This is because there are widely used in literature and play significant roles in green revolution.

Green Recruitment Practices

Green recruitment means paper free recruitment process with minimal environmental impact (Wehrmeyer, 2017). When dealing with HRM practices especially in Nigeria, environmentally sustainable development issues must be integrated into the recruitment process (Essien & Akpan, 2010). Such recruitment process involves the monitoring of long-term competency requirements for the company, providing new employees with information about sustainable development policies and commitments. This is achieved through recruitment procedures, which support the equitable representation of applicants and recruits in terms of gender, age, racial and ethnic groups, sexual orientation, disabled people and other relevant groups (Ahmad, 2015).

Green recruitment is defined as the process of recruiting new talent who are aware of the sustainable process, environmental system and familiar with the words of conservation and sustainable environment (Prasad, 2013). It is a system where the focus is given on the importance of the environment and making it a major element within the organisation (Jackson et al., 2011; Zoogah, 2011). Green recruitment makes it certain that new talents are familiar with the green practices and environmental system that will support the effective environmental management within the organisation (Wehrmeyer, 2017).

Green recruitment and selection is considered as one of the HRM practices that provide a firm with an opportunity to introduce GHRM initiatives to the prospective job applicants. Hiring and sustaining talented employees is known as the most challenge issue that human resource managers faced in global environment (Ahmad, 2015). Business organisations are now market themselves as environmental conservatives in order to attract highly smart professionals with fabulous green knowledge, who are also adopting of green practices and sustainability issues. In the job analysis process, job description, and job specification firms should include and press on environmental aspects, and what is expected out of selected candidate should be explained clearly as well in green terms (Renwick et al., 2013).

Green recruitment practices in the context of Nigeria are often achieve courtesy of green recruitment policies whereby organisations developed and designed recruitment patterns that attract a green high

fliers to join the organisation. This is unconnected with online recruitment platform that encourage green organisational culture, which invariably promotes corporate social responsibilities.

Green Training and Development Practices

Green training and development consist of employee working methods that reduce waste, proper utilisation of resources, conservation of energy and reduces the causes of environmental degradation (Atiku, 2020; 2019; Fields & Atiku, 2017; Zoogah, 2011). In Nigeria, the green training and development is another means for educating employees about environmental management and training that should be given for the employees about energy, reduce waste, and diffuse environmental awareness in the organisation (Essien & Akpan, 2010). This green training and development help management to provide an opportunity to engage employees in environmentally problem-solving skills (Fields & Atiku, 2018; Zoogah, 2011).

Further, green training and development practices enhance the skill of an employee to educate with the different environmental issues (Mandip, 2012). The practice of green training and development programmes also helps the employers to work smart with ease while delivering workshops, lectures, demonstrations and sessions that solely concentrated on environmental related problems (Cherian & Jacob, 2012). In the end, the training and development programs can be used to generate awareness related to crucial environmental issues like waste management, energy conservation, reducing carbon footprints among others in fighting pollution and ensuring sustainable living environment (Cherian & Jacob, 2012).

Therefore, this factor of green training and development is another significant contribution to the chapter, as it includes social and environmental issues at all levels. That is, from technical health and safety considerations on the shop floor to strategic sustainability issues at executive management and board level (Mandip, 2012). Green training and development stands out as one of the most important GHRM practices needed to the success of green management at firms. Environmental training is also considered as one of the key tools for developing human resources (Jabbour et al, 2010). It aims to stimulate people's attention and knowledge towards environmental concerns, create positive attitude, takes a proactive approach on greening initiatives and building competencies to reduce waste and saving energy (Zoogah, 2011).

Nigerian organisations emphasis on training and development criteria that will inculcate goodwill on the new employees towards friendly environment whereby new sharing green practices are adhere by the new and existing workforce. The rationale for green training and development is to create and influence green creativity among the workforce. Green creativity enhances green products and services that are logical end-result of organisational sustainability.

Green Compensation Structure

Compensation packages should be customized to reward green skills acquisition and achievements by employees (Atiku, 2019; Prasad, 2013). In general, organisations are seen to develop reward systems to produce desirable behaviours, and doing so requires effective employment of both incentives and disincentives (Wehrmeyer, 2017). Organisations may wish to engage in giving employees positive rewards in terms of verbal feedback from supervisors, as such informal verbal and written feedback which might help motivate employees towards environmental improvements (Cherian & Jacob, 2012). Also, recognition-based awards can highlight green contributions of employees through wide publicity and public praise and appreciation of green efforts by top management executives (Wehrmeyer, 2017).

Green Human Resource Management Practices and Organisational Sustainability

Compensation structure such as rewards and remunerations has tremendous benefits in influencing staff interests towards organisation's goal and objectives (Ahmad, 2015).

According to Cherian and Jacob (2012), two types of compensation structure are generally popular for use. The first is monetary rewards and the second is non-monetary rewards. Where monetary rewards entail pay allocations such as salary increment, cash premiums, bonuses, special discounts on the company's goods and others. The non-monetary rewards on the other hand include a habit of conferring special recognition awards to employees on their green achievement or specially organized party for Mr. Green of the year, special holiday leave, gifts, promotions etc. Green reward system plays a vital role in motivating people and helps in identifying their significant performance towards environmental management (Arulrajah et al., 2015). The objective of adopting rewards criteria is to achieve, maintain and motivate people for performing well and realizing the importance of environment protection. Green reward system means to align the system with green policies and practices used by the firm. It should be designed to produce green initiatives in the workplace, lifestyle and reducing carbon footprints (Cherian & Jacob, 2012). People should be rewarded with bounces for their interest in understanding and developing eco-friendly culture (Prasad, 2013).

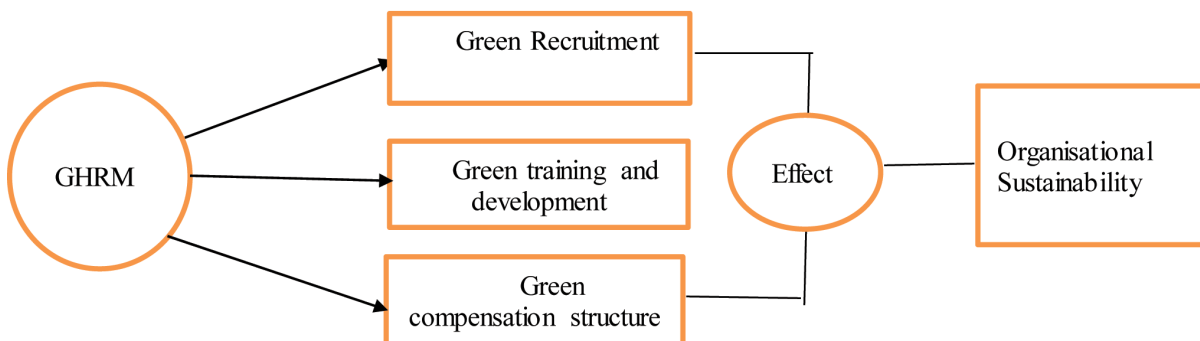
There are many types of reward practices that firms may use to green skills acquisition and green behaviour. Several studies concluded that firms can achieve positive environmental performance through providing different forms of rewards such as praise letter, promotion, career gains, bounces, cash, and gifts. (Prasad, 2013; Ahmed, 2015; Arulrajah et al., 2015; Renwick et al., 2013; Opatha & Arulrajah, 2015; Azeez & Genty, 2018). Therefore, monetary-based rewards for contributions in environment management can be allocated in the forms of salary increase, cash incentives and bonuses while non-monetary rewards may include sabbaticals, special leave and gifts to employees and their family members.

Green compensation or reward system in the context of Nigerian organisation lead to organisational sustainability because organisations are now eliciting eco-friendly behaviours among workforce. Activities such as putting off light after workday, meeting customers demand for green merchandises are being compensated. Rewards are based on the fact the workers are conserving organisational resource; therefore, it will minimize waste, pollution and such workforce green behaviours need to be appreciated.

The below graphical illustration explain the link between GHRM practices and organisational sustainability based on the earlier discussed three functions of HRM.

Figure 1. Model showing the Effect of GHRM on Organisational Sustainability.

Source: Author's compilation



GREEN HUMAN RESOURCE MANAGEMENT PRACTICES FOR SUSTAINABILITY

In order to achieve organisational sustainability, many initiatives have been developed by Nigeria organisations. Some were perceived being defensive and tactical in nature but focused on organisations products, facilities, employees and the greater community. Although, some of these initiatives appear impressive but represent largely incremental changes to the business. Therefore, the efforts need to be dealt with strategically by embracing the guiding principles of sustainability.

GHRM practices is one of the initiatives that have potential effect on organisation's operation in Nigeria because it deal with the emerging issues presented by sustainability especially in the area of managing human beings and reducing greenhouse emission gases simultaneously. Nigeria organisations have different approaches of dealing with sustainability as earlier mentioned ranging from economic, social to environmental but both human and ecological sustainability makes implicit reference to the economic sustainability of an organisation (Perrott, 2014). This is because human sustainability refers to practices, which contribute to the personal well-being and development of the workforce as well as its contribution to the well-being of the community and society as a whole by the organisation.

To deliver sustainable development, the following stakeholders have a crucial human capital building role to play: Students, Schools and universities, Employers, Government, Trade unions, Professional and regulatory bodies, as well as The United Nations (Fajana, 2019). With appropriate orientation and international best practices, all the stakeholders are advised to create the right personnel and organisational culture that would promote the adoption and institutionalisation of sustainable development through human capacity building; thus providing groundwork for greater overall development in the future.

Ecological sustainability in Nigeria on the other hand refers to the impact of the organisation's activities on the environment such as eliminating emissions and recycling water. Therefore, these two main paths of sustainability are interwove and inextricably intertwined in Nigeria that allows for green management of human resource activities to sustain organisation. This infers that a particular organisation may achieve different phase classifications and may progress at different rates along each path on its road to becoming effectively sustainable in both the human and environment dimensions (Perrott, 2014). Thus, climate change has been canvassed to occur by human activity. Therefore, without gainsaying, GHRM is necessary to ameliorate climate change and ozone layer depletion especially in the context of Nigeria organisations (Essien & Akpan, 2010).

Human resource strategies such as GHRM if they exist are focused mainly on creating and maintaining a compliant workforce. In ensuring a safe, healthy workplace and avoiding environmental abuses that could lead to litigation in Nigeria, there is need for integration between human resource and environmental functions to reduce costs and to increase efficiency. This is achievable through systematic investment in training and development to build a more skilled workforce as well as introduction of new technologies for improvements in product and service quality.

Perrott (2014) posited that sustainable organisations are resilient and create economic value, healthy ecosystems and strong communities because economic and social sustainability contribute to the green case. Explaining GHRM for organisational sustainability, emphasis therefore in Nigeria must be placed on the three sustainability cases namely economic, environmental and social as well as the relationship that exist among them. Hockerts (1999) illustrated the interconnectivity that exist between the three sustainability cases graphically and postulated that without economic sustainability, an organisation

may not have the means, resources and mind-set to devote to the remaining environmental and human dimensions of the sustainability equation.

Consequently, a new integrated sustainability model showing all the three sustainability dimensions of the economic, the human and the environment is proposed in the context of Nigeria. This will allow each sustainability path to reach one of the six sustainability phases namely rejection, non-responsiveness, compliance, efficiency, strategic proactivity, and the sustaining corporation at a point in time as campaigned by the United Nations in their Sustainable Development Goals (SDGs).

Measuring GHRM for Organisational Sustainability

Having agreed that GHRM are set of policies, practices, and systems that stimulate a green behaviour of a company's employees in order to create an environmentally sensitive, resource efficient and socially responsible workplace and overall organisation performance. The environmentally destructive nature of organisations activities and outcomes has contributed to the current environmental issues globally (Ahmad, 2015; Prasad, 2013; Mandip, 2012). According to Jabbour et al (2010), environmental issues are some of the most complex and significant managerial challenges of twenty-first century. It includes climate change, resources depletion and reduction of biodiversity and ecosystem integrity. Rapid destruction of natural resources is seen and heard courtesy of organisation activities. Organisations are responsible for the environmental degradation (Cherian & Jacob, 2012; Jabbour et al., 2010). Natural resources are being used by governments and organisations lavishly for production of various goods and services needed by people who want to enhance their standard of living.

It seems that some people in certain parts of the world are too greedy and never get saturated resulting in development which is concerned with meeting the unlimited, various needs of people at the expense of the ability of future generations to meet their own needs, at least their essential needs. It is generally observable that people get unhealthy (and even die) suddenly owing to inhalation of poisonous air and drinking contaminated water. Ecologists who study the pattern and balance of relationships among plants, animals, people, and their environment recommend a natural balance for survival of the planet. Fortunately some governments, some organisations and some individuals including environmentalists and nature lovers commenced increasingly to pay a serious attention to preserve (to protect), conserve (to save) the environment and to minimize environmental pollution.

GHRM functions can be adopted to motivate people responsible behaviour to become environmentally friendly (Cherian & Jacob, 2012). HR professionals are responsible to get the support of the employees to preserve the environment. Jabbour et al. (2010) mentioned the significance of human resource management under various stages of environmental management system. Ahmad (2015) concentrated on the role of HRM including people and performing such practices like conservation of energy, recycling and carpooling. Now a day's one can observe electronic filing, car-sharing, job-sharing, teleconferencing and virtual interviews, recycling, telecommuting, online training, energy-efficient and office spaces.

Sustainability and environmental affairs are becoming the most significant drive of HRM practices, but there is a limited resource in literature and academic work. Organisations may enjoy environmental sustainability and positive performance if human resource practices are linked to environmental and sustainability issues. Cherian and Jacob (2012) pointed out that firms, which pay attention to the greening of HR functions, may be more productive, thus generating positive performance.

Renwick et al. (2013) introduce a comprehensive compartmentalization of GHRM practices that can be clearly understood, starting at the point of an employee's entry and proceed until the point of

the employees exit. To be ecological, economical and practical at the same time is possible through by adopting Green practices. Green HR involves reducing carbon footprint via less printing of paper, Green Printing, Green Manufacturing and Disposal of Staff ID card, Job sharing (sharing a full-time job between two employees), Teleconferencing and virtual interviews, Recycling, Telecommuting, Online Training video conferencing and interviews.

GHRM that is concerned with transforming normal employees into green (i.e. environment-friendly employees) to achieve environmental goals of the organisation and finally to make a significant contribution to environmental sustainability. The green living movement encourages people to live in a more environmentally friendly way. This is because GHRM leads to reduction of pollution, reduction of waste and preservation of wide life among others, which in turn enhance organisational sustainability.

SOLUTIONS AND RECOMMENDATIONS

Explaining GHRM for organisational sustainability in Nigeria and elsewhere, emphasis must be placed on the three sustainability cases namely economic, environmental and social as well as the relationship that exist among them. Thus, climate change has been canvassed to occur by human activity. Without gainsaying, GHRM is necessary to ameliorate climate change and ozone layer depletion.

To deliver sustainable development, the following stakeholders have a crucial human capital building role to play: Students, Schools and Universities, Employers, Government, Trade unions, Professional and regulatory bodies, as well as the United Nations. Therefore, with appropriate orientation and international best practices, all stakeholders are advised to create the right personnel and organisational culture that would promote the adoption and institutionalisation of sustainable development through human capacity building; thus providing groundwork for greater overall development in the future.

HR strategies such as GHRM if they exist are focused mainly on creating and maintaining a compliant workforce. In ensuring a safe, healthy workplace and avoiding environmental abuses that could lead to litigation, there is need for integration between HR and environmental functions to reduce costs and to increase efficiency. This is achievable through systematic investment in training and development to build a more skilled workforce as well as introduction of new technologies for improvements in product and service quality.

Consequently, a new integrated sustainability model showing all the three sustainability dimensions of the economic, the human and the environment is proposed especially in the context of Nigeria. This will allow each sustainability path to reach one of the six sustainability phases namely rejection, non-responsiveness, compliance, efficiency, strategic proactivity, and the sustaining corporation at a point in time as campaigned by the United Nations.

FUTURE RESEARCH DIRECTIONS

In order to achieve organisational sustainability, many initiatives have been developed by organisations. Some were perceived being defensive and tactical in nature but focused on organisations products, facilities, employees and the greater community. Although, some of these initiatives appear impressive but represent largely incremental changes to the business. Therefore, the efforts need to be dealt with strategically by embracing the guiding principles of sustainability.

Several studies have been carried out on GHRM practices where many indicators have been used. In this chapter however, green recruitment practices, green training and development, and green compensation structure representing the components of GHRM are used to predict the outcome of the study towards achieving a great organisational sustainability. Thus, future research should be conducted to see how Green Performance Management, Green Human Resource Planning, Green Employees Participation and Engagement among others can be used to promote organisational sustainability in the context of Nigeria.

This becomes imperative because GHRM is the best model for solving environmental problems in the organisation and it act as an alignment to the overall organisational green management mission and objectives. In essence, GHRM can be understood as a manifesto, which helps in the creation and development of Green employees.

CONCLUSION

Businesses are finding it hard to align sustainability in their strategy as their approach is mostly driven by cost and output, which are economic in nature. Thus, organisations should integrate sustainability into their market orientation strategy in order to overcome economic sustainability challenges rather than focusing on social and environmental sustainability challenges alone. This is because social and ecological sustainability have been marginalized to reduce expenses and increase revenue. Sustainability has focused mainly on social issues and environmental issues with scanty writings about economic issues.

Although environmental issues particularly in the area of pollution and waste, greenhouse gases emissions among others appear as the main sustainability concern and are at the forefront. Sustainable development is a combination of human well-being and ecosystem well-being. The integration of aspect of economic viability, environmental orientation, and social orientation is necessary to achieve holistic sustainability in every endeavor of work-life. Therefore, working collaboratively on the dimensions of sustainability (economic, environmental, and social) in the short, medium and long term will assist in achieving a more sustainable organisations that will improve economic security, a reduction in pollution and emission related to climate change, and waste generation as well as providing jobs in the area of green revolution such as green employees.

Since organisations are an integral part of modern societies, therefore it becomes a subsystem of a larger environmental system because organisations provide jobs in the society. In this capacity represent a new social form and have rights and resources that are independent of its individual members. Organisations are seen as a system whereby some resources enter, some resource exit and some remain in the system. For instance, those resources that enter are the employees when they arrive to work, raw materials and energy, while the resources that exit the organisations are emissions and effluents, waste energy, products and by-products, employees when their work is finished. This implies that organisational sustainability is a dependent of HR, thus, changes must be balanced among the multiple stakeholders in the organisation.

Conclusively, GHRM using green initiatives such as green recruitment policies, green training and development criteria as well as green compensation system are for modification of workforce behaviours towards green practices. Green workplace behaviours will lead to organisational sustainability because it will established green organisational culture, green creativity as well as eco-friendly innovations in the workplace.

Green human resource management practices targets range from ending hunger and poverty, inequality within and between countries, protecting the ecosystem, promoting good governance and peaceful societies among others. GHRM practices is one of the initiatives that have potential effect on organisation's operation because it deal with the emerging issues presented by sustainability especially in the area of managing human beings and reducing greenhouse emission gases.

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KEY TERMS AND DEFINITIONS

Green Gas Emission: These are toxic gases been generated from nitrogenous substances that are harmful for human beings, animals and affect the earth globally.

Green Human Resource Management: These are policies and programmes designed by organisations to overcome the challenges of greenhouse emission through green revolution practices.

Human Resource Management Practices: It is the systematic process of managing human elements in the world of work, starting from the point of entry to the exit point in such organisation.

Nigeria: This is a country in Sub-Sahara Africa with the largest population among the black race in the world.

Organisational Sustainability: It is the ability of an organisation to maintain and be consistent in its mode of operandi, which in turn lead to increase in performance, profitability, enhance customer and workers satisfaction as well as competitiveness among its peers.

Sustainability: It is model developed by the United Nations to integrate the economic, the human and the environment towards creating an environmentally sensitive, resource efficient and socially responsible workplace and overall organisation.

Chapter 2

Green Human Resource Management: A Review and Future Directions

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ABSTRACT

This chapter explores the vital role of human resource departments in organisations and their contributions towards environmental sustainability in the nations of sub-Saharan Africa. It posits that the role of HR in recruitment, training and development, learning, rewards, employee relations, and appraisal of employee performance should be conducted with environmental sustainability in mind. It affirms that instilling a culture of environmental awareness into every activity of organisations has a great return on productivity, attracting the best talents, and minimizing the harm of environmental degradation. It contends that organisational policies and behaviour on environmental responsiveness should be of greatest priority to the 21st-century businesses in sub-Saharan Africa.

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INTRODUCTION

Over the past two decades, there has been increased media focus on climate change and environmental degradation largely because of the rapid pace of industrialisation across the globe. While the surge in industrial growth and globalisation has resulted in economic boom and job opportunities for nations, it has adversely led to environmental ruin, especially in sub-Saharan African nations. Some of the effect of industrialisation include the depletion of natural resources and environmental pollution. Several scholars have argued that to sustain an effective organisational green management system, it is vital to promote the use of Green Human Resource Management (GHRM) in every organisation (Jackson, Renwick, Jabbour, & Muller-Camen, 2011; Liebowitz, 2010). GHRM is the education of employees on the values and future economic benefits of environmental sustainability. GHRM involve the creation of environmental awareness among the workforce by organising seminars and workshops mainly to achieve green behaviour in their performance. GHRM refer to the promotion of sustainable practices and environmental awareness by employees in the performance of their functions in the organisation (Cherian, & Jacob, 2012; Greaves, Zibarras, & Stride, 2013). In essence, GHRM is the use of video conferencing for interviews and seminars, the use of iCloud to preserve employee and organisational data and using online training and performance appraisal of employees. All these efforts are conducted primarily to attain a balance between organisational growth and environmental sustainability.

The human resource department is largely responsible for forging the corporate mission statement based on the environmental awareness and sustainability. It creates a pattern of green behaviour among employees which is often carried out into private life (Arulrajah, Opatha, & Nawaratne, 2015; Chan, 2011; Sathyapriya, Kanimozhi, & Adhilakshmi, 2013). The quest to safeguard the environment from detrimental practices by nations in sub-Saharan Africa has resulted in several of these nations promulgating policies and laws to ensure environmental sustainability. Studies in the field of environmental sustainability have indicated the cardinal role of human activities in environmental destruction (Davis & Challenger, 2013; O'Skamp, 2000). As such, the application of environmental sustainability using workplace behaviours such as recycling of papers, bottles and cans as well as using energy efficient equipment.

While several scholars have underscored the importance of green training in enhancing environmental-friendly behaviour among employees, there is still lack of research in the areas of GHRM especially in sub-Saharan African region (Jabbour & Santos, 2008; Ones & Dilchert, 2012; Rimanoczy & Pearson, 2010). Significantly, much of the literature around GHRM is examined in the context of developed countries, particularly in Western Europe and North America (Unsworth, Dmitrieva, & Adriasola, 2013). Considering the rapid pace of environmental degradation in sub-Saharan African nations, it is particularly vital to explore green training and development in the context of sub-Saharan African nations. The purpose of this paper seeks to examine the relevance of GHRM in both the public and private organisations in sub-Sahara Africa. Studies on green employee training and development is significant because it offers broader understanding of an organisation's workforce behaviour on the environment.

BACKGROUND

There is a unanimous consensus on the detrimental impact of environmental degradation (Ahmad, 2015). Policy makers and scholars in the field of environment and economics studies have described the potential gloomy economic implications of not creating management programs to deal with the

ongoing crisis of environmental disasters (Ahmad, 2015; Guerci, Longoni, & Luzzini, 2016). There are ample evidence of natural disasters with significant cost, which are all attributable to climate change and environmental degradation (Labgat, 2016; Tang, Chen, Jiang, Paillé, & Jia, 2018). Thus, the past two decades has witnessed several nations in sub-Saharan Africa enacting laws and policies with the goal of forestalling the wanton destruction of the environment (Greaves, Zibarras, & Stride, 2013). Most of these national policies and laws are geared at changing the environmental culture of public and private organisations to reducing the effect of their operations on the environment. Considering this, several of these organisations have resorted to using GHRM, primarily to instil the culture of green behaviour and operations in all their activities. Haden, Oyler and Humphrey (2009) states that the integration of environmental strategies to enhance sustainability coupled with strategic development objectives of an organisation often provides meaningful results in a well-integrated environmental management system.

In GHRM, various human resource practices, such as recruitment and selection, performance appraisal, compensation, benefits and training, are designed in a manner to create a workforce that understands and promotes green behaviour in the organisation (Mathapati, 2013). Particularly, the effectiveness of any organisational approach to environmental sustainability is significantly dependent on the recruitment, training and development of its employees (Boselie et al., 2001; Jiang et al., 2012 Paauwe & Boselie, 2003). Thus, an organisation's workforce who are environmentally conscious and efficiently trained on green behaviour in their routine activities often tend to promote a culture of environmental sustainability (Renwick et al, 2013).

Research on green training and development advocate the building of employee capability and initiating a supportive culture that promotes the adaptation of green behaviour in all their operations (Paillé, & Mejía-Morelos, 2014). Specifically, green training and development are vital human resource management processes crucial to stemming the tide of environmental destruction in our 21st century workplace. The existing literature in the field of human resource management and environmental sustainability states that human resources executives are leaning towards environmental consciousness in their activities and seeking to make their organisations environmental champions (Ruepert, Keizer, Steg, Maricchiolo, Carrus, Dumitru, García, Mira, Stancu, & Moza, 2016; Saeed, Afsar, Hafeez, Khan, Tahir, & Afridi, 2019).

This chapter sheds light on the important role of organisations in creating a sustainable development pattern for present and future generations (Jackson & Seo, 2010; Uzzel & Moser, 2009). The objective of this chapter is to identify some of the gaps in the literature on GHRM and contribute to it within the context of sub-Saharan African nations. In so doing, it will identify some of the organisational activities accelerating environmental degradation in sub-Saharan African region. It also seeks to offer a comprehensive insight on GHRM processes and reflects on some green initiatives in HR.

Ultimately, this chapter examines employee and organisational behaviours that influence environmental sustainability in sub-Saharan African countries; (i) the role of green employee training and development in organisations; (ii) the role of green recruitment and its impact on the on environmental sustainability (iii) the impact of technological advancement in organisations and ultimately on environmental sustainability in our 21st century world. This chapter provides recommendations on reducing the cause of environmental degradation and enhancing environmental awareness in organisations. It concludes with an overview of key policies necessary to encourage the sustenance of environmentally sustainable economies in sub-Saharan countries.

GREEN HUMAN RESOURCE MANAGEMENT IN SUB-SAHARAN AFRICA

This literature review uses the online database search at Pentecost University Library. EBSCO database was utilized to look for textbooks, e-books, and academic journal articles that examined GHRM in sub-Saharan Africa. The search explored articles published from 2005 to 2015 and key focus was given to articles published in the last decade. Journals reviewed included Human Resource Management Review, World Review of Science, Technology and Sustainable Development, Journal of Human Resource Management, Zenith International Journal of Multidisciplinary Research, Environmental Quality Management, The International Journal of Human Resource Management and Journal of Recent Sciences. Keywords utilized in this research included green training, green employee development, green recruitment, green employee relations, environmental sustainability, industrialisation, and environmental degradation in sub-Saharan Africa. Overall, 70 journals articles and 25 books were used.

GREEN HUMAN RESOURCE MANAGEMENT PRACTICES

Human Resource Management (HRM) is a vital function of management that deals with the most important assets of an organisation, which is usually the human capital and ability to carry out the operations of the organisation. The entire context of HRM is being considered in the light of sustainability over the past two decades (Temminck, Mearns, & Fruhen, 2015). GHRM is steadily gaining prominence in sub-Saharan Africa because of the urgent need to tackle the spate of climate change and its negative effect on the economies of these nations. GHRM has grown from ecological affairs and now spans across areas like the economic wellbeing of employees and how their reaction affects the organisation and broadly the environment (Ahmad, 2015).

Scholars in environmental management and sustainability over the past three decades have contributed immensely to our understanding of GHRM and the importance of it in every organisation (Lindström, & Vanhala, 2011; Rawashdeh, & Al-Adwan, 2012). Much of the literature on GHRM explains the positive effect of environmental management practices on organisational performance (Wong, Tan, Ng, & Fong, 2013; Wehrmeyer, 2017).

A great deal of the discussion on GHRM describes the values of green ideals in recruitment, training, personnel development, employee relations, reward systems, performance and appraisal management as essential mechanisms for aligning employees with an organisational environmental awareness strategies (Mishra, Sarkar, & Kiranmai, 2014; Sarkis, Gonzalez-Torre, & Adenso-Diaz, 2010). Similarly, the literature on human resource management also highlight the importance of environmental practices as a major goal of organisational functioning, thus identifying it with the efficient way to do human resource management in organisations.

Various researchers in human resource management and environmental studies have over time defined GHRM in different ways. Marhatta and Adhikari (2013) defined GHRM as the use of HRM policies to promote the sustainable use of resources within organisations and environmental sustainability. Mampra (2014) describes Green HRM as the use of HRM policies to promote the sustainable use of resources within organisations and foster the cause of environmentalism among employees. Other scholars describe Green HRM as the practice of HRM policies and philosophies, primarily to enhance sustainable use of business resources and prevent the wanton use of resources likely to cause environmental concerns in organisations (Mandip, 2012; Opatha, & Arulrajah, 2014; Zoogah, 2011).

Green initiatives within HRM evolved as part of a broader programs of corporate social responsibility. The success of GHRM is contingent on the policies and behaviours of human resource managers (Jabbour, 2011; Masri, & Jaaron, 2017; Opatha, & Arulrajah, 2014). GHRM is a vital component of environmental sustainability which seeks to manage the human resources in an organisation focusing on green ideals. Green HR is made up of two key elements namely environment-friendly HR practices and the conservation of knowledge capital (Mandip, 2012). In every organisation, human resource and their systems are the basis of its business, thus they are tasked with the goals of planning and executing the eco-friendly policies to generate a green business environment. Jackson and Seo, (2010) declared that organisations tend to benefit significantly by evaluating their organisational growth to environmental sustainability solely because there is a positive outcome by way of increased profit achieved by proposing green practices. The implementation of green processes in the activities of human resource departments will facilitate the transformation of new set of skills and expertise among employees in organisations (Mishra, 2017; Greaves, Zibarras, Stride, 2013).

The primary goal of green HRM is to create a sense of awareness among employees on the advantages associated with the effective management of the environment, which ultimately reduces the cost of organisational operations because of the use of energy efficient equipment and conservation of energy (Paillé, Chen, Boiral, & Jin, 2014; Robertson, & Barling, 2013).

Green Recruitment

Green recruitment is the selection of individuals who are qualified by way of education and experience to fit the criteria of the job assignment. Recruitment focuses on attracting of prospective candidates or individuals with the right attributes fitting into the green culture of the organisation. It also examines the relationship between employees and management and the various means to enhance the productivity of the individual. Green recruitment involves the use of technological processes such as video conferencing and using emails in the recruitment process. Green recruitment also refers to the procedure of hiring people with the knowledge and awareness of environmental management into the organisation (Bissing-Olson, Iyer, Fielding, & Zacher, 2013). Green recruitment can be defined as the process of hiring individuals with knowledge, skills and behaviours that identify with environmental management systems within an organisation. Green recruiting is a process where the emphasis is reflected on the value of the environment and making it a major component within the organisation.

The ability to judge fairness, professionalism and ethical behaviour which are essential in any recruitment process is assessed using the responses of video conference interviews and emails applications of employment forms and other recruitment processes. Importantly, the attributes of applicants are reviewed using the computer software to select applicants who match the qualities required for that particular job (Holtom et al, 2008).

Changes in global business perception on the importance of environmental sustainability are making employers recognise that following green practices is an effective tactic for attracting new talents (Phillips, 2007; Stringer, 2009). For instance, Rover Group carmaker in Britain, the Rover Group carmaker, made environment associated responsibilities as part of routine job and involved that in its job description (Wehrmeyer, 1996). Wehrmeyer (1996) emphasised that the process of green recruitment can offer immense help to organisations in producing effective performance including performance related to its profitability and attracting high talented employees. Attracting high-quality employee is a major HR task in the “war for talent” (Renwick et al., 2013). Increasingly, firms are starting to understand

that gaining reputation as a green employer is an effective way to attract new talent (Phillips, 2007; Stringer, 2009). For instance, German firms such as Siemens, BASF, Bayer and Mannesmann employ environmental activities and a green image to attract high-quality staff. In the USA, technology companies such Google, Alphabet, Facebook, and Amazon offices are built with LEED building materials to minimize the consumption of energy and there is high awareness of environmental sustainability in their recruitment efforts. Other multinational companies such as Walmart in USA makes environmental responsibilities and qualifications a key aspect of every job profile (Wehrmeyer, 1996). Holtom, Mitchell, Lee, and Eberly (2012) in their work on turnover and retention of employees assert that the most essential benefit to the dimensions of HR and sustainability are retention and satisfaction to employees. Increasingly, green job descriptions with environmental aspects are now being included for employees in many recruitment programs.

Employees who are conscious about the importance of environmental sustainability are often enthusiastic, and to some extent passionate about working for an environment friendly “green” company (Zhou, & Zhang, 2018). According to Wehrmeyer (1996), recruitment practices can boost effective environmental management by making certain that new employees are conversant with an organisation’s environmental culture and can maintain its environmental values. Recruiting candidates with green sensitivity makes it easier to incorporate these professionals with sustainable ideals such as like recycling, conservation, and creating a greener logical world. Grolleau et al. (2012) in their study on the effect of environmental standards of a company on recruitment of an employee found that a company’s devotion to environmental issues contribute positively to the profile of the company. In their primary survey, they found that millennials were more enthused and motivated with the environmental strategy of a company and are more willing to work in such a company. A review of this study reveals that green recruitment offers the employer an upper hand in recruiting highly qualified millennials who perceive environmental sustainability as major way to preserve our environment for future generation. Millennials also consider environmental sustainability as a great health issue because of health implications with pollution in the environment. Likewise, millennials also identify environmentally friendly policies in companies as a win-win situation in terms of greater profits in the long term for organisations. This literature review assert that green recruitment adds more financial benefits to the organisation and enhances its image of the business world. This study also asserts that organisations such as General Motors, General Electric, Telsa motors, and several multinational companies have changed their operation approach by investing heavily in green efficient products and are gradually changing the way the world conducts business. The cause to ensure more environmentally friendly policies has been recognised by many organisations as the most productive way to conduct business in the 21st century.

GREEN TRAINING AND DEVELOPMENT

Green training and development refer to the use of technology and related tools to improve the skills of employees. It also involves the creation of awareness among employees of the benefits associated with green concepts and ideas in the organisation’s business activities. Development of attitudes, behaviours, knowledge, and skills in the employees that curtails the corrosion of environment related attitudes and knowledge comes under the umbrella of green training and development (Zoogah, 2011). Many organisations and educational institutions have resorted to online training, online seminars, and workshops.

Annual recertification of health care workers in the western world have often utilized intranet as the major means of training.

Climate change in Sub-Saharan Africa is one of the visible aspects of the natural environment. Sub-Saharan Africa depends immensely on its natural resources, thus the destruction caused by human activities for financial gains tends to create more harm than good for future generation.

The human resource department of any organisation has a greater role to play in establishing the workplace sustainability culture (Jabbour, 2013; Roy, & Khastagir, 2016). It is emphasized that greater focus on green policies by human resources departments has a direct influence on the extent to which environmental awareness play in an organisation's management systems (Jabbour, Santos, & Nagano, 2010).

According to Ones and Dilchert (2012), degradation of the environment is often caused by corporate greed to make more profit at the expense of the population living in that habitat. The authors mentioned that much of these irresponsible behaviours can be curtailed by training workers using green practices, thus making the ecosystem safe and environmentally friendly (Cherian & Jacob, 2012). Green practices should be championed by HR department to support employees and keep the environment safe. A study by Cherian and Jacob (2014) also highlight that organisations that were not undertaking green activities in their routine operations would always lack the kind of higher productivity required to ensure higher profits. Contrary, organisations that utilized effective green training practices by emphasising on technology tend to be extra productive and attained high profits.

Green training and development have attracted much research work in the past decade largely because of the efficiency and the flexibility related its outcome (Liebowitz, 2010). Green T & D are considered as key HR tools within the GHRM practice essential to help achieve the success of green management in organisations (Jabbour, 2011). It aims to familiarise employees' attention and knowledge towards environmental issues, generate positive attitude, takes a hand-on approach on greening initiatives and fosters competencies to reduce waste and saving energy (Zoogah, 2011). Sarkis et al. (2010) posited that training and development initiatives by the HR enables a culture of supporting and encouraging an environmentally friendly culture with the workplace. In their quantitative study on green training, Saturnino Neto et al. (2014) asserted that in order to minimise the severe impact of climate change on our community, environmental training is very crucial for the systematic development of low carbon products. Perron et al. (2006) revealed that it is important for organisations to customized green employee training and assess the training program with regular evaluation of its effectiveness. Renwick et al. (2013) proposed certain HR practices such as training on recycling, energy efficiency and safety, green analysis of workplace, waste management, and job rotation for potential green managers within the organisation. To the authors, training programs should be planned based on training needs specifically to achieve the best environmental benefits from it (Cherian & Jacob, 2012). Prasad (2013) highlights the need for business organisations to come up with green training and development practices through the adaptation of processes and practices that are environmentally friendly. Training is considered as the preparation of multi-talented employees that is concerned with the development of knowledge and skills required for innovation (Liebowitz, 2010).

Performance of the organisation is also associated with the training and development of employees because training incorporates knowledge and skills in the employees needed to achieve organisational goals and objectives. The employees must be equipped with the necessary skills to perform effectively in the organisation. The capability to acquire new knowledge can be produced among employees through training that can be used for innovation and enhanced performance and competitiveness of the

Green Human Resource Management

organisation. Exploratory learning is largely associated with organisations conducting training. The skill development and the exploratory learning are the potential means of encouraging innovations in the organisation (Zakaria, 2012).

Green T & D educate employees about the value of environmental management, train them in working methods that conserve energy, reduce waste, diffuse environmental awareness within the organisation, and provide opportunity to engage employees in environmental problem-solving (Zoogah, 2011). Green T & D activities make employees aware of different aspects and value of environmental management. It helps them to embrace different methods of conservation including waste management within an organisation. Further, it sharpens the skill of an employee to deal with different environmental issues. Ramus (2002) in a survey of managers on best management practices concluded that environmental training and education, along with establishing a favourable environmental culture for the employees made them feel that they were a major part of the environmental outcomes. The authors posited that this type of training were the most important HRM processes that facilitated the achievement of environmental goals. Liebowitz's (2010) study on the role of HR in achieving a sustainability culture, suggested that the HR Department can offer leadership development workshops to help managers develop their "front wheel" soft, people skills, or behavioural competencies, in teamwork, diversity, managing change, and collaboration. In sum, authors of this chapter envisage that the need of the hour is: organisations should train their employees on best business practices enthused with green initiatives. Besides, sustainable training and education employees should also be adept to educate the customers regarding the advantages of becoming more earth-friendly and buying green products.

GREEN LEARNING

Green learning is the orientation and instilling into employees the values of green behaviour and culture at the workplace. It normally begins from the first day at work and through all the training and development programs that are undertaken in the organisation. Several scholars (Singh, Chen, Del Giudice, & El-Kassar, 2019; Wehrmeyer & Vickerstaff, 2017; Jabbour, 2013) have called for more research enquiry into the barriers and possible obstacles that hinder effective environmental training. In response to these calls, a study of Wehrmeyer and Vickerstaff (1996) found issues relating to insufficient need analysis, poor training provided for the job, poor trainee readiness, lack of perceived or actual commitment in leaders, top management and employees and other related problems as critical reasons for the implementation of environmental training initiatives. Other related training readiness studies have shown that the exposure to learning opportunities is more effective among highly motivated employees who are psychologically or mentally ready to learn (Atiku, 2020; Fields & Atiku, 2017; Goldstein & Ford, 2001). Hence, the initiative of environmental training efficacy can be improved if the assessment of environmental learning readiness is considered. There is also the need for scholars to focus much attention on exploring the individual readiness for environmental learning and find ways of enhancing learning readiness of employees.

GREEN COMPENSATION

Employee performance is most often appreciated through HRM's provision of compensation and reward packages. HR practices are the most powerful method of linking an individual's interest to the achievement of organisational goals. There is also the assertion that incentives and rewards can influence employees to put up great effort at work and motivate them to exert maximum energy to achieve organisational goals. From the GHRM context, rewards schemes and compensations are presumed to be effective tools for getting employees and organisations to support environmental activities. In accordance to a strategic approach for reward and management, modern organisations are developing reward systems to encourage eco-friendly initiatives embarked upon by their employees. This statement is supported by a survey conducted in the UK by CIPD/KPMG that estimated that 8% of UK firms were rewarding green behaviours with various types of awards and/or financial incentives (Phillips, 2007), and these practices can be effective in motivating employees to generate eco-initiatives (Ramus, 2002). Similarly, findings from a study by Forman and Jorgensen's (2001) revealed that employee participation and commitment to environmental management programs increased when they were offered compensation to take up duties in relation to environmental responsibility. Berrone and Gomez-Mejia's (2009) study also revealed the efficacy of green rewards and compensation by using a sample of 469 US firms operating in high-polluting industries. They found that the firms having eco-friendly performance paid their CEOs more than non-eco-friendly firms and concluded that long-term company results in accordance to pay were associated with greater pollution prevention success. A taxonomical review of extant literature reveals that executives are highly motivated when compensated to work and achieve short-term results (Benz & Frey, 2007; Denis, Hanouna, & Sarin, 2006).

Although compensation and rewards enhance green initiatives within organisations, it can never be completely free from some malpractices. The development of initiatives that are monetary in nature becomes a challenge due to the struggle in correctly and honestly evaluating environmental behaviours and performance (Fernández, Junquera, & Ordiz, 2003). Hence, this chapter agree with Gupta (2008) that organisations need to design energy-efficient products and processes, and devise incentives to accelerate their acceptance. It is suggested that if green rewards and compensation system are aligned to the process of HRM, a green culture in organisations can be encouraged. Employees green behaviour can be promoted when managers incorporate elements of green management within their compensation and reward programs. Further, managers and employees can have a mutual decision and develop green ideas pertaining to their individual jobs for each year. The attainment of these organisational goals, therefore, becomes the basis for receiving rewards and other incentives. Compensation programs can be modified to provide bonuses to employees after an appraisal ratings process concerning green behaviour and green technical competencies.

Liebowitz (2010) also added that rewards should be provided based on the merit on employees' outstanding work on special green projects. According to Pillai and Sivathanu (2014), workplace and lifestyle benefits such as the offset of carbon credits, the provision of free bicycles and many others should be included in the green reward systems primarily to motivate people to participate toward the achievement of the green agenda while continuing to recognize their contributions. There is the need for more studies to focus on effective approaches towards the design and proper implementation of green compensation practices that nurture the achievement of corporate environmental goals.

GREEN REWARD SYSTEMS

Green reward system is the appreciation of contributions made by an employee or a group of employees towards the efforts of green initiatives in the organisation. The benefits of rewarding green initiatives in the organisations have encouraged research interest of most scholars to contribute to the reward system literature. According to Renwick et al. (2013) there is the need to recognize and reward people who are devoted to green environmental practises, and managers who motivate their subordinates to perform eco-initiatives. Several studies have proven that positive environmental performance can be achieved by firms who continuously provide different forms of rewards such as praise letter, promotion, career gains, bounces, cash, gifts, and many others to their employees (Atiku, 2019; Prasad, 2013; Ahmed, 2015; Arulrajah et al., 2015; Renwick et al., 2013; Opatha & Arulrajah, 2014).

ORGANISATIONAL PERFORMANCE

According to Ghosh and Mulherjee (2006) the assessment of employees' behaviour in business organisations in terms of their accuracy and effectiveness is largely the product of all activities performed by the organisation. The management of organisations can help produce the required positivity needed by the business organisation to perform at the highest level possible. Business organisation are realizing the need to adopt an environmentally friendly measures that can help reduce the bad impacts of business activities on the ecosystem (Atiku & Fields, 2019; Wong et al., 2013). Organisational performance can further be referred as the means of adopting practical ways to positively affect the ecological system. Thus, business organisations are seeking to develop good practical activities that will be beneficial to the environment and safeguard it. (Jackson & Seo 2010). Literature on management shows that several studies have been undertaken and the results indicate that different GHRM practices affect organisational and environmental performance differently (Bombiak, & Marciniuk-Kluska, 2018; Paillé, Mejía & Morelos, 2014). To create opportunities and give the business organisation an edge in the market, GHRM practices like green recruitment, green training, and green rewards can be used as a means to enhance organisational performance. (Ahmad,2015; Masri & Jaroon; Renwick et al., 2013).

GREEN EMPLOYEE RELATIONS

The establishment of a friendly environment for the smooth running of the employer and their employee relationship to thrive can be described as employee relations. The amicable relationship helps bridge the gap between the employer and employees whiles developing the confidence and motivational level towards higher productivity. There is a direct correlation between employee's relationship and performance. It reduces conflict at the work environment and makes conflict resolution at ease. The organisation remains competitive among its peers when there is a high employee relation, which is one of the intangible assets. Employee involvement in managing green initiatives make the organisation stand strong in green management, which also meet employees' aims, strength, goals, morale and ideas with green management. Empowering employees in environmental management has been reported as advancing environmentally friendly systems to an efficient resource deployment (Florida & Davison, 2001); minimize waste (May & Flannery, 1995); and bringing pollution in the workplace at low rate.

In particular, suggestions that are geared towards environmental friendliness must be allowed from all employees giving little or no attention to their title, name or position. This will inspire their interest in ecological problems and make fantastic use of their skills. Organisations HR must encourage management to create more some participative work concerning the manner at which employees contribute to environmentally related issues. The implementation of such an approach to employee relation will be most laudable primarily because they reflect the culture and image of the organisation to the outside world (Dumont, Shen, & Deng, 2017). The diversity of employees' skills should also be tapped to broaden the ideas and minds that can help foster environmentally friendly behaviour at the workplace (Collier & Esteban, 2007). As past of organisation's social responsibility in their community, it should embark on semi-annual green workshop for major stakeholders in the community. When organisations make outreach into the community of their location and engage members to appreciate the value of green initiatives in their everyday lifestyle, there would be massive transformation of the community approach to green initiatives. For instance, several communities would adopt green values of education individuals against the littering of plastic trash and enforcing an environment clean from filth and pollution. In Ghana, the non-governmental organisation, World Vision International in Sub-Saharan African advocated the planting of trees and helping communities recover from pollution arising from mining and desertification (Daily, Bishop & Steiner, 2007). This chapter suggest that other multinational organisations operating in Africa can develop a strong corporate social responsibility practices by collaborating with their communities of operations on green initiatives. Similarly, in Ghana, Friends of the Earth, a non-governmental organisation is engaged in building a society which is environmentally friendly. Likewise, Unilever company has made sustainability an essential part of its corporate identify (Casler, Gundlach, Persons, & Zivnuska, 2010). The company's "sustainable living plan" sets targets for sourcing, supply chain and production on everything from energy and water use to treatment of suppliers and communities where they operate.

ENVIRONMENTAL SUSTAINABILTY AND 21ST CENTURY ECONOMIES

Environmental concerns around the world, be it political, public, or business, irrespective of its field have been more pronounced and generated renewed interest in the past two decades. The interest by organisations and nations around the world focus on environmental concerns is due to the rise from specific treaties to battle climate change (Fields & Atiku, 2017). For example, several treaties have been enacted by United Nations Agency on Environment since 1997, and they include Koyoto Treaty in 1997, Bali 2007, and Copenhagen 2009 (Victor, 2001). As a result of harmful effects from and Non-Governmental Organisations have tried to slow down the degradation of natural resources and its harmful consequences on mankind through the promotion of standard regulations and policies (Christmann & Taylor, 2002; Shrivastava & Berger, 2010). Considering the past decade, organisations have also tried to come up with methods and strategies to help reduce the activities that lead to the destruction of our natural resources, besides dealing with economic issues. In order for success to be achieved within the cooperate environment, as well as the facilitation of growth in profit making by shareholders, the key players (organisations) have to turned their attention to the social, environmental, economic and financial factors in the economy (Daily, Bishop & Steiner, 2007; Govindarajulu & Daily, 2004).

In particular, strong leadership, as well as a concrete process is required for the successful planning and implementation of these sustainable corporate strategies within an organisation (Glavas, Senge & Cooperider, 2010). Leaders in the corporate environment now place much more priority on sustainability

Green Human Resource Management

issues more than ever, because the awareness of integrating “green” into the business strategy is providing favorable results for businesses (Wirtenberg, Harmon, Russell & Fairfield, 2007). Individual Units of an organisation, such as the Marketing, IT, Finance and especially the Human Resource Management must lead the environmental awareness agenda in order to achieve much broader corporate goals. Since the culture of any organisation is first introduced to new employees by the human resource management unit, their active participation would yield massive results in green awareness in the workplace. It is unarguable that, since the corporate world plays a vital role in environmental hazards, it cannot be left out in the discussions about environmental issues, and consequently conforms to be an important part of the solutions towards environmental hazards. There are clear indications that, a significant part of the workforce in the business environment are passionate about their environment, as employees of several multinational corporations are more dedicated and well pleased with organisations that tend to show more concern about their environment awareness culture.

Over the past two decades, there has been a worldview regarding the view importance of managing our environment in a friendly way (Gonzalez-Benito & Gonzalez-Benito, 2006). Several research work on green concept in the field of management has been conducted and they include the following; Green Marketing (Peattie, 1992), Green Accounting (Bebbington, 2001; Owen, 1992), Green Retailing (Keek-hung, Cheng, & Tang, 2010), and Green Management in general (McDonagh & Prothero, 1997), have all contributed to the field of management. Besides, the vigorous contribution of the corporate world in the backing of the environmental management strategy (Boiral, 2002; Gonzalez-Benito & Gonzalez-Benito, 2006), have paved the way for the dominance of the green management point of view.

CHALLENGES TO ENVIRONMENTAL SUSTAINABILITY

Challenges to environmental sustainability includes the economic activities of man and organisation with the cardinal goal of making more profit and productivity. Mezher, (2011) acknowledged that the principal challenge of the global economic order is a major struggle between the balancing of economic growth and development with sustainable development. The last two decade has been particularly troubled with the protection of the environment and yet utilizing the natural resources for economic growth. However, the rapid pace of environmental destruction with its resulting consequences in climate change appeals for the preservation of resources of the ecological system for the generations yet to come.

RECOMMENDATIONS

The first two decades of the 21st century has seen a fundamental change in the approach to environmental management. The increased focus on environmental sustainability is largely resulting from the heightened pace of environmental degradation and climate change. The consequences of climate change have led to the destruction of coastal boundaries of island nations (Teixeira, Jabbour, de Sousa & Jabbour, 2012). Further, the rise in sea levels has continuously created tropical storms bringing in its path the devastation of cities and towns in coastal nations (Shah, 2019). Furthermore, the weather pattern has change dramatically, resulting in a longer period of dry season and shorter raining season in tropical African. These changes in the weather pattern has contributed immensely to famine and the destruction of livestock in the Sahelian region of Sub-Saharan Africa (Razab, Udin, & Osman, 2015).

Table 1. Components of Human Resources Management and Key Authors in the literature.

Component of HRM	Key Authors	
Green Recruitment	Phillip, 2007; Stringer, 2009	Employers recognise that following green practices is an effective tactic for attracting new talents.
	Wehrmeyer 1996	Process of green recruitment can offer immense help to organisations in producing effective performance including performance related to its profitability and attracting high talented employees.
	Renwick et al., 2013	Attracting high-quality employee is a major HR task in the “war for talent”.
	Phillips, 2007; Stringer, 2009	Firms are starting to understand that gaining reputation as a green employer is an effective way to attract new talent.
Green Training & Development	Jabbour, 2013; Roy, & Khastagir, 2016	Human resource department of any organisation has a greater role to play in establishing the workplace sustainability awareness culture
	Jabbour, Santos, & Nagano, 2010	Greater focus on green policies by HR departments has a direct influence on the extent to which environmental awareness play in an organisation’s management systems.
Green Reward & Compensation	Liebowitz (2010)	Rewards should be provided based on the merit on employees’ outstanding work on special green projects
	Renwick et al. (2013)	There is the need to recognize and reward people who are devoted to green environmental practices, and managers who motivate their subordinates to perform eco-initiatives.

Source: Authors compilation

Better planning and use of technology will augur well for human resource management in incorporating green ideals in HRM approach to recruitment, employee training and development as well as rewards and compensation. For instance, the use of emails to send information, iCloud to save data and improved telecommunication to interview new recruits via video conferencing will go a long way to forestall the waste of resources often used in the workplace. Importantly, training and development of employees by video conferencing in a form of a seminar and workshops can be done effectively without the need for employees to travel for these programs. In essence, technology has reduced the impact of man’s activities on the environment and should be given more focus in HRM in organisations (Rehman, & Shrivastava, 2011)

Besides the implementation of green orientation, training and development of employees, there should also be the introduction of curricula on environmental sustainability in our educational system, from primary up to the tertiary level. Education on the proper use of environmental-friendly programs will enhance the way the society deals with their natural resources. There should also be green seminars and workshops organised semi-annually to coach and mentor the youth and employees to fully understand the importance of environmental stewardship and sustainability. An environmental approach by industries will get employees and other individuals a broader perspective to appreciate the impact of climate change and how environmental sustainability is important for the future generation in sub-Saharan Africa.

FUTURE AREAS OF RESEARCH

The numerous factors precipitating the increasing rate of environmental degradation and how GHRM can create innovative ways to enhance environmental sustainability through recruitment, training, employee development, reward and employee relations needs to be tested with a qualitative study, using simple descriptive case study. The use of descriptive case study will provide comprehensive understanding of the impact of GHRM in organisations and the benefits of environmental sustainability for future generations. Further, this study can be used to compare some of the policies and laws enacted by some sub-Saharan African nations. Future research can also conduct an empirical study to examine the positive impact of environmental policies introduced in some nations in sub-Sahara Africa purposely to understand the trend of environmental sustainability and the impact on these nations.

CONCLUSION

This chapter concludes that utilizing technological innovations in the implementations of GHRM will benefit economies of sub-Saharan African nations. Many multinational organisations have adopted technological approach in their recruitment, training, and development of employees and this is evidence in the progress towards environmental sustainability (Hosain, & Rahman, 2016). The impact of environmental sustainability on economies in sub-Saharan Africa region depends on the way HR department implements green programs in its activities. Specifically, all types of organisations should take advantage of the values of environmental sustainability and introduce green programs in its people management. In so doing, more environmental awareness would be fostered among all employees and citizens.

The increasing pace of population growth and the impact to meet their needs often results in the exploitation of the environment. However, organisations can set the pace by managing the environment in a sustainable way using green programs in its application of HR policies. Significantly, the use of technological tools in an organisation's routine activities will help in creating sustainable economies which will go a long way to reduce the severe impact of climate change which is currently hampering the economic growth of many sub-Saharan African nations.

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KEY TERMS AND DEFINITIONS

Environmental Degradation: It is the destruction of the environment through the misuse of natural resources such as water, air, soil, and the wanton destruction of ecosystem, their habitat as well as the extinction of wildlife.

Environmental Sustainability: The responsible relations with the environment purposely to prevent degradation of natural resources and offering future generation quality environment.

GHRM: It is about the contributions of human resource management practices and policies relating to the greater corporate environmental plan.


Green Management: Is an initiative targeted at consistently advancing the cause of environmental management, such as the management of personnel accountable for environmental activities and conservation of biodiversity.

Industrialisation: Is the process of transforming an economy from an agrarian to one based on manufacturing goods.

Chapter 3

Understanding Green Human Resources in Healthcare

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ABSTRACT

Human resource management plays an integral role in developing capital for the triple bottom line. In the Fourth Industrial Revolution, human resources now shift their focus to advancing communication and connectivity versus focusing purely on technological advances. As the Fourth Industrial Revolution continues, communicating the effectiveness of human resource management and human capital development should be considered as an essential area of interest. As healthcare practitioners continue to provide treatment and care for those in need, human resource managers need to learn green practices to create a more sustainable environment that contributes socially and economically while adhering to the demands of the international stakeholders. As healthcare continues to be either one of the most significant expenditures or needs for numerous countries, consideration in this field provides potential holistic benefits for stakeholders.

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INTRODUCTION

The Fourth Industrial Revolution (4IR) features the disruption of the current industrial environment due to the emergence of current and developing technologies. The disruption caused during this revolutionary period redefines work in a dynamic and sophisticated manner. Focus on interconnectivity, unpredictability, and rapid evolution of work processes and practices are inherent traits of the Fourth Revolution requiring numerous industries to recognize change agents and make rapid adjustments. Some of the benefits noted include operational efficiency, innovation, and effective deployment of assets and capital (Park, 2016). These changes not only provide value-added benefits to organizational development, but employees also benefitted from the change as well.

Organizations must contend with technological advances and competing for environmental, social, and financial demands. Known as the triple bottom line, these demands create a framework over the years to become a model for an organization's mission and vision statement. No longer defined by monetary gain, businesses now focus on sustainable solutions that provide direct and indirect benefits to the organizational culture, and the global economy (Fields & Atiku, 2017).

Human resource management plays an integral role in developing social and intellectual capital for the triple bottom line. In the 4IR, human resources now shift their focus to advancing communication and connectivity versus focusing purely on technological advances (Schwab, 2016). Technology continues to remain relevant in the development of human capital (Atiku, 2018; 2020). However, recognizing ways to become more responsive in the global environment while maintaining a strong corporate social responsibility footprint are some of the key elements found within the 4IR.

Green Human Resource Management

Green human resource management (GHRM) is an approach quickly which is gaining recognition as a critical element of the 4IR. GHRM focuses on the performance of human resource functions within organizations from a sustainability perspective. The sustainable use of company resources supports ecology as well as the development of ecological sensitivity in workers (Atiku, 2019; Bombiak, 2019). GHRM generates value for company stakeholders via efficiencies in the social and environmental aspects of human resource processes (Bombiak, 2019). The application of processes in these areas provides additional value to the organizational culture and its global footprint in the environment.

The adoption and implementation of green practices, such as training, recruitment, and training and development, are useful if the staff is hired or trained in competencies related to the principles of GHRM. Those responsible for human capital management considers several functions that are incorporated in the GHRM methodology: job design and analysis, employee selection, developing working discipline, performance evaluation, employee relations, and working conditions (Bombiak, 2019; Fields & Atiku, 2017).

The demand for sustainable solutions in human capital management and development increased from a multi-national perspective. As different industries and economies growing increasingly global, competition for assets, capital, and productivity grew, as well as diversifying business processes to continue to meet such demand. Businesses were required to do more in terms of developing efficient products of value with an emphasis on corporate social responsibility to the environment. The production of goods and services for a business is essential for profitability, yet the foundation of such processes, supply-chain logistics, and delivery of the goods and services are dependent on the framework of the

organization's human resources management. Therefore, scholars shifted their focus in the past decade towards researching and understanding how human resources play a critical role in sustainability and the green revolution.

Due to its relatively recent focus on this specialization, there exists a wide variation of interpretation as to what GHRM consist of, and the different types of work processes within the human resource management paradigm that benefits need additional research. Yong, Yusiliza, and Fawehimi (2019) conducted a study which focused on a systematic literature review concerning GHRM from 2007 – 2019. The study found an increase of research and discussions from scholars during the past decade, but there was no consensus towards a way to measure successful objectives and outcomes. For example, some of the literature focused exclusively on methods to implement cleaner production, green employee empowerment, adoption of GHRM, and retention of employees. Despite the different methods of study or discussions through a review of 70 academic journal databases, the topic of GHRM increased and is considered essential to the development of human resource management practices.

GHRM and Healthcare

In the U.S. and across the globe, healthcare continues to be a complex and dynamic industry that features a myriad of challenges. One of the significant challenges involves sustainability within the industry. Governments, globally, continue to focus on innovations that create sustainability and address the needs and demands of their stakeholders. Projects encounter social, economic, environmental, and health-related barriers that impede the growth and application of how these projects deliver hospitals, physicians, staff, and pharmaceuticals. Different patient and global needs necessitate the ongoing commitment to deliver solutions that benefit global health, safety, and welfare.

GHRM contributes to sustainability in several ways if appropriately administered. Employees are encouraged to be more productive if adequately engaged. Green methods to encourage employee empowerment provide opportunities for conscientious consideration of how their work processes affect the environment. Emotional well-being may improve with organizational commitment as an effort to improve social awareness. As one of the largest industries in numerous countries, the direct and indirect benefit of working for a healthcare company provides economic benefits by potentially increasing wages and improving consumer consumption, as well as improved life expectancy and a decrease of illnesses (Du Toit & Millum, 2016).

Lennox, Maher, and Reed (2018) discussed how failing to follow sustainability initiatives create adverse effects for an organization. Wasted investments into human capital and monetary investments detract from the organization's bottom line. Potential profits not received cannot be reinvested within the triple bottom line, and as a result, inefficiencies and structural breakdowns could occur. Staff enthusiasm could decline, and employee turnover rates will increase. Lack of adopting sustainable methods within the healthcare structure will also increase energy consumption and provide other direct and indirect damage to the environment (Lennox, Maher, & Reed, 2018).

Collectively, healthcare faces another threat towards sustainability by the global staffing shortages and challenges related to the connectivity of physical and personnel resources contributing to significant healthcare disparities. Therefore, it is viable for healthcare human resource personnel with the support of organizational leadership to consider proper adoption and implementation of green practices and take advantage of the benefits available.

Understanding Green Human Resources in Healthcare

Modern health care systems are confronted with the task of effectively managing the expertise, information, knowledge, and human resources necessary for improving the health and wellbeing of those they are committed to serving (Smith, 2018).

The human resources department of an organization plays a significant role in the creation of their company's sustainability culture that serves those organizational goals (Ahmad, 2015). Notable procedures at every stage of the talent management are considered powerful tools for aligning employees with a company's corporate social responsibility strategy around sustainability (Ahmad, 2015). GHRM refer to using every employee touchpoint/interface to promote sustainable practices and increase employee awareness and commitments on the issues of sustainability (Ahmad, 2015). GHRM approaches can occur with recruiting messages, recruiting processes, training, employee development, employee rewards, and performance measures that are intentionally focused on the promotion of sustainability and environmentally friendly practices (Ahmad, 2015). For example, human resources can support sustainability through the development and adoption of paperless processes in hiring, benefits, training, and communications where the consumption of paper and the environmental impacts around that paper consumption can be reduced (Ahmad, 2015).

Implementing talent management approaches that promote sustainability and corporate social responsibility implies sound and effective decision making at critical points throughout the entire healthcare organizational system. Contemporary health care systems can be divided into macro-level and micro-levels of decision-making (Gray et al., 2017). Each level has a distinct mandate, but all are linked to contributing to the overall health care system performance and organizational strategy (Gray et al., 2017). Green initiatives within human resources form part of more comprehensive programs of corporate social responsibility. GHRM mostly consist of two major elements namely environment-friendly HR practices and the preservation of knowledge capital (Ahmad, 2015). Hiring approaches that promote messages and programmes that show the organizational commitment to sustainability are a critical part of this process (Ahmad, 2015).

Modern health care systems generate massive amounts of knowledge and information. This is one of its great strengths (Milton & Lambe, 2016). At the same time, this resource and the employee expertise that generates this knowledge and expertise is often not fully leveraged for improving organizational processes (Milton & Lambe, 2016). It is critical for organizations to develop knowledge management systems that allow for information to be shared in a way that promotes green training and development. According to Ahmad (2015) green training and development are activities and initiatives that help employees at all levels gain knowledge and expertise, in the context of their own job roles and duties, of the organization understand the values, processes, and programs around sustainability. Green training and development is a focus on knowledge development, knowledge sharing, and knowledge transfer around the roles employees and the organization can play in waste reduction, energy conservation, recycling, and provide an opportunity to engage employees in environmental business process improvement endeavors that support sustainability (Ahmad, 2015). In order to green training to grow and flourish in the organization, human resources and senior leadership need to support the development of strong knowledge management systems.

The purpose of this proposal is twofold. The first purpose is to contribute to the ongoing and continued need for literature and research related to GHRM. As the 4IR continues, communicating the effectiveness of human resource management and human capital development should be considered as an essential area of interest. The second purpose of this proposal is to address the needs of the healthcare industry, which are many. As healthcare practitioners continue to provide treatment and care for those in need,

human resource managers need to learn green practices to create a more sustainable environment that contributes socially and economically while adhering to the demands of the international stakeholders. As healthcare continues to be either one of the most significant expenditures or needs for numerous countries, consideration in this field provides potential holistic benefits for stakeholders.

Sustainability Challenges in Healthcare

Before understanding the need for GHRM practices in healthcare, it is essential to understand the challenges that exist in healthcare. For example, healthcare accounts for 17% of the U.S. gross domestic product (GDP) (Papanicolas, Woskie, & Jha, 2018). GDP is not only high in the U.S., but other wealthy nations as well. According to the Organization of Economic Cooperation and Development (OCED), countries such as Germany, Switzerland, Denmark, and the Netherlands feature high GDP outputs.

Presently, the continued growth and the demand for improved and accessible healthcare by stakeholders raises the prospect of increased waste and inefficiencies of scale. Such waste with adverse impact on the environment, quality of life, financial performance, and human capital creates challenges for those in the industry to deliver premium care without wasted resources. Therefore, the reliance on suitable workers with an understanding of sustainability whether directly or indirectly holds the key to how the carbon footprint of this planet is affected.

Leadership within the industry has the opportunity to take hold of these challenges and make significant changes to their operations. The resulting benefits include increased operational and financial benefits by meeting the demands of their stakeholders. Embracing significant sustainability provides opportunities to improve overall patient outcomes and public health. Hospitals, clinics, rehabilitation centers, and outpatient centers are real estate entities that consume vast tracts of land. Due to the needs of the general public for availability, energy output and consumption well-exceeds other industries in operation throughout (Mellow, 2019).

Furthermore, in terms of environmental impact, most healthcare-related entities rarely meet 100% capacity, thus resulting in additional waste. Levine (2016) noted that in the U.S. alone, \$8 billion annually is spent on energy through nonrenewable sources. Thus, controlling energy consumption and efficient use of resources should be underscored by initial training and ongoing training not only by staff, but for those in healthcare leadership as well.

Human resource management is the central point where business operations begin and sustain over time. Therefore, programs and initiatives requires effective waste management, not just biohazard waste. Energy consumption practices and identifying sources could release chemicals, pathogens, toxins, and other greenhouse gases that could erode the environment from the land, water, and air. Despite this knowledge, similar to the slow adoption of information technology, leadership continues to show signs of slow adoption of significant sustainability initiatives. Despite the researched and known benefits of certain practices such as utilizing renewable energy to pare down costs.

Waste management in healthcare is an underrated and not widely discussed focus of healthcare providers. The challenge is not disposing of waste, which healthcare entities are ethically bound to do, but how the waste is disposed of correctly, efficiently and effectively, thereby minimizing the risk of harm from a sustainable perspective. A continued practice that does not focus within the scope of environmental control results in an undercurrent of a public health crisis that many do not understand. Therefore, it cannot be understated that healthcare leadership should continue to be stewards of the environment and developing organizational strategies with this concept in mind.

Understanding Green Human Resources in Healthcare

Waste management areas to take into consideration could include heating and cooling, energy usage related to lighting, reducing air changes in operating rooms, and water consumption. Although some may not associate the importance of these areas of waste management as a significant operational concern; however, those providers who rely on plant directors, vendors, and even front-line staff are the first wave of stewardship of waste management. Understanding that waste management has a direct impact on operational expenses and potential realized savings should be a continued focus on human capital management and a core focus of the organizational culture.

The challenges of waste management exist in sub-segments in healthcare such as the long-term care industry (LTC) (Mousa & Othman, 2020). As the population continues to age, and more people are required to work, the reliance of a care-based model for loved ones to remain in a nursing home or assisted living facility continues to generate huge demand (Mello, 2019). Responding to the demand, more LTC companies are acquiring land and developing extensive facilities which will produce more waste than a neighborhood of homes. The amount of energy consumption, various types of waste, as well as the concentrated vehicle and foot traffic continue to provide potential harm to the environment.

Many of the facilities feature high percentages of unoccupied rooms and empty halls. However, based on the energy needs of these facilities, increased energy consumption occurs thus accelerating pollutants. High turnover and inadequate training increase the amount of stress and financial waste associated with replacing staff. Although nursing and nursing aides continue to highlight some of the major concerns of the LTC and overall healthcare industry, other personnel contribute to the high production of waste that leadership should consider developing strategies to mitigate against such a threat. Purchasing practices also feature a sustainability challenge as individuals manage who may not comprehensively understand the importance of inventory management make excessive purchases or purchase items that are not necessary.

Human resources managers continue to struggle with the increasing demand for adequate staffing, thus placing less a priority towards educating staff in promoting sustainability initiatives. Even most surveying bodies do not focus on energy consumption or waste by the facility except for regulated concerns and focus more on the quality of care which is a fair number of instances continues to be substandard and inadequate. Despite not being the focus from a political perspective, leadership should consult human resource management about developing sustainability initiatives with the potential for growth throughout numerous departments from a scalability perspective rather than a broader perspective.

Healthcare should be a focal point for sustainability efforts from an operational and a human capital development perspective. With a myriad of sophisticated delivery systems, regulations, and stakeholders, healthcare arguably has the most significant impact on individuals from birth until mortality. Despite its global impact on ecological systems, the industry generally ignores sustainable practices (Mousa & Othman, 2020). Therefore, one may argue that human resources is central in driving sustainability initiatives to improve performance and minimize waste based on activities economic, social, and financial performance.

Sustainability and Human Resource Management

Once perceived as a matter of doing minimum harm, sustainability is now an issue of the greater good that affects individual stakeholders, human resources, and Fortune 500 companies alike (Cooper & Burke, 2006)). In the face of scarce resources, climate change, and population explosion, businesses, governments, and organizations are all realizing the interconnectedness of the various systems in which they operate and the impact those systems have on global, environmental sustainability. As a business

professional, the decisions that one makes on behalf of his or her organization will directly impact these critical issues.

The discussion question (DQ) that follows centers around understanding an organization's sustainable options within the context of the ever-changing business or economic environment. As a result, sustainability offers a variety of strategies for transforming or improving an organization in order to cope with and potentially preemptively remedy the socio-economic and political challenges taking place in the ever-evolving business environment.

Globalization is a vital contributor to a rapidly changing world as a result of international economic interdependence. Such interdependence, to some extent, has resulted in for better or for worse situations in various regions of the world. In this context, environmental sustainability is imperative because, for example, global warming or environmental challenges are adversely affecting the ecosystems the world over, as well as resource availability and procurement for individuals of multiple socioeconomic statuses, and various tiers of businesses alike from mega-corporations to independent small businesses.

Several definitions and concepts are associated with sustainability. Nevertheless, the core concept of sustainability is that actions that an organization will take that will enable it to have a long-term survival socially, environmentally, and financially (Epstein, 2008). Also, sustainability is key to making the environment a better place after pollutions and other degradations have taken their toll on it. Further, King (2008) pointed out that the "economics of sustainability must find a way to raise the standards of living of a large number while reducing the negative environmental consequences of economic activity, with priority for the future, so that "future generations have at least the same potential economic opportunities to achieve the welfare of the current generation" (p. 28-29).

The definition of sustainability is the economic development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs (Brundtland, 1987). In the early stages, sustainability was considered as an environmental discourse that sought to preserve as much biodiversity and unspoiled land as possible. However, as Galpin and Whittington (2012) noted, ". . . sustainability requires the full integration of social, economic, and environmental issues into the vision, values, and operation of the organization." From what was initially considered a one-dimensional construct (an environmental discourse), sustainability has become the centerpiece of a long-term organizational strategy.

Some organizations fully embraced sustainability as a means to more efficiently deploy its human and other resources; by engaging in and sponsoring certain civic/social activities; establishing itself as a caring, responsible corporate citizen within the communities that the organization has a presence. One of the more significant changes noted includes hiring practices. Today, prospective employees for sustainability-minded organizations provide examples of their involvement in civic/social activities as a means of attracting individuals who are open to making a positive contribution to society.

According to Epstein (2008), ethics, governance, transparency, business relationships, financial return, community involvement/economic development, the value of products and services, employment practices, and protection of the environment as the nine principles of sustainability performance (p. 37). Organizations shifting to a GHRM framework considers building positive business relationships and adding resources to help sustain performance and maintain viability. Furthermore, organizations can address the level of social responsibility desired by improving more promotion of employment practices in the area of diversity. Employment practices are when "the company engages in human-resource management practices that promote personal and professional employee development, diversity, and empowerment" (Epstein, 2008, p. 37).

Understanding Green Human Resources in Healthcare

In this case, the assumption of society's potential inability to sustain itself in the future is to manage itself socially, economically, and naturally. This assumption is rooted in the belief that a sustainable and ecologically livable environment can be achieved if the social, economic and natural resources are well managed to the benefit of future generations. Environmental sustainability is about the future and the present is where appropriate actions are taken to preserve the environment for future generations.

Consequently, the practical application is sustainable thinking: helping people consider and implement simple choices that can have a positive environmental impact extending to all facets of life. Thus, sustainable behavior becomes a moral and ethical imperative for everybody, not only those concerned, to consciously think about sustainability or sustainable solutions. Moreover, a deep understanding of systems thinking by individuals, groups, or organizations can enhance their motivations to become proactive agents of positive social change for the greater good of society, the economy, and above all, the environment. In this direction, crisis management and total quality management are solution tools that can significantly assist in finding sustainable solutions that will positively affect the welfare of all.

In this situation, systems thinking, sustainable thinking, and social responsibility are interwoven concepts that are incredibly relevant to the discussion of finding sustainable solutions to crises and destructive practices that have the potential to destroy humankind and the environment. To this end, the concept and implementation of corporate social responsibility (CSR) compel all stakeholders to dedicate portions of their resources to the protection of the environment (Atiku, 2019). Firms operating in communities frequently neglect the development of and eventually those communities falter economically, socially, environmentally, and otherwise. Therefore, corporate social responsibility, sustainable thinking, and systems thinking are powerful management and leadership philosophies that can help guide decision-making which results in positive and sustainable solutions that will have a more significant impact on society, economy, and the environment. Sustainability enables organizations to continue beyond the immediate borders of the present without depleting environmental, economic, and social resources in the present (Epstein, 2008).

Sustainability is a significant objective of any business regardless of the product or service that it provides. Even with this as a clear objective, the evolving landscape of business coupled with technological advancements makes operating a business sustainably quite challenging. The values of the culture and organization define the perception and practices used in measuring sustainability. Methods used for immediate gains may be the critical ingredient for destruction in the future. The depletion of environmental resources has ecological consequences just as disregard of the individual values can weaken development. A successful business will have to reposition in order to maintain a viable business that continues to flourish (Senge et al., 2008).

The concept of sustainability applies not only to private industries that are profit-oriented but also to government agencies. An example of this occurs in the collaboration between the Department of Health and Human Services (HHS) and the Environmental Protection Agency (EPA). HHS uses green standards established by the EPA in its procurement requirements for products and services. These requirements frequently occur in the request for proposals for commercial products as a means of protecting our valuable resources and preventing situations such as the tragedy of commons. Although this may not be as prevalent in research and development, there are conditions of awards that govern the use rights of the individuals as well as disposal of hazardous material. The limitation of these measures affects the ability to provide appropriate oversight and monitoring consistently. Regulating compliance can be costly. However, the expansion of our perception of sustainability beyond economics measures, to include

factors such as human flourishing, should be the basis of a responsible culture (King, 2008). We are all stakeholders in this endeavor and directly benefit from embracing and perpetuating sustainability.

Green Human Resources in Healthcare

The Institute of Medicine defines healthcare quality as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Agency for Healthcare Research and Quality, 2020). More specifically, healthcare is one of many efforts organized by society to protect, promote, and restore the people’s health (Last, 1988). The general purpose of the healthcare sector is to foster a healthy environment where individuals and populations realize the opportunity to live longer, healthier lives.

The healthcare sector includes many industries, sub-industries, and a wide variety of companies. Any company involved in products and services related to health and medical care are represented in the healthcare sector and further categorized under six primary industries. These industries include pharmaceuticals, biotechnology, equipment, distribution, facilities, and managed healthcare (Ledesma, McCulloh, Wieck, & Yang, 2012). It should be noted that any health-based organization, including institutions and nonprofits, contribute to the healthcare sector. The healthcare sector accounts for close to one-fifth of the overall U.S. gross domestic product (GDP), making a substantial impact on jobs and local economies.

Healthcare businesses should be open-minded about the more significant aspects of their bottom-line aligned with green sustainability. Green means to protect and enhance natural systems such as the air, water, and land. Green also addresses recreational and open space opportunities to ensure community and social cohesion. Communities desire clean air, water, land, and access to open space and parks for recreation and healthy living. Sustainability occasionally refers to meeting the needs of the present generation without jeopardizing the opportunities of future generations to meet their needs. Sustainability presents the opportunity to provide good jobs, healthy communities, and quality lifestyle choices.

Investments in green sustainable policies and initiatives by the healthcare sector can benefit employees and local communities where they operate. Such policies and initiatives link to a value system of corporate and social responsibility. Local communities benefit from healthcare businesses that address social and physical determinants of health. Social determinants of health can include lack of healthcare access, food insecurity, poverty, mental health, and residential segregation. Physical determinants of health can include blight, dumping and litter, lack of trees, brownfields, lack of open and green space, and substandard housing.

Outcomes of individuals and communities are influenced by many factors, including economic conditions, the built environment, accessibility to healthy products, the behavioral choices people make, and access to and quality of medical care systems. Green sustainability contributes to these factors. Green hiring is an essential dimension within GHRM hiring practices which may improve overall performance, productivity, and morale (Mousa & Othman, 2020).

The healthcare sector must be a leader of community and employee health and wellness. Making up one-fifth of the nation’s GDP, the healthcare sector as employers can more naturally connect to their employees around strategies of green sustainability, health, and wellbeing. Further, employers in the healthcare sector can be a significant catalyst for sustained, community improvement and growth of local economies. Healthcare companies and organizations also have the opportunity to galvanize local communities through their employees.

Understanding Green Human Resources in Healthcare

Employees who have the resources and support systems of their healthcare employers that are focused on green sustainability practice will have the knowledge and tools to help make healthier and environmentally sound changes in their life and among family members, friends, and the community. Employees engage with individuals and groups during work hours and outside of work. When employees value and adapt their employer's culture into their way of life, the interactions can be beneficial. Their influence can be in the form of lifestyle changes through the adoption of green sustainability practices at the individual, household, and community levels.

Companies that align green sustainability efforts are often viewed more favorably by the public. Conversely, employees feel more loyal and prouder of their company when the business has closely connected the needs of the local community. Community and social responsibility can lead to attracting top talent and reducing turnover. Green sustainability affects morale, leading to better employee performance. Employees within the healthcare sector can have a more significant impact on society, more specifically, local communities.

Millennials in particular are significant drivers of green sustainability practices. According to the 2016 Millennial Employee Engagement Study by Cone Communications, millennials make up the largest group of employees in the U.S., 50% of the workforce. Further, millennials seek a higher purpose in their company's social responsibility commitments. Key findings from the study included: 64% consider a company's social and environmental commitments when deciding where to work; 64% will not take a job if a company does not have strong corporate and social responsibility values; 83% would be more loyal to a company that helps them contribute to social and environmental issues (vs. 70% U.S. average); and 88% say their job is more fulfilling when they are provided opportunities to make a positive impact on social and environmental issue. Sustainable living is becoming more commonplace and creates a culture for innovation in the workplace.

Business goals and values in the healthcare sector that integrate social responsibility into its strategic organizational framework by serving the community become the responsibility of human resources. Healthcare companies can achieve value by linking green sustainability and human resources. However, it will take a deep dive into understanding how profit-driven healthcare organizations can grow by focusing on mission-driven social innovation and community impact at the local level. Significant advancements in green sustainability are more effective with support from executives. Executives must think more in-depth about their organization's brand and reputation at a more micro level.

Human resources and organizational culture are two critical functions for healthcare companies. Human resources involve the collective capabilities, experiences, and commitment of the company's board, management team, and staff. The culture of a company binds together shared values and common practice. These values and practices should define how healthcare businesses in particular function and define themselves. Human resources are at the heart and forefront for employees. Benefits designed to improve employee skills, health, and wellbeing often fall to human resources.

Human resources can help to integrate and operationalize strategies into the workplace culture. Further, human resources can lead an organization's employees by providing training and development sessions to understand and adopt green sustainability principles and actions; offering incentives and recognition for green sustainable achievements; setting policies that encourage employee cooperation; and involving the company's environmental objectives (MacGuire, 2015). These efforts can support an internal shift that can establish a leadership position within the economy, nationally and locally. Healthcare businesses can also advance building healthier, sustainable, and more equitable local communities.

When healthcare businesses make financial contributions and provide employee volunteer hours to community and civic green sustainability initiatives, these companies can make a significant, positive cultural shift that is not only profit-driven, but can also be socially innovative that is impactful on local communities. For example, volunteer community outreach initiatives can engage all levels of an organization's employees. Recognizing employees' participation in volunteer programs is the most common way that companies involve workers in sustainability (Bates, 2011).

The value of sustainability supported by human resources can provide many vital drivers. These drivers could include: a competitive financial advantage; operational cost savings; contribution to local communities; environmental considerations; and health and safety considerations. Positive outcomes could include improved employee morale; increased employee loyalty; stronger public image; and increased brand recognition. Human resource professionals are essential to leading these drivers and outcomes within their companies.

In many cases, healthcare companies are anchor institutions in local communities, particularly hospitals. They are economic engines that employ thousands of workers, purchase goods and services, attract external income and resources, generate innovations, and incubate new businesses that in turn produce economic benefits (Gilothe, 2018). Healthcare companies will need to lead green sustainability initiatives. Their bottom-lines directly link to the quality of protecting, promoting, and restoring the public's health. Moreover, as a sector that makes up one-fifth of the nation's GDP, healthcare businesses are pivotal to embracing green sustainability principles and actions that can improve profits, employee performance, and outcomes of social and physical determinants of health. Profit-driven companies must align value-based green sustainability priorities focused on the health and wellness of individuals and communities. Human resource professionals must be the change agents within their corporate structure to help lead social innovation and impact. Healthcare businesses and their local communities can both do well and be healthy. It will be up to human resources professionals working with executive management in their organizational frameworks to lead a new value-based culture of green sustainability. The time is now to do business unusual with game-changing work and commitment. The effort will take a dynamic, needed shift in organizational strategic thinking and culture.

Knowledge Management Human Resources Systems

Knowledge management is defined as "the process by which an organization creates, captures, acquires and uses knowledge to support and improve the performance of the organization" (Kinney, 1998, p. 2). It can also be understood as the exploitation and development of the knowledge assets within an organization, aimed at furthering the goals and objectives of the organization (Metaxiotis et al., 2005). Knowledge management, therefore, can be said to involve a conscious effort to incorporate strategies and practices that ensure maximum use of knowledge in organizations to advance the goals and objectives of the organization (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). It is presently recognized that successful organizations are those that create new knowledge, disseminate it widely throughout the organization, and represent it into new technologies and products (Metaxiotis et al., 2005).

Dalkir (2017) identifies explicit and tacit forms of knowledge as the two forms of knowledge used in organizations that should be managed, captured, and leverage as part of the knowledge management process. These two forms of knowledge are currently recognized as the de facto knowledge categorization informing decisionmaking in almost all organizations (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016) According to Dalkir (2016) a large portion of organizational knowledge and intellectual

Understanding Green Human Resources in Healthcare

capital is tacit. Knowledge of this type is action-oriented and has a personal quality that often is not documented or written down in organizational processes and manuals (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). Given the personalized characteristics of such knowledge, for it to be useful there must be mechanisms in place to ensure the transfer of personal knowledge between individuals as well as the transfer of explicit knowledge between individuals and organizations (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016).

Nonanka and Tekeuchi (1995) define knowledge construction progression as a five-step process involving four approaches of knowledge translation. The process starts with the tacit knowledge or specialized expertise of one or several individuals, who share it with others, thus developing a collective understanding (Nonanka & Tekeuchi, 1995). This collective level of comprehension is transferred into explicit knowledge in the form of a concept or an action in the second step of the process (Nonanka & Tekeuchi, 1995). In the third step that concept or action is validated by paralleling and connecting it to other forms of explicit organizational knowledge (Nonanka & Tekeuchi, 1995). In the fourth step the concept is established into a process or approach this is used (Nonanka & Tekeuchi, 1995). In the final step the new knowledge is shared through a knowledge transfer process throughout the organization (Nonanka & Tekeuchi, 1995). Organizations draw on both tacit and explicit knowledge forms in making decisions around strategy and values (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016).

Knowledge management is defined as the process by which an organization creates, captures, acquires, validates and uses knowledge to support and improve its overall functioning (Kinney, 1998). An important analytical tool for understanding knowledge management is the knowledge system conceptual framework, a framework that provides a holistic approach to understanding how knowledge is learned, developed, documented, shared, and constructively leveraged (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). The knowledge system refers to the institutionalization of knowledge processes that shape behavior and actions in complex environments (Holzner and Marx, 1979). These processes include the creation, organization, distribution and application of knowledge (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). The knowledge management process involves the activities or initiatives undertaken to provide the enabling conditions that facilitate the utilization of knowledge within organizations (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016).

Human resources play a significant role in the development of practical knowledge management processes that support sustainability in organizational infrastructure through policies and approaches that function as enablers of, or impediments to, effective knowledge management strategies and practices (Ahmad, 2015). The knowledge system concept, therefore, provides a sociological framework for analyzing organizational knowledge management structures and processes (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). A knowledge system approach offers organizations the opportunity to integrate approaches capable of dealing with all its knowledge resources in the most efficient way (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016).

The conversion of tacit knowledge into explicit knowledge, the transfer of either form of knowledge between individuals or within (or between) organizations, and the application or utilization of such knowledge constitute the primary actions underlying knowledge management from knowledge system perspective (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). For these activities to be practical, human resources should put into place a knowledge management strategy that promotes sustainable practices (Ahmad, 2015).

Hansen et al. (1999) point to two differing strategies for knowledge management: codification and personalization. According to Hansen et al. (1999) codification strategies focus on explicit knowledge,

and involve carefully codifying and storing knowledge in databases, which can then become accessible to all in the organization. According to Hansen et al. (1999) such knowledge management strategies adopt a “people to document approach” by extracting knowledge from those who developed it, making it independent of them, and reusing it for various purposes. Hansen et al. (1999) outline that personalization strategy, on the other hand, focuses on the dialogue between individuals, and involve knowledge that has not been codified, but instead has been transferred from individual to individual through interpersonal encounters such as conversations or brainstorming sessions.

According to Milton and Lambe (2016) an effective knowledge management strategy is always a combination of codification and personalization, but with a stronger emphasis either on the former or the latter. Moreover, the preferred knowledge management strategy should be designed in a manner that enhances the goals and objectives of the organization (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). Effective execution of a knowledge management strategy requires organizations to examine critically the knowledge forms underlying their decision-making and how that knowledge is used (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). This is important because knowledge management strategies not commensurate with organizational goals and objectives can derail the growth and development of the organization (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). Human resources can play a significant role in ensuring that there is alignment between organizational policies and effective sustainability practices (Ahmed, 2015).

A knowledge strategy is simply a plan that describes how an organization intends to better manage its knowledge for the benefit of that organization and its stakeholders (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). A good knowledge management strategy is closely aligned with the organization’s overall strategy and objectives. Selecting the right knowledge management strategy is, therefore, an essential prerequisite for attaining organizational objectives (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). Hansen et al. (1999) point at two different strategies for knowledge management: codification and personalization. They believe that the best knowledge management strategy is always a combination of the two, but with a stronger emphasis on one (Hansen et al., 1999). While a codification strategy is appropriate for explicit knowledge to thrive, the personalization knowledge management strategy better supports the use of tacit knowledge in organizations (Hansen et al., 1999). Since tacit and explicit knowledge forms are complementary, an organization’s efforts towards knowledge management should be focused on instituting the most appropriate strategy or a combination of the two (Milton & Lambe, 2016).

These two knowledge management strategies have distinctive features. The codification knowledge management strategy ensures the re-use of explicit knowledge by capturing, codifying, classifying and making available knowledge to support routine problem solving (Milton & Lambe, 2016). Uniformity in action is ensured since knowledge is recycled to guide decision-making (Milton & Lambe, 2016). Questions regarding organizational problems and the usual response to them serve as the primary questions guiding codification strategies in organizations (Milton & Lambe, 2016). For such questions to be resolved, libraries of procedures, policy documents, guidelines, data collection forms, typical cases and outcomes, and risk assessment tools derived from all parts of the organization must be developed and made available to all individuals in the organization (Milton & Lambe, 2016).

The codification knowledge management strategy also thrives on the availability of incentives to encourage staff to engage in the knowledge management process fully (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). This implies that organizations adopting the codification knowledge management strategy should reward the use of, and contributions to, document databases as recognition of staff

Understanding Green Human Resources in Healthcare

adherence to policies. The codification strategy, in general, involves intensive investment justified by multiple knowledge re-use (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). The codification strategy, stresses the need for technology and its importance in identifying, classifying, categorizing, storing, and retrieving knowledge (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016). The personalization strategy, takes a softer stance on knowledge and acknowledges that knowledge cannot always be formalized and used explicitly, but rather tacitly in an organization's process, actions, and activities through those of the employees (Dalkir, 2017; Gray et al., 2017; Milton & Lambe, 2016).

Promoting organizational communities of practice are examples of an effective personalization knowledge management strategy. Communities of practice are networks capable of nurturing and supporting the development of the personalization strategy of knowledge management in organizations through the sharing of knowledge, expertise, ideas, best practices, and problem-solving approaches around a topic that is important in an organization (Wenger, 2002; Brown & Duguid, 2001). The literature views communities of practice as powerful conceptual tools for pursuing personalization (person-to-person) knowledge management in organizations (Wenger, 2002; Brown & Duguid, 2001). Communities of practice function within not only an organization, but can extend to embrace individuals outside an organization who also share a common passion and interest in an issue or topic (Wenger, 2002; Brown & Duguid, 2001). Human resources can play a significant part in developing, promoting, and organizing the communities of practice process with a focus on sustainability and employee behaviors around sustainability (Ahmed, 2015).

Health care decision-makers rely on the use of information and knowledge in making dynamic decisions (Lengyel, 2018; Johnson, 2016) Understanding the knowledge that underlies health care decision-making, and how that knowledge is acquired, stored, validated, shared and applied, is an essential first step in ensuring effective knowledge management (Lengyel, 2018; Johnson, 2016). Effective knowledge management in health care decision-making requires the coordination of many elements: organizational structure and culture, policies, the extent of individual interactions within organizations, and the use of information and communication technology (Lengyel, 2018; Johnson, 2016). Human resources with their engagement, policies and comprehensive knowledge management approaches can drive organizational sustainability policy and employee behaviors in support of sustainability through green training (Ahmed, 2015; Atiku, 2020).

CONCLUSION

Technology advances help drive the innovation and progress associated with the 4IR. These changes create numerous opportunities for different industries to become more flexible, innovative, and develop operational efficiencies of scale. The advances made in technology gives organizations an ability to produce at a higher rate than ever before, thus requiring more of its workforce.

GHRM involves a set of policies, practices, and systems that promote a more socially responsible environment. Sustainability initiatives now drive the strategic goals of many organizations spanning numerous industries. Such initiatives drive the green behavior of employees and set the tone for recognizing the importance of how actions by an organizational entity may affect its internal and external stakeholders, including the environment.

Healthcare is historically known to be a slow adopter of new innovative practices. From technology adoption to healthcare delivery, waste management, record management, and data security, many

providers within the industry continue to lag behind other major industries despite the significance of how the industry affects a country's overall well-being. Such challenges remain true in human capital management within the healthcare industry. Sustainability challenges exist ranging from mental and physical stress, wasting energy and land resources, hiring practices, education, and high turnover rates.

Exhibited by occupying swaths of land that consume many natural resources at a rate that is unsustainable to the environment, healthcare is at a crisis in terms of becoming a more conscientious entity in ensuring that the natural resources are not expended at an accelerated rate that results in developing more waste than necessary. Globalization of healthcare provides more possibilities for healthcare delivery and access; however, the manner that is used by many organizations mirrors a status quo method rather than adopting green practices that do not pose an overall risk to public health.

It is incumbent on researchers and leadership to work simultaneously in developing sustainable initiatives that mitigate risks associated with financial, ecological, and social waste. Ensuring that the appropriate personnel from the line staff to senior leadership practice green initiatives improves awareness of performing tasks that provide positive benefits to the environment. Knowledge management and the sharing of information between organizations that help limit excess greenhouse gases, and less reliance on older systems in the healthcare delivery process can provide financial savings and show that the healthcare industry itself shows value in being a socially responsible industry.

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KEY TERMS AND DEFINITIONS

Fourth Industrial Revolution: Infusion of technological and digital practices towards advancement of productivity and operational capacity.

Green Human Resource Management: Set of policies and practices designed to stimulate environmentally sensitive, resource efficient, and socially responsible workplace.

Green Sustainability: Pursuit of knowledge and practices designed to improve environmentally, ecological, and social resources.

Knowledge Management: Process of creating, sharing, and using the knowledge and information by an organization.

Chapter 4

Succession Planning as a Developmental Tool for Sustainability

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ABSTRACT

The chapter present a practical guidance based on four simple-to-use models of developing a succession plan. It also highlights current best practices of succession planning based on literature. Succession planning is a critical leadership tool for organizational growth and sustainability; it alleviates substantial gaps in organizational knowledge and leadership through strategic replacement of key personnel. Using succession planning as a developmental tool will allow the organization to determine what and whose knowledge is most important to capture and help them to identify critical positions. It is very important for organizations to grasp the meaning of succession planning before implementing a succession plan as a developmental tool for organizational sustainability. Based on the definitions of succession planning, this chapter defines succession planning as a proactive approach to managing talent, and the development of a leadership pipeline to meet an organization's need-based demand for sustainability.

INTRODUCTION

An ongoing challenge for organizations is the development of consistent approaches to ensuring leadership sustainability and reinvestment in their talent pool. As stated by William J. Rothwell (2005), “amid the twofold pressures of pending retirements in senior executive ranks and the increasing value of intellectual capital and knowledge management. It is more necessary than ever for organizations to plan for leadership continuity and employee advancement at all level. Rothwell went further to discuss that small businesses, non-profits, and government agencies too need to give thought to planning for future talent towards sustainability.

For many, the workplace story goes like....Understaffed, underfunded, and overworked. How can we possibly justify allocating human and financial capital towards something that has not yet occurred?

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Succession Planning as a Developmental Tool for Sustainability

We just don't have the resources! Bakare (2017) asserted that despite this prevailing attitude, which is unapologetically based more on fact than fiction, succession planning can save time, money, and most significantly, the integrity of the position. Therefore, YES, succession planning should be a foremost consideration. Organizations are using succession planning as part of their talent management strategies, a trend supported by literature.

“It is very important for organizations to grasp the meaning of succession planning before implementing a succession plan. Findings from various study shows that a formal succession plan, especially in the areas of developing internal candidates’ competency levels, knowledge transfer, and knowledge preservation will provide an organization with a strong leadership pipeline as they respond to the ongoing trend of mass retirement by Baby Boomers” (Bakare, 2017 pp.42 -43)

Turnover under the current scenario employees seem to be leaving at a faster pace than ever before. To succeed under this workplace reality, it is imperative that organizations have:

- A detail succession plan, so they know not only when key employees are leaving, but also understand the skills and critical knowledge each employee hold to properly find and train new replacement with the necessary qualification and competencies.
- A suitable replacement candidate pool – both entering the organization and moving up into leadership roles.

When long-term veteran employees leave the organization, they take with them both a unique understanding of effective leadership and incredible amount of institutional knowledge, often including undocumented asset information.

Organizations are aware of some vacancies or that a position is going to be vacated. However, that awareness rarely transform into action and it formidably loom over them as they wait for “Departure-Day. Then and only then, is filling the position seriously addressed. Through a succession planning process, you recruit superior employees, develop their knowledge, skills, and abilities, and prepare them for advancement or promotion into ever more challenging roles in your organization ensuring that you will never have a key role open for which another employee is not prepared. Rothwell (2005) said “successful succession planning processes are driven by strategic planning” (p. 40), which “is a process by which organizations choose to survive or compete” (p. 21) with “time being the key strategic resource” (p. 42). Technology and global competition are forcing companies to rethink succession planning by going back to their mission and their strategic plans. Those companies, who do not do so, are increasingly being punished by either the market or their competition, or both.

Historically, there have been different forms of succession planning. According to Darvish and Temelie (2014) organizational succession planning began during the time of the Industrial Revolution, where organizations adopted methods to plan for changes in their leadership in order to protect their organization. Henri Fayol, in the twentieth century, argued that management consists of a set of activities that are common to all organizations, and developed 14 administrative principles of management (1916). Within these principles, Fayol (1916) calls attention to the need for management to ensure the stability of personnel. He believed stability of personnel is crucial for organizational continuity and that if this is ignored, the organization will end up filling key positions with ill-prepared employees (Rothwell, 2010).

As Baby Boomers prepare for retirement, the turnover rates continue to increase, it is wise for an organization to find ways to capture the institutional and tacit knowledge from those who possess it. Capturing this knowledge is not always easy as there are real fears of those who have that knowledge that they will be replaced by lower priced talent once their brains are drained. Once the organization has determined what and whose knowledge is most important to capture, then a succession plan should capture the transfer of that knowledge. They need to find practical ways of doing this, provide incentives for those who possess that knowledge, implement steps for transferring the knowledge, and then evaluate the successes of the effort. Knowledge transfer can be done through employee mentoring, critical incidents, job shadowing, brown bag lunches where a few employees share critical situations they encountered in face-to-face discussions, and asking the in-house experts or “go to people” to describe how they do their work to resolve various problems or issues by capturing their unique approach to problem-solving and other tasks. Yet few companies make an effort to capture this knowledge from the in-house experts or those moving on to greener pastures. When someone in a managerial position is leaving, it is not the easiest of times to build a focus on long-term planning; however, there are issues with timing and authority since managing one’s own succession is not a simple affair and the process of seeking a successor is often badly handled when done at the last minute. Both the public and government need to focus on the longer term and develop a willingness and ability to devise an effect approach to succession planning, which is a crucial step in the process.

Elements in Succession Planning

Rothwell (2010) suggested four elements to be considered in succession planning development for any organization, which are direction, timing, planning, and scope.

- **Direction:** The highest-level leaders make decisions about how assessment of competency and performance for a current position, and how future competency and performance will be assessed. Rothwell recommends that the direction should come from the top-down and from the bottom-up (p. 45).
- **Timing.** Succession planning may be conducted fitfully, periodically, or continuously. Fitfully implies that there is no systematic effort and every vacancy can become a crisis. Periodically means succession planning is carried out on a fixed schedule, whereas, continuously means ongoing decision-making, information gathering and action taking occurs routinely. The periodic approach is preferred (p. 46).
- **Planning.** Succession planning should occur deliberately with a written organization-wide statement of purpose as a guide (p. 45).
- **Scope.** Succession planning may range in scope from specialized to generalized. Specialized succession planning targets leadership continuity in selected job categories, job level function or location. The intention of generalized succession planning is to prepare an individual for advancement in all job categories, job levels, and location. This helps to identify individual training, education and development needs to meet individual career goals (p. 46).

Objectives of Succession Planning

To ensure leadership continuity in key positions, every organization's succession plan needs to include the following objectives:

- Identification and selection of best-fit candidates for key positions
- Effective leadership development
- Knowledge management and retention and
- Maximizing employee retention and minimizing turnover of high performance employees. (Carson, 2009, p. 54)

Carson (2009) wrote a report on why some Ontario Municipalities were not engaging in succession planning. The report analyzes and compares data from Ontario Municipalities and their approaches to planning for the departure of top executives and senior management. The author developed a survey instrument with 18 questions administered online through the University of Western Ontario, Social Sciences Network and Data Services. The study selected 160 members of the Ontario Municipal Human Resources Association (OMHRA). Only 34 participants participated in the survey resulting in a response rate of 21 percent. The sample choice of OMHRA members was appropriate, but the study did not provide statistically significant results. The participants were not open to other professionals in the workplace that understand work force planning or the operational competency of their agency. For a succession plan to be effective, every stakeholder within an organization has to be involved. Carson's (2009) results showed 59% of the participants identified succession planning as a priority in their strategic plan and 32% were unsure if it was a priority or not. In answering the question about whether succession planning was in place in their Municipality, the responses were the following: six (18%) reported it was in place for executives/senior management positions, four (11%) said it was in place for all staff, 11 (32%) said they only monitored the age demographics and used them to determine the number of employees that would be retiring, six (18%) agreed that their municipality had a mentoring program in place, and seven (21%) said one or more internal staff were currently been groomed to take over a top management position if they retire or leave. The article did not specify the type of instrument used to gather these data. The author concluded that "Ontario municipalities are aware that succession planning is needed in their municipality, with over half reporting that succession planning was identified as a priority in their strategic plan" (Carson, 2009, p. 5). The study provides a good starting point for further research of factors that prevent public or governmental organizations from engaging in succession planning initiatives. However, the method of data analysis and sample collection needs to be re-evaluated in order for this study's results to become reliable and generalizable. Jarrell and Pewitt (2007) used narrative analysis to explore the following four questions:

- How does a public agency develop a succession plan?
- How has succession planning affected workforce sustainability?
- How are the results of succession planning measured and evaluated?
- What may or may not have made their organization successful? (p. 302)

Jarrell and Pewitt's study carried out their study in the City of Plano, Texas. In 2001, the City of Plano decided to look into their aging workforce and realized "46% of their senior management would be eligible

to retire within five years” (p. 302). In their analysis of the City’s succession plan and a review of the pertinent literature, they determined that a “formalized succession plan must have certain key elements, such as planning, selection, training of staff, sustainability, measurement, and evaluation of the process in practice which they decided to put in place” (p. 305). In the planning phase, the HR director noticed a formal succession plan is not a common process in municipal government, but that it was an area of interest (p. 306). The outcome of this phase was “a plan to include a formalized process that requires application, assessment, selection, and 12 months of planned curriculum” (Jarrell & Pewitt, 2007, p. 306).

During the planning process, they realized that succession would have to be tailored to their organizational needs and future planning concerns. The City of Plano identified a small elite group of leadership participants for the Managerial Leadership (MP3) program and created an Institute of Excellence for employees to access additional leadership training and resources (Atiku, 2019). The sustainability phase did not factor into the development process, as there was “no formalized follow-up of participant performance past their program completion (Fields & Atiku, 2017). The MP3 program relied on the relationships and connections built during the 12 months, but for succession planning to succeed it “must have support from the top” (Jarrell & Pewitt, 2007, p. 307). There was no formalized evaluation method articulated in the City of Plano’s process; the City only relied upon the initiative of the participants to use their new knowledge to better the organization (Atiku, 2020; Fields & Atiku, 2018). The interpretive nature of the narrative research presents concerns for the reliability of this study’s findings, as there was no follow-up evaluation of the effectiveness of their succession planning process. Literature reveals that knowledge and practical procedures are necessary for public organizations to begin their own formal succession planning efforts.

Succession Planning Best Practice

Effective succession planning requires the use of a systematic approach. Use of a particular approach depends on the strategic plan and vision of the organization. Fibuch and Van Way (2012) identify the following best practices in developing an effective and successful succession planning process, namely:

- Ensuring the participation and support of senior leaders in the process;
- Ensuring full, informed engagement from the board of directors;
- Ensuring “good fit” with the structure and strategy of the organization and its benchmarks, and finally, and
- Ensuring that the succession plan is focused, systematic, and embedded throughout the organization as a key process linked to the strategic focus of the organization. (p. 47)

Barnett and Davis (2008) proposed a practical approach to succession planning that integrates most elements found in the literature. They argued that, Integrated and effective succession planning systems can be implemented in five steps and assume that the best decision about a participant should be data based, and made by group discussion and consensus, not just an individual executive on his or her own. (p. 730). The following are the five steps, according to the Barnett and Davis (2008):

- **Step 1: Preliminary planning.** The top executives need to agree on the key aspect of succession planning system design and process. The issues discussed and decided are purpose, rationale,

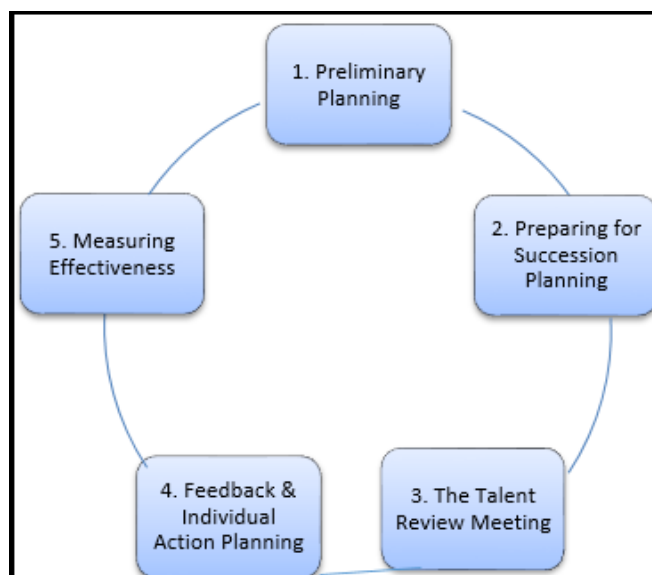
Succession Planning as a Developmental Tool for Sustainability

objectives, positions, and participants, key concept definition such as performance and potential, link to other HR systems, and use of an organizational competency model. (p. 730)

- **Step 2: Preparing for succession planning and talent review.** This involves implementing a talent review process that gives room for a potential successor to be reviewed and discussed by the group of line executives. To facilitate the discussion, data and information about each potential successor needs to be collected and assembled. The actions at this step involve identifying and nominating a participant, process communication, future competency and leadership potential, career conversation, and assessment rating data collection. (p. 703)
- **Step 3: The talent review meeting.** The lead executive or relevant Human Resources professionals facilitate a talent summit or review meeting. The meeting activities include discussion on each nomination participant, placement in performance-by-potential (9-Block) grid, feedback agreement, development recommendation for each potential successor, and confirming timing/process for the next round. (p. 703)
- **Step 4: Providing feedback and facilitating development action planning.** This step involves two critical activities: First, is the need to communicate and initiate development planning with those individuals discussed in the talent review meeting. The second is for HR to align their level of readiness with current staffing needs. (p. 732)
- **Step 5: Measuring effectiveness.** This step encompasses the evaluation phase, and should be designed by the Succession Planning Lead or a Human Resources Professional. The activities should include establishing a baseline, measurement of effectiveness, evaluation of process satisfaction, presenting results to stakeholders, discussing modification or improvement for future succession planning, and talent review meeting. (p. 732). Figure 1 provides the pictorial illustration of these steps in a circular flow.

Figure 1. High-impact succession planning process

Source: Adapted from Barnett & Davis (2008).



Succession Planning and Knowledge Transfer

Barzinpour, Jafari, and Biuki (2014) “suggested an integrated approach for succession planning and knowledge transfer to prevent loss of valuable knowledge in organizations” (p. 124). The purpose of the qualitative study was to “illustrate the link between knowledge management and succession planning and to provide an integrated model of succession planning and knowledge management” (p. 124). The authors reviewed literature on succession planning and knowledge management, and conducted semi-structured interviews with subject matter experts on succession planning and knowledge management. However, one of the limitations of this study is the fact that the selection criteria for the subject matter experts were not identified; therefore, one can assume it is a purposive sample, instead of a more robust random sample. They received 25 responses; 15 were organizational managers and 10 were university researchers. The questionnaire consisted of three open ended and eight close-ended questions. The instrument used to measure the reliability of the questionnaire was “Cronbach’s Alpha that gave a rating of $\alpha = 0.734$, evidence that the information is highly reliable” (p. 130, “Table: Reliability Statistics”). In analyzing the results, the authors used a binomial test with 80% of respondents in agreement with input provided in the model, 100% in agreement with components of the model including input, output, enablers, succession planning, and knowledge management, and 72% in agreement that the model shows a relation between succession planning and knowledge management (p. 134).

The study’s findings demonstrate that succession planning and knowledge management have some mutual content, as scholars have been pointing out in recent decades, but few researchers directly work on the issue. According to Barzinpour et al. (2014), each company should develop a plan to cover succession planning and knowledge management (p. 135). The researchers make recommendations for future studies including drawing results from a larger sample, something they failed to do in their own research. The abstract had much more clarity than the study; however, the study is a good starting point for this type of research, given the lack of an integrated model that combines succession planning and knowledge management.

As Baby Boomers prepare for retirement and turnover rates continue to increase, it is wise for organizational leaders to find ways to capture the institutional and tacit knowledge from those who possess it. Capturing this knowledge is not always easy as there are real fears of those who have that knowledge that they will be replaced by lower priced talent once their brains are drained. Once the organization has determined what and whose knowledge is most important to capture, then a succession plan should capture the transfer of that knowledge. They need to find practical ways of doing this, provide incentives for those who possess that knowledge, implement steps for transferring the knowledge, and then evaluate the successes of the effort. Knowledge transfer can be done through employee mentoring, critical incidents, job shadowing, brown bag lunches where a few employees share critical situations they encountered in face-to-face discussions, and asking the in-house experts or “go to people” to describe how they do their work to resolve various problems or issues by capturing their unique approach to problem-solving and other tasks. Yet few companies make an effort to capture this knowledge from the in-house experts or those moving on to greener pastures. Yet waiting until these technical experts retire or leave for other employment may place the company in a crisis depending on that person’s technical expertise and position within the company. Froelich, McKee, Rathge (2011) surveyed executive leadership of 800 charitable organizations and 859 organizations in two Midwestern states. They received returned questionnaires from 106 charitable nonprofits and 140 from cooperatives with a 15% return rate. There was no demographic information collected beyond tenure related questions; the initial mailing collected

Succession Planning as a Developmental Tool for Sustainability

the survey data with one follow-up between October 2009 and April 2010. The sample organizations came from organizations that submitted IRS 990 returns, which was available at the Internal Revenue Business Master file. A two stage stratified random sampling was used; the sample was divided into two groups, where the first group consisted of those “individuals with total assets above \$1 million, and the other group consisted of those with total assets between \$100,000 and \$1 million” (p. 15). The cooperative organizations in the study included credit unions, electric cooperatives, farm suppliers, and grain companies.

The research analysis focused on descriptive statistics, namely frequency distributions, mean, and ranking. The results demonstrated that respondents from both organization types largely perceived succession planning as important; 70% registered a 4 or 5 score on the importance scale, with 5 being “very important” (p. 16) Less than 20% had developed a formal plan for CEO transition (p. 16). The data indicated that internal candidates are preferred in about half of the organizations, while about two-thirds reported no viable internal candidate. The author stated that based on the data collected; there were no signs of organizational readiness for executive succession planning in either nonprofit or cooperative organizations. Though the sample population recognized the importance of succession planning and had a board meeting about it, there appeared to be little interest in developing and implementing a succession planning.

Overall, the picture is a mixed one: positive in that an immediate leadership deficit is not perceived, and yet contradictory since the nonprofits appear ill prepared for and even unrealistic about the upcoming challenges they may face. Clearly, there is considerable work ahead to better prepare for executive succession in nonprofit organizations and cooperative organizations.

Succession Planning and Replacement Planning

While the term “succession planning” and “replacement planning” is often used interchangeably; they have different approaches to talent and competency identification for leadership continuity within an organization. According to Rothwell (2010), “the two are compatible and often overlap and they should not be confused with each other” (p. 10). Replacement planning is a form of preparation ahead of any risk. It helps to prepare the organization for any chance of disaster that may occur due to the immediate or unplanned loss of someone occupying a key position. However, succession planning is proactive and helps to ensure leadership continuity by cultivating talent from within through planned leadership development.

Charan (2008) writes that succession planning is linked through traditional and alternative approaches. According to Charan (2008), in a *traditional approach*, people within an organization can only make six types of job movements: in (entry), out (termination), up (promotion), across (lateral transfer), or progress in place (development in current position); the alternative approach reallocates the work duties, and relocates them across other key positions available within the organization. This approach encourages skill building through exposure to a new functions, activities, and responsibilities (Charan, 2008, p. 20). The traditional approach is most commonly used in public organizations due to the Civil Service system. The Civil Service systems’ hiring planning process focuses on the immediate need of the work unit like a replacement plan. The success rate of replacement planning efforts remains low, because it focuses on a short-term result rather than on a long-term succession plan.

Richard (2008) used a naturalistic inquiry investigative approach to determined if succession planning mattered in the context of corporate leadership. The two methods of data collection used were: (1) a case

study of succession planning process at three Australian corporations, selected based on the author's existing knowledge of the succession-planning process, and (2) an in-depth interview of 12 CEOs within the 45 – 60 age group, where only one cohort member was female. While interviewing the CEOs, with special attention given to documenting issues, claims, and concerns. Each CEOs was interviewed for 60 minutes. The author used constant comparative code method described by Strauss and Corbin (1990) to identify emergent themes. The case study's results show that they implemented a leadership identification process systematically. The standard method utilized by the three corporations are as follows:

- The use of a mentor or executive coach to assist individuals to develop in specific ways that cater to specific needs and development criteria,
- The appointment of key staff to different roles in an organisation for the purposes of giving them a breadth of experience outside of their area of immediate technical capability, and
- Sponsorship to attend business schools and leadership development courses.... (p. 456)

The interview data from this case study reveals that the CEOs took little or no account of information provided to them by their Human Resources teams. Most of the CEOs said they made decisions based on their own criteria for succession planning, which they understood but did not properly document. The validity and reliability of the case study's data was addressed through prolonged engagement and triangulation during the data process.

Behn, Riley, and Yang (2005) extended earlier research to analyze the market reaction to the death of a Chief Executive Officer (CEO) in order to determine whether investors value the succession planning process. The instrument used in this study was "a succession plan proxy developed by Cannella and Shen (2001)" (p.169). The study considered two questions in the development of their hypothesis. The first question was the connection between the death of a CEO, succession planning, and stock market price reaction. The second question was whether an investor discriminates between companies that have and do not have a succession plan in place. Based on these questions the study hypothesis was "for companies that experience the death of a CEO, stock returns for companies with a succession plan in place will be higher than stock returns for companies without a succession plan in place" (p.170).

The study utilized a random sample featuring 6,276 preliminary matches. The authors screened the sample to ensure that it related to a particular company. They examined public records to determine if it was a publicly traded company and if stock price was available, leaving a final sample of 168 observations. Behn et al. (2005) found the average tenure of the CEO to be 14.1 years. The correlation table revealed that several independent variables, such as tenure, promotion, and age were correlated with succession planning. The variable correlation percentage breakdown is as follows:

- Tenure (40.9%)
- Internal promotion (43.8%)
- Age of deceased (46.8%). (p. 171)

Tenure and internal promotion correlated at approximately 34% while tenure and age correlated at approximately 66% (p. 171). Other factors that could affect a succession planning process were not among the variables used in this study. Finally, the article relies mostly on assumptions and does not survey the opinions of the investors or their understanding of a succession plan.

Succession Planning as a Developmental Tool for Sustainability

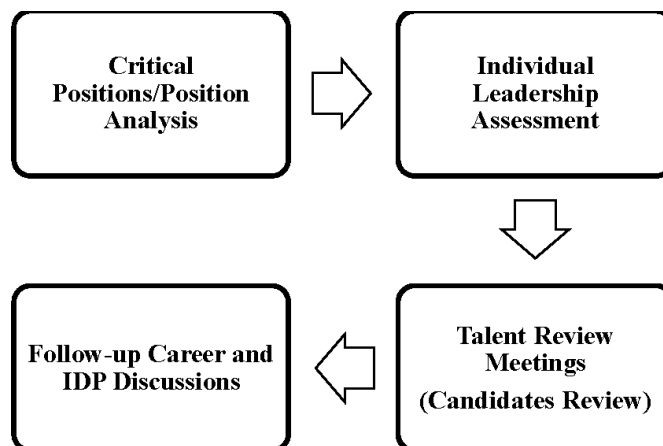
According to Rothwell (2005), getting suitable people in the right positions and at the right time is the key to organizational planning; however, the absence of a succession plan can be disastrous for a company when there is a sudden loss of a company leader, which can lead to power struggles and confusion about the company's future (Ruiz, 2006). Therefore, a successful transition of new leadership is a critical aspect of organizational development.

Rothwell (2011) also examined how the replacement planning process was implemented at a public utility in the Northeastern region of the United States. His research was based on the earlier work of Yin (2003) who categorized his own case study as a report about programs or processes. Rothwell's (2011) research used data gathered from document analysis and interviews. His study defined replacement planning "as a process of identifying short-term and long-term emergency backups to fill critical positions or take the place of critical people" (p. 88). The author found replacement planning to be a foundation on which to build more approaches to succession planning, rather than a substitute for succession planning. Rothwell (2011) reported that after key concepts were introduced to the senior leadership of the organization and senior leadership completed replacement charts for their organizational units, the consulting team found that many senior leaders making appointments had to ask key questions before they completed their replacement charts. The author found replacement planning to be a foundation for introducing succession planning and talent management to organizations that had not previously considered issues related to replacing key leadership and management personnel (Rothwell, 2011).

SUCCESSION PLANNING MODEL

The Succession-Planning Model process is designed to achieve two overall objectives. The first is based on an honest and objective analysis of the strength of the leadership for critical leadership positions bench. The second is analysis of each critical position pool to provide organizational intelligence to inform the strategic succession planning decisions regarding the talent pipeline. The Succession Planning model consists of four phases as shown in Figure 2 below.

Figure 2. The four step succession-planning model
Source: Bakare (2017)



Model 1: Critical Positions

Review existing positions against the current organizational structure and determine positions that are critical, based on the position competency. This may include adding, removing, and/or modifying job titles, classifications, Civil Service codes, and updating the profile of current incumbents' positions. Rothwell (2010) highlights six ways to identify key positions. He described a key position as one in which an important work process must be carried out and the results continuously accomplished. Rothwell's six ways to identify these key positions include:

- ***The consequence (uproar) resulting from a pending vacancy.*** A vacancy in a key position creates uproar because an important activity is placed on hold until the right talent is secured to make informed decisions, complete a process, or achieve results. The greater the uproar created by an existing or a pending vacancy, the greater the importance of the key position.
- ***Organization charting.*** An organization chart will provide valuable clues about the organizational process. This is expressed in terms of the inputs, transformational process, and outputs of the function relative to the organization's work.
- ***Questioning.*** Most organizations have a keen grasp of their areas of responsibilities for what they regard as a key position within a specific area by asking questions about responsibility, title, etc. Employees are not provided with clues and are allowed to furnish their own rationales.
- ***Historical evidence.*** The organization should use evidence of a past uproar as indicators of where key positions are located by scanning personnel records and by contacting former supervisors in the organization. With this information, the organization can determine which department posed the greatest problems for the organization and why these problems occurred.
- ***Network charting.*** Network charting is a technique of communication analysis used in identifying employment discrimination by allowing decision makers to seek information only from those individuals who occupy important positions. By interviewing people or by retracing the flow of communication allows one to determine which positions are key to the decision-making process in each part of the organization.
- ***Combination.*** This final approach is a combination of two or more of the preceding approaches and involves verifying information by double-checking it from multiple sources

Model II: Individual Leadership Assessment/selection

Individual assessment and leadership potential. This allows one to create a list of potential candidates and to create a battery of assessments to validate performance and potential for selection into the successor pools and to identify development actions required to address gaps related to performance and potential. This model enables your Talent Manager to evaluate the current strength of the leadership bench.

- ***Performance.*** Focuses on what an individual **has done** in the past. While this is important, it tells us less about an individual's **potential** – what they **could do** in the future and their ability to learn, grow and take on broader leadership responsibilities. The qualities that link to short term performance are easy to see and measure – and they are also easier to develop. In contrast, the qualities that determine longer term leadership potential are more difficult to see and measure, and harder to develop.

Succession Planning as a Developmental Tool for Sustainability

- ***Potential.*** Provides insight into distinctive strengths and gaps in the qualities linked to longer term potential. The objective is not to excel in all areas. Instead, it is to develop greater awareness of strengths to determine future opportunities that fit distinctive talents. The assessment will help to create or update individual development plan to close any gaps.

Model III: Talent Review Meeting

A Talent Review is a formal meeting in which senior leaders discuss talent as part of the overall succession planning process. Goals of the Talent Review include:

- Identify and assess successors in the organization using consistent, objective criteria.
- Review individual employee strengths and gaps in alignment with organizational needs.
- Assess the strength of position pools and the leadership pipeline.
- Develop employees to increase readiness to fulfill Critical Positions.
- Monitor development to ensure successors are focused on building leaders over time.

Facilitating Talent Review Discussions Meeting Ground Rules

The following steps are important in talent review discussions:

- ***Maintain confidentiality:*** Talent Review discussions are highly confidential; what gets said in the meeting should not be shared with staff outside the meeting. Failure to keep information confidential can result in significant employee relations issues and litigation.
- ***Think of the whole organization:*** When reviewing talent, consider what is best for the entire organization, not just one unit or department.
- ***Consider both current and future leadership needs:*** Use readiness ratings to distinguish between short-term opportunities for nominees and long-term career paths. Focus on constructively building talent, in other words, what can be done to strengthen the capability and readiness of each nominee to assume a leadership role?
- ***Use observable behaviors and recent, factual data points:*** Never base decisions on impressions or assumptions. Focus on behaviors and results that occurred in approximately the last two years (e.g., what was observed or the business results).
- ***Use appropriate references:*** Avoid reference to age, race, gender, family status, and personal life situations.
- ***Remember that people change:*** Remember that Talent Review discussions represent a “snapshot in time.” People change, so experience with an individual from several years ago may not be current or relevant to present discussion.
- ***Listen to all discussions:*** Avoid interruptions. Listening to all information presented is especially important for those individuals you may not know.
- ***Stay on track:*** Stick to the agenda and keep data points focused.
- ***Avoid using personal electronic devices:*** Keep electronic devices on vibrate; minimize meeting interruptions.
- ***During the Meeting - Keeping the Discussion on Track:*** When the Talent Review team discusses the professional experience of each successor, ask questions to fill in any gaps in the career devel-

opment picture. Do not take sides or challenge what is being said, but simply clarify information to enrich the discussion and capture accurate and complete documentation.

Questioning Techniques

To determine the business impact of behavior:

- *“So when you say this team leader is lacking coaching skills, is this affecting the team’s turnover, development, ability to handle performance issues, or something else?”*
- *“You have identified this nominee as having executive potential; they currently have 1 year of leadership experience... when will they be ready to assume an executive role?”*

To help the group avoid snap interpretations of performance:

- *“Do we see this performance marker as a trend? Can you tell me how long you worked with this nominee? How often has this been observed?”*

To prompt discussion of development opportunities:

- *“What areas would indicate a need for self-development? Are there any areas where the average of the successor’s and manager’s ratings are a ‘3’ or lower?”*

Model IV: Follow-up Developmental Discussion

Follow-up developmental discussions. This phase allows one to communicate succession planning recommendations and development actions to the successors. This phase also enables managers to have meaningful conversations with each employee regarding their critical position pool nominations and status, and to strengthen the current Individual Development Plan (IDP) to address specific performance, potential, and readiness gaps.

Tips for Identifying Development Recommendations

Identify development recommendations based on:

- **Assessment data** – Scores and descriptions (Leadership Potential Profile Report).
- **Knowledge of other developmental opportunities to boost performance and potential** – Internal or external leadership programs, books, coaching among others.

Evaluate and Revise Strategies

The succession plan should be reviewed and revised at least once a year by a strategic team, which includes and recruitment professionals. Data analysis incorporated into the annual review allows one to see trends in performance gap and retirement for planning purposes. It will also be important to conduct an

Succession Planning as a Developmental Tool for Sustainability

Table 1. Talent review follow-up discussions

Purpose of the Follow-up discussion...	
Purpose	It is important to follow-up with successors individually after the Talent Review Meeting to discuss development recommendations suggested and next steps. This ensures that each successor is developed in a targeted way to prepare them for larger roles in the organization
Before Follow-Up with each of the successor	<ul style="list-style-type: none"> · Review the position pools recommended for the individual successor · Review the development actions for the potential successor to close their development gaps · Review the participant's current Individual Development Plan (IDP) and identify proposed updates based on the recommended development actions · Schedule the Talent Review Follow-Up Discussion with potential successor (a 45 minute to one-hour meeting)
During Follow-Up with each of your CSP participants	<ul style="list-style-type: none"> · Share and discuss recommendations with potential successor · Collaborate to prioritize development actions and determine what support or resources are required · Remind the Potential Successor to update their IDP in the CSP system to reflect the changes discussed during the Talent Review Follow-Up Discussion · Establish a plan or define a schedule to discuss progress on the IDP activities (At least twice per year) · Encourage the employee to complete one IDP activity every six months
Conducting Pool or Program Removal Discussion With each of your CSP participants	<ul style="list-style-type: none"> · Deliver a synopsis of the meeting comments to the employee, including any areas for development mentioned in the comments · Be sensitive and cognizant of the disappointment that the employee may be feeling § Recognize and accept that the employee may be disappointed or upset § Acknowledge it and listen to the employee. Give him/her time to respond § Recognize that people process feedback differently § Some people need to talk about implications and strategies immediately § Other people need time to process the information on their own § Allow your employees to respond either way. You can ask them, "After hearing this feedback, would you like to talk about the issue further together, or do you need time alone to process this information" § If the employee is ready, talk about possible next steps

annual employee survey of the succession planning process. Rothwell described evaluation "as a process of determining how much value is being added to an activity by a program" (Rothwell, 2010, p. 10). He suggests Kirkpatrick's (2011) metric for evaluation, which requires the following four hierarchical levels of evaluation: reaction, learning, behavior, and organizational outcome or result (Rothwell, 2010, p. 10). Kim (2010) stated that the simplest way to measure the value of succession planning is to calculate key positions based on the program objectives. Kim conducted qualitative research to measure the value of succession planning and management in multi-national companies. The study sampled 12 people from seven Fortune Global 500 companies and found three themes:

- Succession planning as a core corporate strategy;
- Objectives of succession planning; and
- Position approach versus a pool-based approach to succession planning. (p.12).

Five of the seven companies described succession planning as a core corporate strategy referring to the company's perception of leadership succession and its importance for future survival and competitiveness. The study found the objectives of succession planning to be both official (written) and unofficial (verbal). The interviewees identified five objectives for succession planning; enhancing diversity, meeting future human capital needs, strengthening the internal leadership bench, filling specific positions, and accelerating leadership development within the organization.

CONCLUSION

Given the unsustainability of various retirement programs as a stand-alone succession-planning tool, there is a need to ensure sustainability in the leadership pipeline. This sustainability is achievable by preserving if not enhancing performance standards, by identifying important leadership positions, by strengthening individual advancement, and by having the right leaders prepared for the executive position at the right time. This chapter defines succession planning as a proactive approach to sustainable talent development to build a leadership pipeline that meets an organization's need-based demand for business growth and innovation (Atiku & Fields, 2019). Every organization needs to review its strategic plan and overall goal for workforce sustainability to determine if the recommended succession plan process will work for them. Practitioners can explore this as a relevant guide consisting of peer-reviewed resources on succession planning.

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KEY TERMS AND DEFINITIONS

Competency Model: A competency model is a framework is an effective method to assess, maintain, and monitor the knowledge, skills, and attributes of people within an organization for a particular job.

Key Position: This term refers to a position that is critical to a company's success and has a major influence on the operational activities of the organization based on an organizational chart.

Knowledge Management: Firms doing what is needed to get the most out of knowledge resources, including both explicit and tacit knowledge.

Knowledge Transfer: A way to access knowledge from an individual or organization and adapt to the constantly changing work environment.

Leadership Development: The expansion of a person's capacity to be effective in leadership roles and processes for organisational effectiveness.

Succession Management: A proactive and systematic process of identifying those positions considered to be too critical to be left vacant or filled by any but the best-qualified persons—and then creating a strategic plan to fill them with experienced and capable employees.

Succession Planning: A proactive attempt to ensure that leadership in an organization will be continuous by identifying how these positions will be filled as both planned and unplanned departures occur.

Chapter 5

Green Recruitment Practices

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ABSTRACT

Today, scholars, governments, organisations, and practitioners from a variety of fields such as business, politics, and public policy have begun to show much interest in environmental issues. There exist different green HRM practices, but this chapter focuses on green recruitment practices. Green recruitment is the procedure of hiring people having behaviour, knowledge, and skills of environment management systems in the organisation. An important rationale behind green recruitment practices in most organisations is to reduce recruitment costs by automating the process and also make a green difference starting at the online career site. Green recruitment practices minimise energy use and pollution associated with manufacturing, transporting, and recycling paper products. Therefore, green recruitment practices should be supported by organisational policies and government regulatory frameworks.

INTRODUCTION

In the present era, across the globe, leading researchers from many different fields like business, engineering and, politics, to name a few, have begun to show interest in environmental issues. Obaid & Alias (2015) postulate that the global quest to address climate change has resulted in increased interest in environmentalism. Research reveals that, given the dangerous effects of pollution and the excretion of toxic chemicals and waste by industries, governments, non-profit making organisations, practitioners, organisations and civil societies across the world are increasingly designing policies and legal frameworks to combat the negative effects of the industrial pollution (Shrivastava & Berger, 2010). Similarly, scholars such as Ahmad (2015) and Mwita (2018) argue that environmental conservation has become a major concern for many international and local organisations, and even for individuals. Scholars have supported the view expressed by Alias (2015) that currently the importance of environmental issues and sustainable development has captured the attention of researchers in both developing and developed na-

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tions. Furthermore, Sharma & Gupta (2014) concur with the aforementioned scholars that the growing concern for the global environment and the development of international standards for environmental management has created a need for business to adopt “green practices”.

Scholarly literature suggests that Human Resource Management (HRM) is considered an important area of management that focuses on the most vital asset of the organisation, the human resources. Sustainability has become the focus of almost all areas of study, including HRM and it is contended that Green Human Resource Management is the most important component of sustainability. According to Sudin (2011), green HRM/management is an important concept in forward-thinking businesses around the world. It is believed that understanding and increasing the scope and depth of green HRM practices, has the potential to improve the environmental performance of organisations in a more sustainable manner (Sudin, 2011). Aruljah, Opatha & Nawaratne (2015) point out that Green HRM practices are powerful tools in making organisations and their operations green. Dutta (2012) conceptualises green HRM as the utilisation of HRM policies, practices and processes to promote sustainable use of resources within business organisations and, more generally, to promote the cause of environmentalism. In addition, Mampra (2013) sees green HRM as the practices and policies of HRM for the encouragement of sustainable resource use in businesses and the promotion of environmentalism helpful for boosting the satisfaction and hence, morale of the employees within organisations. Zoogah (2011, p.19) explains green HRM as “the practice of philosophies and policies of HRM to promote ecological usage of business resources and prevent any harmful environmental effect arising with the operations of the firm.” There exist different green HRM practices in organisations. These include green recruitment, green selection, green talent management, green human resource planning, green training, etc. However, the focus of this chapter is on green recruitment.

Ahmand (2015) views green recruitment as an important component in GHRM practices It is defined as the procedure of hiring people showing behaviour, knowledge and skills of environment management systems in organisations (Obaid & Alias, 2015). According to Tang, Chen, Jiang, Paille & Jia (2018), applicants’ green awareness is a fundamental component of green recruitment; it comprises personality factors such as green consciousness, conscientiousness and the agreeableness of candidates. Kaur (2013) claims that the job requirements for fresh graduates, ready to enter the job market, change all the time. In addition to requirements such as confidence, friendliness, enthusiasm, qualifications, skills, and work experience, applicants are now required they have a high sense of awareness of the most serious and current political, social and environmental issues (Kaur, 2013). It has been argued that green recruitment measures works with companies throughout the process of defining the talents, skills, knowledge and abilities of top performers and managing the recruitment process from start to finish. (Saini & Shukla, 2016). The scholars, Bhutto & Auranzeb (2016) advocate that recruitment of highly qualified applicants who are aware of environmental issues would help in improving the environmental and organisational performance of firms. Although much has been written about green agenda and sustainability, there is still a dearth of literature on green recruitment. In addition, the review of empirical works reveals that most organisations fail to invest in green agenda, although this concept has gained popularity among researchers (Jabbar & Abid, 2015; Marhatta, 2013). This necessitates more research on green recruitment to provide empirical information make a positive impact on the field. To address the gap in existing research, this study explores the relationship between green recruitment and other variables such as organisational performance, employee engagement, employee commitment and employee loyalty in organisations. The main objective of this chapter is to provide an in-depth discussion of green recruitment practices in order to expand the scope of green HRM practices. The chapter serves as a policy

documents for organisations when developing policies for green recruitment. Furthermore, the chapter aims to develop a conceptual model of green recruitment.

CONCEPTUALISING THE TERMS RECRUITMENT AND GREEN RECRUITMENT

Before defining the term green recruitment, it is important to first understand the meaning of recruitment. Recruitment is an activity which involves the process of attracting the right talent for the right job, at the right time, the right cost and for the right position within the organisation (Diana, 2016). Effective recruitment involves the balance of the “five rights”. Thus, it involves the ability to attract the right candidate, for the right job, at the right cost, at the right time and placed in the right position. Opatha (2010) maintains that recruitment is the process of finding and attracting suitably qualified candidates to apply for specific vacancies within an organisation. To Ofori & Aryeetey (2011), recruitment involves the process of generating a pool of competent applicants to apply for employment within an organisation. From these definitions, it is clear that recruitment is all about identifying, attracting and encouraging talented people to apply for vacant posts within an organisation.

The term green recruitment has no universally accepted definition, but somehow it means recruiting without the use of paper so that it reduces the environmental effects. Wehrmeyer (1996) defines green recruitment as the process of hiring new talent with knowledge about sustainable processes, ecofriendly systems and is familiar with ways of safeguarding the sustainable environment. According to Wehrmeyer (1996), green recruitment makes sure that new applicants are aware of green practices and ecofriendly systems that support effective environmental management within the organisation. Ahmad (2015) sees green recruitment as the process of attracting and hiring candidates with knowledge, skills, approaches and behaviours that identify with environmental management systems. Green recruitment is a system, which focuses on the importance of the environment and makes it a major element within the organisation. Ahmad (2015) contends that most recruits are very enthusiastic, and to some extent, passionate about working for an environment friendly “green” company.

According to Gupta & Gupta (2013), John Sullivan, an HR Consultant and Professor of Management at the San Francisco State University’s College of Business in June 2007, coined the term green recruitment. Sullivan (2007) claims that if you want an edge in recruiting, green recruiting is the way forward. Sullivan (2007) defines green recruitment as the sharing of a firm’s unwavering commitment to the cause of the environment with the candidates whom they are trying to hire.

COMPONENTS OF GREEN RECRUITMENT

From the definitions above, a number of elements can be identified which form the basis of green recruitment. Based on the review of the various definitions, the key components of green recruitment are: it is a sustainable process, the systems are ecofriendly, the environment is sustainable, management focuses on the environment, candidates’ green awareness, green consciousness, green conscientiousness and green agreeableness. These components of green recruitment are briefly described below:

Sustainable Process

Di Fabio (2016, 2017) contends that sustainability is not only about the ecological and socio-economic environment but refers to improving the quality of the life of every human being. More specifically, the term “sustainable” refers to something that can be sustained for a period of time. Further, it implies something that can be supported, tolerated, or confirmed over time; it can be stated with certainty. Sustainable processes may be seen as environmental initiatives that promote a green agenda. Sustainable process is an approach to evaluating environmental impacts. Sustainable process can further be defined as the science of meeting the current needs of both humans and the society without compromising the ability of future generations to meet their needs (Ku-Pineda & Tan, 2006). There are three pillars of sustainability: economic, environmental and social—also known informally as profits, planet and people. In the context of green recruitment, organisations must attract talent with knowledge, experience and skills regarding sustainability or sustainable management.

Ecofriendly Systems

The concept “ecofriendly” is relatively new but has been used in different contexts. Ecofriendly simply refers to earth-friendly or not environmentally harmful. In other words, ecofriendly means green living or practices that help to protect or conserve natural resources such as trees and water. Katsikeas, Leonidou & Zeriti (2016) claim that, due to the growing ecological challenges and mounting pressures to consider the impact of human activities on the natural environment, many organisations around the world have increasingly adopted business practices to deal with these challenges. In addition, most studies (Banerjee, Iyer & Kashyap, 2003; Rueda-Manzanares, Aragón-Correa, & Sharma, 2008) of the drivers of ecofriendly product practices have focused on eco-friendly product issues at the individual project levels.

Sustainable Environment

Currently, there is ever increasing social pressure for organisations to adopt sustainable environmental methods of production to reduce environmental impacts (Christoffersen, Frampton & Granitz, 2013). However, assessing the impact of sustainable environment practices is a major challenge on several fronts. Knoepfel (2001) suggests that in order for firms to achieve environmental sustainability, they must follow sustainability practices such as innovation, good governance, meeting shareholders’ interests, effective leadership and meeting societal expectations. To achieve sustainable environment, HRM has a major role to play. HR managers must first develop policies for the awareness and promotion of a sustainable environment. In addition, HRM practices such as green recruitment and green selection need to aim at hiring candidates with knowledge of environmental sustainability.

Environmental Management Systems

In recent times, there has been an increase in interest in corporate activities or practices which aim at minimising or eliminating waste from production, use and/or disposal of a firm’s products. Existing studies have paid much attention to the need for such activities and current research attempts to identify the components that encourage or discourage such activities (Melnik, Sroufe & Calantone, 2003). Since the introduction of ISO 14001, many researchers have shifted their attention to environmental manage-

Green Recruitment Practices

ment systems (EMS). The underlying assumption is that EMS is critical to a firm's ability to reduce waste and pollution, while simultaneously improving its overall performance (Melnyk *et al.*, 2003). Managers today are not only expected to reduce lead times, improve quality, reduce costs and enhance flexibility, they are also expected to become more environmentally responsible. An EMS is a structured approach to addressing the environmental bottom line of the economic, social and environment (Ann, Zailani & Wahid, 2006).

EMS is one of the most important tools available to make organisations more environmentally proactive and efficient. It aims to encourage organisations to control and reduce their environmental impact (Emilsson & Hjelm, 2002). However, it appears that there is limited literature on how green recruitment and environmental management systems are strategically aligned to each other. Moreover, literature is not clear as to how organisations can integrate environmental management systems into green recruitment. It is important for organisations to attract and retain a workforce with knowledge, skills and the ability to implement an environmental management system. In addition, organisations must have clear policies on how environmental management systems can be enhanced they should ensure compliance with environmental policies. In addition, organisations must implement, maintain and improve their EMS.

Green Awareness

These days, there is growing concern about the way the degradation of the planet's ecosystems compel the necessity for more comprehensive and reliable environmental management. As a result, awareness from citizens and organisations of all nations of environmental issues has become more important than ever before. Lizuka (2000, p.32) sees green/environmental awareness as the pro "environmental attitude-behaviour". Awareness of environmental issues contributes to the development of an environmental consciousness of the planet's ecosystem problems and actions aimed at promoting environmental corrective actions to reverse the degradation process (Abdul-Wahab, 2008; Cetin & Nisanci, 2010; Jarraud, 2008). To be environmentally aware, there is the need for an organisation to have adequate environmental policies, environmental facilities and environmental activities. In addition, organisations need to recruit professionals who can act locally and globally to transform their organisational culture of environmental carelessness to environmental carefulness. In addition, HRM professionals have a huge task to perform to create and maintain a green HRM culture by putting in place learning and development schemes for employees to raise and maintain their environmental awareness.

Scholarly literature (Abdul-Wahab, 2008; Ziadat, 2010) suggests that green or environmental awareness requires the following: knowledge of environmental problems, knowledge of how to remediate such environmental issues and environmental actions. In addition, employee participation is required, given that green awareness leads to sustainable behaviour.

Green Consciousness

In today's business environment, HR managers across the globe are recruiting people who are aware or conscious of how the environment affects customers and the organisation. It is important to understand first the meaning of "consciousness". The term consciousness is often used in the field of psychology but can be used in different contexts. Although "consciousness" is a commonly used word, there exists no universally acceptable meaning for it. From the psychological point of view, consciousness is defined as an individual's awareness of his/her unique thoughts, memories, feelings, sensations and environ-

ment (Milner & Rugg, 2013). In other words, it is an individual's awareness of his own internal states as well as of the events going on around him. However, within the context of green recruitment, green consciousness may be defined as the extent to which individuals are aware of the effects of the environment on businesses and vice versa. It can also be defined as the discourse whereby emphasis is placed on creating change in the ways people experience and perceive the world around them. The question is, "How can HR managers recruit candidates who are conscious of the environment?" To achieve this, HR professionals must consider hiring people who have adequate knowledge and experience of ecology, ecofeminism and bioregionalism.

Green Conscientiousness

The term "conscientiousness" is one of the dimensions of the big five-personality traits which represents differences in organisation, productiveness and responsibility (Soto, 2018). By contrast, Hogan & Ones (1997) argue that conscientiousness mostly relates to impulse control and conformity. Highly conscientious persons prefer order and structure, work persistently to pursue their goals and are committed to fulfilling their duties and obligations, whereas unconscientious individuals are comfortable with disorder and less motivated to complete tasks (Soto, 2018). It has also been argued that those individuals who are highly conscientiousness have high levels of self-discipline, respect for duty and desire for achievement compared with those who are low in conscientiousness.

According to Lee & Ashton (2004) and Paunonen, (2003), basic personality traits like the Big Five have been infrequently used as predictors of individual environmental behaviours. Research shows that duty and self-discipline, which are the key attributes of conscientiousness, relate to conservation behaviours (Hilbig *et al.*, 2012; Hirsh, 2010). Thus, high conscientiousness is positively associated with environmental concerns. It is therefore important for HR managers to consider hiring employees who are conscientious because they have self-discipline, are respectful of green agenda and desire to work towards achieving environmental sustainability.

Green Agreeableness

"Agreeableness" is also an important dimension of the Big Five personality traits. It refers to the tendency of people to respect or recognise social harmony and to get along with others (McCrae & Costa, 1997). Those individuals who are high in agreeableness trust others and are cooperative and sympathetic to others. According to Hirsh (2010), agreeableness is significant and positively correlated with increased environmental concern. Gifford & Nilsson (2014) explain that there has been a wide range of research which confirms that agreeableness is a dimension of the Big Five personality traits and is strongly connected to environmental engagement. They further note that literature is inconclusive about the relationship between personality traits like neuroticism and extroversion and environmental sustainability.

GREEN RECRUITMENT PRACTICES

There exist several green recruitment practices. These practices vary from one organisation to another depending on the organisation policy. Diana (2016), in his study, identifies the following green recruitment practices:

Job Portals for Organisations

With regard to green recruitment practices, applications are often invited through online media such as e-mail, online application forms or the global talent pool (Saini & Shukla, 2016). This green recruitment method eliminates the use of paper, thereby promoting green agenda in organisations. These days, most organisations advertise jobs on their websites for a number of reasons, including the limitation of cost and waste resulting from the use of paper. Since the purpose of recruitment is to attract prospective candidates to apply for available jobs in organisations, either internally or externally, job portals can be used as a good platform to attract employees who not only have skills and knowledge about, but also an interest in environmental conservation (Saini & Shukla, 2016).

Resume Scanning

Resume scanning is an important recruitment practice. Scholarly literature suggests that in recruitment and selection practices, biographical data in the form of resumes should be considered as the most common method for making hiring decisions (Anderson, 2003; Monahan & Muchinsky, 1983). A resume is a well-structured or designed professional profile that provides detailed information about applicants' strengths, accomplishments, interests, skills, and work-related experience. Pre-screening of resumes forms a key phase in recruitment and selection processes. HR professionals or recruiters use the information presented in the resume to make important decisions about an applicant's work-related skills, abilities, motivation, personality and job fit (Furtmueller, Wilderom & Tate, 2011). Recent developments in recruitment practices show that HR professionals, recruiters and organisations are now conducting what is now known as "e-recruitment" (Furtmueller *et al.*, 2011). With the increasing use of green recruitment practices, recruiters no longer receive hard copy or paper copies of resumes.

The evaluation of applicants' resumes, also known as candidate screening, is conducted prior to job interviews in almost every recruiting process. Resume scanning is a convenient and cost-effective way of assessing education, work experience and specific skills of job applicants. Today, HR professionals are also interested in applicant knowledge and experience of environmental protection and sustainability (Frosch, Harhoff, Hoisl, Steinle & Zwick, 2015).

Telephone Interviews

Telephone interviews are conducted to minimise travel-related environmental impact. According to Block & Erskine (2012), telephone interviews are increasingly useful in making hiring discussions due to costs and other challenges associated with personal interviews. Just like face-to-face interviews, telephonic interviews can be conducted to evaluate the suitability of the applicants' experience, skills and competencies. They can also be conducted to assess whether the salary required is compatible with the position and the organisation. Telephonic interviews may be conducted with a view to narrowing down the field of the applicants to be invited for face-to-face interviews. Telephonic interviews have the advantage of allowing the employer to evaluate applicants' verbal and communication skills. Moreover, they are useful for clarifying unclear information on the applicants' resumes. However, telephonic interviews may be ineffective because of the unavailability of the applicant to answer the call. In addition, telephonic interviews may be limited in terms of time.

Online and Video Interviews

Today, technology has made the recruitment process much more streamlined, providing an improved experience for recruiters and job applicants. Online, or video, interviews are a popular method used in the recruitment and selection process. Video interviews are the quickest, easiest and most convenient way of screening job applicants, based on their competencies and capabilities. They are useful during the initial stages of screening candidates and save time for both the employer and job applicants (Chapman & Webster, 2003). According to Branine (2008), in recent times, firms are increasingly recognising the video interview as an important and useful recruitment method because it speeds up the entire recruitment and selection process. Moreover, many companies now rely on video interviews because they are far less expensive than personal interviews. Video interviews are a widely accepted method of screening job applicants because the interview arrangements take the form of a pre-recorded interview. This helps applicants to relax since they are not answering questions on the spot. Video interviews also have the potential to reduce or eliminate interview scheduling on the part of the recruitment panel or HR professionals, as they can assess the suitability of applicants at any time convenient to them. Video conferencing or interviews are especially useful when recruiting large number of applicants.

E-Recruitment

According to Wehrmeyer (1996), most firms conduct online recruitment with a view to reducing their carbon footprint. E-recruitment involves a paperless recruitment process with the aim of minimising the impact on the environment with the result that environmental protection is given more importance within the organisation (Aranganathan, 2018). E-recruitment is the process of advertising job vacancies and the formal sourcing of information about jobs online (Fred & Kinange, 2018). It includes job postings on company homepages, as well as resume uploads to central databases. The use of e-recruitment in the recruitment process is increasing due to its cost-effectiveness. Studies (Madia, 2011; Tucker, 2012) show that e-recruitment might soon be surpassed by Twitter and cell phone recruitment.

E-recruitment has several: quick and easy to access applicants' information; minimising costs (including advertising post, printing of resumes and letters), eliminating manual interventions, providing wide range of job opportunities, flexibility of use; wide geographical coverage, attracting highly qualified applicants globally and providing verified and technically good candidates (Fred & Kinange, 2018; Subhani, Joseph, Osman & Hasan, 2012). However, a typical disadvantage of e-recruitment is that it eliminates applicants from minority groups or who are geographically dispersed and may not use this medium to source job vacancies.. The screening and checking of skill mapping and authenticity of a number of resumes may be time consuming.

CHALLENGES OF GREEN RECRUITMENT PRACTICES

Globally, organisations are faced with challenges when it comes to the recruitment process. These challenges are common to every organisation. The most common challenges faced by HRM when implementing green recruitment practices are as follows:

Lack of Qualified Candidates

Shortages of skills and qualified personnel are common phenomena experienced by organisations across the globe. Although many people, especially graduates across the world, are searching for employment, the challenge is that most of them lack skills, knowledge and experience when it comes to environmental sustainability. Diana (2016) argues that some organisations do not have sufficiently qualified candidates with expert knowledge and experience of green environments or sustainability. It is therefore suggested that creating a congruent and authentic employment brand would help organisations attract and retain candidates who possess unique skills, knowledge and experience of sustainability (Diana, 2016). Hiring the most talented candidates is critical to an organisation's success. However, recruiting employees with special skills, knowledge and experience is a difficult task (Breagh, 2009).

According to Lushuku (2014), most organisations end up recruiting candidates who are not sufficiently competent. This challenge has led to instances where some employees make unnecessary complaints towards their respective organisations. To address the problem of lack of qualified candidates, it is important for HR practitioners to make decisions regarding whom to target, what message to convey to the candidates and how to conduct the recruitment process.

Additional Responsibility for HR Managers

It has been argued that green recruitment practices create extra responsibility for HR practitioners (Diana, 2016). It is important to note that these recruitment practices go beyond ordinary practices. They require HR practitioners to perform additional tasks to ensure that the right calibre of persons are recruited. Moreover, HR practitioners are required to take sole responsibility for ensuring that members of the organisation understand the benefits of green practices and for winning their trust and confidence (Diana, 2016). Green recruitment practices further create an additional responsibility for HR managers in the sense that they are expected to train employees as well as to create awareness of the need for environmental sustainability.

Employees not Seeking Serious Employment

According to Diana (2016), the inability of people to seek employment is one of the major challenges that hampers green recruitment practices. The purpose of green recruitment practices is to attract a pool of applicants from which the best applicants can be selected to occupy vacant positions. However, it appears that many people have given up the search for employment; hence, it is difficult for recruiters to hire the most competent candidates. Many people are not interested in seeking serious employment for several reasons, including a lack of job incentives, job stress, difficult supervisors or managers and a preference for leisure.

WHY GREEN RECRUITMENT

Today, many jobseekers and existing employees are much concerned about environmental challenges. The decision of job applicants to accept offers in organisations largely depends on the environmental credentials of the company and its position concerning profit, environment and well-being (Aranganathan,

2018). According to Sharma & Gupta (2015), the increasing concern for the global environment as well as the development of international standards for environmental management have forced many organisations to consider green recruitment practices in their strategic decision-making process. For instance, in the United Kingdom, environmental issues have serious implications on organisations' recruitment efforts. This is because most applicants consider the environmental performance and the reputation of firms as criteria for decision-making when applying for jobs (Aruljah, Opatha & Nawaratne, 2015). In Germany, firms such as Siemens, Mannesmann and Bayer rely on their green image and environment friendly activities to attract competent applicants (Obaid & Alias, 2015).

According to Tandberg (2007), more than 80% of existing staff in organisations prefer to work for firms with have good reputations for environmental responsibility. It is suggested that most organisations conduct green recruitment practices to attract and retain a talented workforce with knowledge and experience of environmental conservation. Another important reason why many organisations are beginning to integrate green recruitment practices into their HRM practices is to enable them to hire people who act with knowledge of and skills in environment management systems. Studies (Phillips, 2007; Stringer, 2009) show that organisations realise that green recruitment practices are an effective tactic for attracting new talent.

Diana (2016) claims that green recruitment is growing in popularity because many organisations recognise it as a cost-effective tool that facilitates better staffing appointments. An important rationale behind green recruitment practices is to reduce recruitment costs by "automating the process" (Diana, 2016, p.8). In addition, many organisations recognise that green recruitment practices can be a strategic tool to enhance their reputations.

IMPORTANCE OF GREEN RECRUITMENT PRACTICES

An organisation can derive several benefits from green recruitment practices if they are implemented successfully. The most common benefits associated with an effective green recruitment in organisations are discussed as follows:

Cost Saving

A review of empirical works, suggests that green recruitment practices help organisations to save costs. According to Diana (2016), green recruitment practices minimise the energy use and pollution associated with manufacturing, transporting and recycling paper products. Diana (2016) points out that the direct cost savings come from reducing the paperwork related to resumes, processing, advertising and onboarding. Aranganathan (2018) confirms that green recruitment practices help an organisation to reduce the costs as associated with the advertisement of positions, paperwork and transportation.

Attract and Retain Competent Employees

According to Aranganathan (2018), green recruitment processes result in attracting and retaining individuals with knowledge, skills, approaches and behaviour that correlate with environmental management systems. Since the main purpose of the recruitment process is to create a pool of applicants, green recruitment practices also have the potential of attracting well-qualified applicants for job openings. The

Green Recruitment Practices

benefit of green recruitment practices is that they can be used as a strategy to attract those applicants who not only have skills, experience and knowledge regarding environmental conservation but also have an interest in conserving the environment (Saini & Shukla, 2016). In a similar study, Renwick, Redman & Maguire (2013) postulate that green recruitment practices have the potential of attracting and hiring individuals with innovative and creative skills. Mwita (2018) concurs that green recruitment practices contribute to attracting more qualified candidates. It can therefore be concluded that organisations that practise green recruitment are likely to attract more, and more talented, applicants than those that do not practise green recruitment.

Increase Organisational Performance

Performance is a good predictor of organisational growth and progress (Gavrea, Ilies & Stegorean, 2011). The term performance has varied meanings. For instance, Tavana, Szabat & Puranam (2017) conceptualise performance as how well an organisation is doing to achieve its vision, mission and goals. This definition is closely related to a similar definition by Daft (2000), who sees performance as the ability of an organisation to accomplish its aims. By contrast, Kasturi (2006) in Amadi, (2014) argues that organisational performance is the outcome individuals contribution or inputs within the organisation. Haridas & Sivasubramanian (2016) found that green recruitment practices impact positively on firms' performances. This finding is consistent with that of Bhutto & Auranzeb (2016) that green recruitment positively influences the performance of firms. Javed & Cheema (2017), in their study, discovered that green recruitment and selection are positively associated with organisational outcomes.

Increase Efficiency

The term "efficiency" has no universal definition. Simply, efficiency may be defined as the science or art of using limited resources to produce more units of a product at a lower cost and without, or with little, wastage resulting from the production process. According to Mouzas (2006), efficiency is not an indicator of an organisation's success in the competitive market, but rather it measures the operational excellence or productivity of an organisation. Through green recruitment practices, an organisation can become very efficient through the attraction and retention of highly qualified applicants. In addition, green recruitment practices may increase the efficiency of organisations in the sense that they create an awareness of environmental conservation, which can be a useful tool for reducing waste during production processes. Aranganathan (2018) found that green recruitment ensures companies' minimum carbon footprint by cutting down on the use of paper and unnecessary travels. This results in greater efficiency.

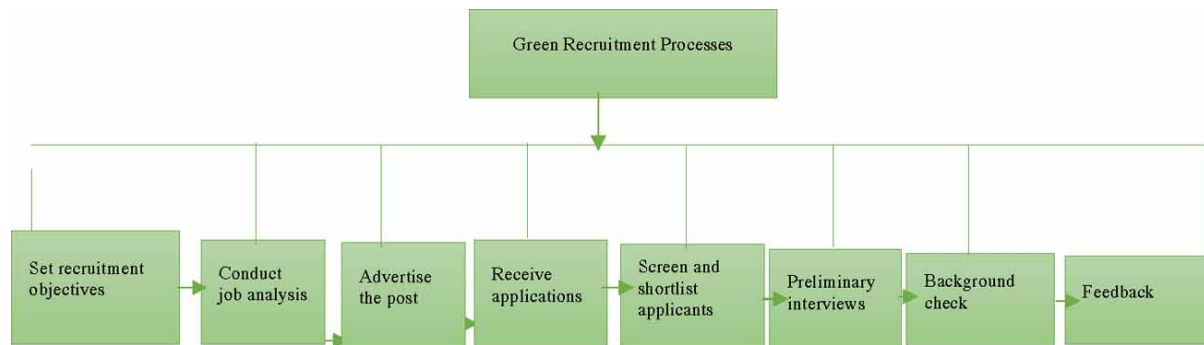
Competitive Advantage

Human resources are considered the most important asset of any organisation. According to Diana (2016), human resources are among the valuable assets that are a source of competitive advantage. Green recruitment practices are an important HR activity which contribute to an organisation's competitive advantage through the attraction and retention of competent human resources. It is argued that HRM practices, such as green recruitment, lead to a sustainable competitive advantage (Almada & Borges, 2018; Atiku & Fields, 2019). One study reveals that the competence acquired through the recruitment practices and involvement of employees in preventing pollution is a resource that cannot be acquired or

imitated by competitors (Pee & Kankanhalli, 2015). It is suggested that HRM practices, such as green recruitment practices, focus on pollution prevention strategies and have the potential to create competitive advantages in economic, environmental and social sustainability dimensions. Figure 1 summarises steps in green recruitment practices:

The green recruitment steps depicted in the Figure 1 are discussed as follows:

Figure 1. Steps in Green Recruitment Practices
Source: Gupta and Gupta (2013).



Set Recruitment Objectives

The first step in every recruitment process is to set and define the recruitment objectives. At this stage of the recruitment process, the HR professionals or recruiters must work hand-in-hand with the organisation or the employer to set clear recruitment objectives. Once the recruitment objectives have been set, it is imperative that they are clearly defined. The objectives must be SMART (specific, measurable, attainable, realistic and time bound). In addition, it is recommended that the recruitment objectives be aligned to the overall strategic goal of the organisation.

Conduct Job Analysis

Job analysis represents one of the key activities of HRM. It provides detailed information about a particular job in terms of job description and person specification. According to Sharif & Karim (2017), job analysis includes information such as job duties, responsibilities, job environment, qualification required and value of the job in the attainment of the organisational goals (Atiku, 2018). Job analysis is the systematic process of collecting and analysing information about jobs. As mentioned above, job analysis involves two important aspects of the job: job description and person specifications. Therefore, it is important for recruiters or HR managers to ensure that these two facets are clearly defined in the advertisements. The job description contains detailed information about the job in terms of the duties to be performed by the jobholder, the responsibilities of the job, its nature and any other conditions attached to it. However, the person specifications involve information about the jobholder in terms of

Green Recruitment Practices

skills, knowledge, experience, competency, qualification and other personal attributes. This information must be made clear in the advertisement of the position.

Advertisement of the Post

Advertising the post is an important step in the recruitment process. There are different methods of recruitment advertising and the organisation's recruitment policy determines the method/s of advertisement. There are two broad methods of advertisement: electronic and printed media. According to Gupta & Gupta (2013), most companies advertise in print media, such as magazines and newspapers, that applicants who are sensitive to the environment are likely to read. Within the context of green recruitment, the most appropriate advertising methods used include job posting, email, radio, television, internet, companies' websites and social media (Facebook, Twitter, LinkedIn etc.). These methods of advertisement help to reduce paperwork and environmental pollution.

Receive Applications

After applicants have completed their application forms, the organisation is in the best position to further screen the forms. Applicants should be encouraged to complete all relevant sections of the application form. Uncompleted applications should be rejected. Often, recruiters or HR professionals fail to acknowledge the receipt of the application but it is advisable that applicants should be informed of the receipt of the application form.

Screen and Shortlist Applicants

The screening and shortlisting of applicants form an important stage in the recruitment process. Having received the application, the recruiters must screen them and shortlist the applicants who meet the job specifications. Thus, only the most suitably qualified applicants should be shortlisted for the next stage of the recruitment process. The screening and shortlisting of the successful applicants should be done in a transparent and fair manner. All forms of discrimination and racism in the process should be eliminated. The criteria for screening and shortlisting of the applicants should be clear and consistent. Any act of discrimination, racism, ambiguity or inconsistency in the recruitment process may result in legal action against the company.

Preliminary Interviews

Interviews constitute a step in both the recruitment and selection processes. Once the applicants have been screened and shortlisted, the recruiters must schedule and conduct interviews. The short-listed applicants must be informed about the interviews timeously. Applicants should be informed of the interview date, time and venue. It is advisable that the interview questions be prepared in advance. There are three types of interview: structured, semi-structured and unstructured. The recruiters or HR professionals may decide to adopt one of these or to combine them. However, there must be consistency in the type of questions presented to the applicants.

Background Check/Information

Waddell (2018) argues that at times, job applicants falsify information in their application materials and the information should be checked to prevent hiring dishonest applicants. Kennedy & Benson (2016) acknowledge that employee theft is very alarming especially in small firms, and in the accounting and financial sections in larger organisations. It is argued that dishonest employees may devastate the owners of small businesses which on smaller profit margins (Kennedy & Benson, 2016). According to Levoy (2014), job applicants sometimes exaggerate qualifications to meet the job requirements. Reinhard, Scharmach & Müller (2013), advocate that HR practitioners or recruiters should conduct thorough background checks to evaluate the qualifications and trustworthiness of job applicants. A number of methods are now available for checking the background of job applicants, including using electronic media (Harrison & Budworth, 2015). It is suggested that proper procedures and methods for completing job applicant background checks improve the quality of employee and mitigate against the potential for employment-related litigation (Peterson, 2014).

Background checks should be carried out for each applicant to uncover any potential problems not revealed by testing and interviews. The recruiters should contact applicants' referees and find out more information about them. The background should include the applicants' crime history, employment history, professional experience and other personal information relevant to the post. It is also important to advise the applicants about the outcomes of the background check to ensure fairness and transparency. Any applicant who is unsatisfied with the outcome of the background check should be given the opportunity to challenge the process.

Feedback

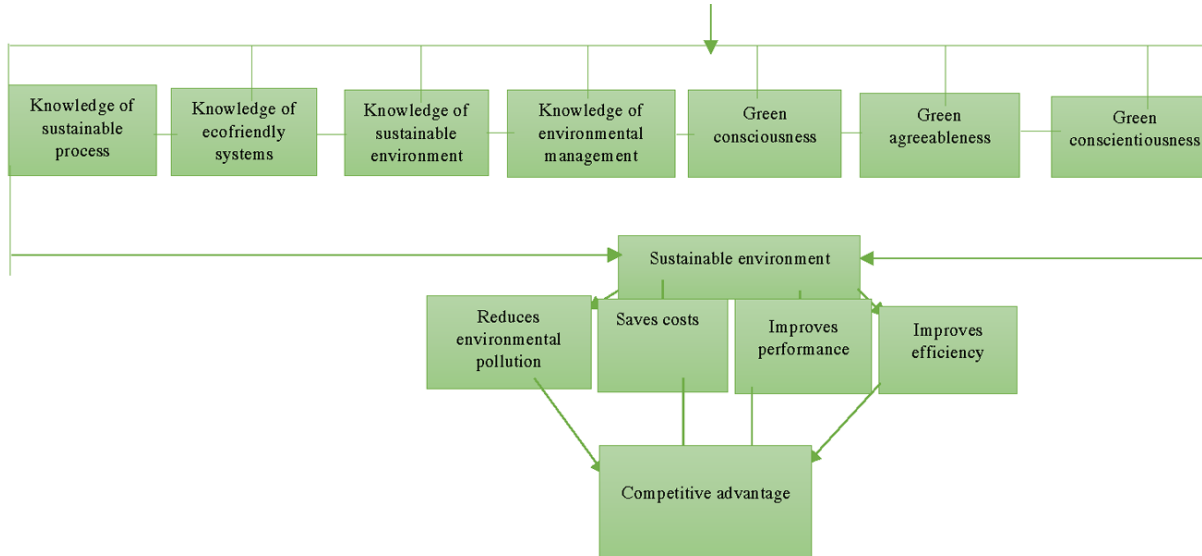
Over the last decades, market conditions, employers and applicants' behaviour have changed in several ways. It appears that there is an imbalance between the amount of effort and commitment applicants put into the process and the feedback they receive. After interviews, candidates (successful and unsuccessful) expect to receive feedback from the panel regarding the outcome; it is important for them to be informed of the outcome of the interview. Although most organisations only inform the successful applicants about the outcome, it is advisable that unsuccessful applicants should also be informed. There are several reasons why feedback is important during the recruitment process: it keeps the applicants more engaged, it reduces the risk of miscommunication, and good feedback streamlines the recruitment process and maximises the effectiveness of the recruiters.

Figure 2 is a model of green recruitment practices in an organisation. Today, many organisations are not only interested in hiring ordinary people, but they also want to hire people with knowledge of and experience in green environment or sustainability. Organisations have now added to their green recruitment processes requirements such as sustainable processes, ecofriendly systems, sustainable environments, environmental management, candidates' green awareness, green consciousness, green conscientiousness and green agreeableness (Atiku, 2020; 2019; Fields & Atiku, 2017). Effective green recruitment practices may help to create a sustainable environment, which may lead to a reduction in environmental pollution, a reduction in organisational costs and improved performance and efficiency, resulting in a competitive advantage (Atiku & Field, 2019).

Green Recruitment Practices

Figure 2. Green Recruitment Model

Source: Author's compilation



SOLUTION AND RECOMMENDATIONS

Environmental pollution, degradation and climate change are global phenomena, which attract attention of governments, organisations and the world at large. Today, scholars and practitioners from a variety of fields, including business, public and politics, governments and organisations, have shown much interest in environmental issues. In recent times, HR practitioners have also become interested in managing climate change by incorporating or integrating sustainability into their core functions like recruitment and selection practices, training and development, human resource planning, health and safety and coaching and mentoring. Green HR practices, which focus on protecting the environment and maintaining ecological balance, have also emerged (Atiku, 2020; 2019). Moreover, green HR practices like green recruitment can become an active way in which organisations achieve their various socio-economic objectives. Among green HRM practices, green recruitment practices are an important activity which help in hiring people whose behaviour, knowledge and skills in environment management systems enhance an organisation (Atiku, 2020). Since recruitment aims at either attracting prospective applicants to apply for available jobs in organisations internally or externally, this can be used as a platform to attract employees who not only have skills in and knowledge about environmental conservation but also are interested in conserving the environment.

Organisations strengthen and improve their green recruitment practices to maintain a sustainable environment. Green recruitment practices should be seen as a tool to attract candidates with a green way of thinking, who are aware of sustainable processes and are already familiar with basics like recycling, reuse, environmental conservation and creating a more logical world. Moreover, organisations should ensure that green recruitment practices are in place to help in achieve sustainability. In addition, new recruits should be trained on the need for a green sustainable environment. Green recruitment may not be effective in promoting environmental sustainability on its own; therefore, it must be integrated into

other green HRM practices. For green recruitment practices to be effectively implemented, organisations should incorporate the agenda in their policies for reference and to formalise these practices.

DIRECTIONS FOR FUTURE RESEARCH

Although green recruitment practices are effective in attracting candidates with a green way of thinking, they cannot be effective in achieving sustainability on their own. To make green recruitment practices effective, they must be supported by organisational policies and government frameworks. Therefore, a future chapter should consider how organisational policies and government frameworks could be integrated into green recruitment processes to achieve sustainability. Furthermore, to make green recruitment practices more effective in organisations, it is advisable that the recruiters themselves must have knowledge about and competency in sustainability to enable them to select similarly minded applicants. Furthermore, a future chapter should focus on the green behaviour of the recruiters or HR practitioners.

CONCLUSION

The review of scholarly research clearly shows that green recruitment practices play a pivotal role in attracting a pool of job seekers who have behave with knowledge and skills of environment management systems. From the organisational standpoint, green recruitment practices help to reduce the costs associated with paperwork, advertisement of posts and travel; they promote efficiency among staff within an organisation and they have a significant impact on a firm's performance and competitive advantage. However, green recruitment practices are adversely affected by a host of factors such as lack of organisational policy, lack of support from management and lack of qualified applicants.

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KEY TERMS AND DEFINITIONS

Ecofriendly Systems: Green living or practices that help to protect or conserve natural resources such as trees and water.

Environmental Management Systems: A structured approach to addressing the environmental bottom line such as economic, social and environment.

Green Agreeableness: The tendency of people to respect or recognise social harmony and get along with others.

Green Awareness: Green awareness is as the pro “environmental attitude-behaviour.”

Green Conscientiousness: This relates to impulse control and conformity.

Green Consciousness: The extent to which individuals are aware of the effects of the environment on businesses.

Green Recruitment Practices: The sharing of a firm’s unswerving commitment to the cause of environment with the candidates whom they are trying to hire.

Sustainable Process: The science of meeting the current needs of both humans and the society, without compromising the ability of future generations to meet their needs.

Chapter 6

Green Selection Practices

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ABSTRACT

Presently, the global world is facing numerous social, political, economic, and ecological challenges that require urgent attention and solution through innovative ideas. Among these challenges, ecological has received much interest from scholars and practitioners in recent times. Due to the adverse effects of environmental hazards, most countries and organisations have started to realise the importance of safeguarding the environment. To promote sustainability, many firms have adopted green practices in all their functional areas. Green selection is a process of hiring candidates who have green consciousness, conscientiousness, and agreeableness. The review of empirical studies reveals that the green selection process helps organisations to meet their environmental obligations by choosing candidates who have pro-environmental behaviours as well as sufficient knowledge of environmental management.

INTRODUCTION

Today, the world is confronted with numerous social, political, economic and ecological challenges that require urgent attention and solutions through innovative ideas. It is an undeniable fact that the environment has undergone drastic changes over the years and, as a result, most countries have started to realise the importance of safeguarding the environment (Aanganathan, 2018). Globally, the concept of “sustainability” is fast becoming a strategic concern for many companies, across various sectors and industries, as an approach to addressing social and ecological issues (Haanaes, 2009). Sustainability has become a “hot topic” for research and discussion in many sectors, including the world of business. According to Adams, Thornton & Sepehri (2012), apart from environmentally sound production methods, the term sustainability includes the attention that is paid to other important social and cultural goals, such as diversity, in leadership. From the above narrative, sustainability may be defined as meeting the needs of the present generation without compromising the ability of future generations to meet theirs. There

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Green Selection Practices

are three main pillars of sustainability: environmental, social and economic. However, the question is: How can organisations achieve environmental sustainability through selection practices? To address this question, various departments within organisations need to incorporate green agenda or green practices into their strategic decisions like selection.

Aranganathan (2018) claims that currently the corporate world is adopting green practices in all their functional areas as an initiative to protect the environment. He argues that HR Departments, in particular, have a major role to play in transforming organisations into green environments, since they are responsible for attracting and maintaining a workforce aware of the most serious and current issues including political, social and environmental. Renwick, Redman & Maguire (2013) explain that the integration of corporate environmental management into human resource management (HRM) is termed as green HRM. Green HRM is all the activities involved in the development, implementation and on-going maintenance of a system aimed at making employees of an organisation aware of green issues. It is the side of HRM that is concerned with transforming normal employees into green employees so as to achieve the environmental goals of the organisation and finally, to make a significant contribution to environmental sustainability (Opatha, 2013; Opatha & Anton Arulrajah, 2014). In today's labour market, there exists strong competition among firms to become green, thereby enhancing their recruiting and selection leverage to identify, attract, develop and retain a high-performing and innovative workforce that is more environmentally conscious. There are several green HRM practices that promote sustainability, but the focus of this chapter is on green selection practices.

According to Obaid & Alias (2015), green selection is the procedure of hiring or choosing job applicants who behave with knowledge of and competencies and skills in organisational environment management systems. Moreover, Saini & Shukla (2016) maintain that in green recruitment and selection, applications are invited through online mediums like e-mail, online application forms or through the global talent pool. It can be argued that when it comes to selection, some companies consider candidates' environmental concern and interest as selection criteria. Also, when interviewing job candidates or evaluating applicants for selection, environmentally related questions form part of the interview questions.

Ahmad (2015) and Deepika Karpagam (2016) point out that green selection is a systematic hiring process which focuses on the significance of the environment in making it a central element within the organisation. According to Grolleau, Mzoughi & Pekovic (2012), the skills-set of the any qualified candidates goes far beyond the basic organisational performance in their areas of performance and into their basic understanding of critical sustainability concepts such as recycling, conservation, as well as the creation of more logical and "green" world. Deepika & Karpagam (2016) explain that more and more organisations are becoming aware of the need to build their reputation as green employers to attract new talent. Deepika & Karpagam (2016) advocate that of the several green HRM practices, selection practices are central to ensuring effective environmental management. This is often achieved by making sure that recruits are made aware of and are familiar with an organisation's aim in maintaining its environmental values (Deepika & Karpagam, 2016). According to Mwita (2018), for organisations to ensure that green selection practices are effective, they need to include a green agenda in their policies to reference and formalise these practices. In addition, it is recommended that governments all over the world, through various statutory and regulatory organs, should formulate legal frameworks that will not only require processing industries and other organisations to comply with green HRM practices but will also follow-up to ensure that these practices are institutionalised. A review of scholarly literature reveals that although much has been written on sustainability and green HRM, there is a dearth of research on how green selection practices are incorporated into organisational activities such as the attraction, de-

velopment and retention of employees. This necessitates the need for more research on green selection practices to provide empirical information that will have a greater positive impact on the field of green HRM and green selection practices.

In addition, a literature review shows that there is no best green selection practice to promote sustainability or green agenda in organisations. This chapter addresses this gap in research by identifying the best green selection practices to enhance environmental sustainability. Furthermore, a review of empirical research suggests that there are limited studies which examine employment laws that regulate green selection practices and processes in organisations. The ultimate objective of this chapter is to improve organisations' sustainable environmental performance through green selection practices. Another objective of the chapter is to develop a green selection conceptual model that will assist organisations in meeting their green strategic plans or objectives.

THE CONCEPT OF GREEN SELECTION

To fully understand the meaning of green selection, it is important to first define selection practices. It must be noted that the term selection practices is different from recruitment practices. Selection involves the process of making a choice from the most qualified applicants from the pool of job seekers recruited to occupy vacant positions (Opatha, 2010). The objectives of selection practices are to identify suitably qualified applicants, establish and maintain a good image as a good employer and maintain the selection process as cost effectively as possible (Gamage, 2014). It has been argued that if a selection process is well designed and implemented, it will identify competent candidates and accurately match them to the job (Gamage, 2014).

From the above explanation, green selection can be seen as the process whereby organisations hire candidates who have personality traits such as green consciousness, conscientiousness and the agreeableness to adopt green practices (Tang, Chen, Jiang, Paille & Jia, 2018). Green selection practices play a pivotal role in achieving environmental sustainability by choosing applicants with green knowledge or eco-friendly behaviour towards the environment (Arulrajah, Opatha & Nawaratne, 2015). Green selection has further been considered as a systematic effort of ensuring environmental sustainability in the workplace by appointing talented staff who are aware of sustainability and are committed to the organisation's green goals (Renwick, Redman & Maguire, 2013).

ALIGNING GREEN SELECTION PRACTICES TO SUSTAINABILITY

Environmental issues have become a great concern for everyone, including governments, employers and scholars. For instance, environmental issues have a great influence on a firm's selection process because not only qualified candidates are required for jobs but they further need green knowledge and personality traits like green consciousness, green conscientiousness and green agreeableness. Green selection has become very important. When selecting applicants for vacant positions within an organisation, it is imperative for the selection panel to assess and judge the applicants' knowledge of sustainability. Therefore, an important issue in green selection is to identify and appoint applicants who are aware of green practices and eco-friendly systems that support effective environmental management. Naveen & Raju (2014) point out that green selection aims to achieve organisational outcomes such as an increase

Green Selection Practices

in performance. Kaur (2013) explains that the adoption of the concept of green selection as part of green HRM practices aims to appoint candidates who are eco-friendly and will help in improving the environmental and organisational performance of firms.

Bhutto & Auranzeb (2016) claim that a significant reason for green selection practices such as electronic interviews, video conferencing interview is to reduce carbon emissions, thereby aiding the conservation of the environment and, at the same time, increasing organisations' performance. Javed & Cheema (2017) concur that the adoption of green selection practices in organisations is to help in conserving the environment and attaining superior performance. Guerci, Montanari, Scapolan & Epifanio (2016) maintain that green selection practices are intended to attract and retain skilled workers capable of helping organisations to achieve their environmental goals. Jabbour & de Sousa Jabbour (2016) contend that green selection is an aspect of green HRM which aims at choosing candidates with pro-environmental attitudes. Ullah (2017) proposes that green selection aims to help organisations to meet their environmental obligations by choosing candidates who are conscious of green issues and with green self-efficacy to fill job vacancies. The purpose of green selection processes is to achieve environmental sustainability through the employment of suitably qualified job-seekers with knowledge of environmental conservation for pro-environmental behaviour on the job (Renwick, Redman & Maguire, 2013). The rationale behind green selection is to increasingly attract skilled workers (Albinger & Freeman, 2000), the number of applicants (Tognetti, Grosse-Ruyken & Wagner, 2015), and qualified candidates (Ehnert, 2009). The attractiveness of the recruitment helps in choosing talent with great green self-efficacy and a higher likelihood of exhibiting pro-environmental behaviour on the job. This goes with green selection processes.

SOUTH AFRICAN REGULATORY FRAMEWORK ON GREEN ENVIRONMENT

South Africa has promulgated several legal frameworks aimed at protecting the natural environment from destruction through the reduction of waste substances. Organisations and individuals are required to comply with the provisions of these regulatory frameworks. The legal frameworks which protect the natural environment are as follows:

Constitution of the Republic of South Africa Act 108 of 1996

The Constitution is the supreme law in South Africa from which all other regulations or laws are derived (Bedix, 2015). Chapter 2 of the Constitution contains the Bill of Rights which regulates the use of land. Section 24 (a)(b) of the Bill of Rights provides that everyone has the right to an environment that is free from harm to their health and well-being, an environment that is protected, for the benefit of present and future organisations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation and secure economically sustainable development and efficient utilisation of natural resources, while promoting justifiable socio-economic development (Constitution, 1996). From this perspective, it can be argued that the Constitution of South Africa, Act 108 of 1996 provides for a comprehensive environmental right. Kotzé (2008) postulates that this environmental right forms part of the supreme law of the country and all environmental laws. The manner in which South Africa achieves its sustainability goals will depend to a significant extent on how this

right is interpreted, applied, enforced and, ultimately, how this right guides governance efforts, both in the private and public domain (Kotzé, 2008).

Globally, there is an increasing demand for environmental impact assessment to move away from the traditional approach of delivering more sustainable outcomes. South African environmental impact assessments and legal frameworks seem to have embraced the concept of sustainability (Morrison-Saunders & Retief, 2012). The study conducted in South Africa by Morrison-Saunders & Retief (2012) reveals that, notwithstanding a strong and explicit sustainability mandate through policy and legislation, the effectiveness of environmental impact assessment practice falls far short of what is mandated. These scholars argue that further regulatory reform is not necessary to improve effectiveness, but rather a focus on changing the behaviour of individual professionals (Morrison-Saunders & Retief, 2012). A thorough review of existing literature and case laws suggests that the Constitution of South African is very effective in promoting sustainability within the South African landscape. For instance, in the case of *In Re Kranspoort Community* ('*Kranspoort*'), the Court held that the applicant community was entitled to restitution but it set some conditions meant to address certain issues that appeared to have arisen with the implementation of past restoration orders. One of these issues was environmental degradation and what the court termed 'unsustainable development'. These conditions were aimed specifically at eliminating the risk of unsustainable depletion of renewable resources on the land (Atiku, 2020; 2019; Fields & Atiku, 2017). The Court further argued that: "The effect of such depletion would be to prevent the younger members of the community from having equitable access to the restored asset [possibly referring to the land and its renewable resources] in the future" (Kotzé, 2008, p. 299).

Moreover, in the case of *BP Southern Africa (Pty) Ltd v. MEC for Agriculture, Conservation and Land Affairs* ('*BP Southern Africa*'), the applicant sought authorisation to establish a new filling station, which required an environmental impact assessment. The Department for Agriculture Conservation and Land Affairs ('the Department') refused to grant the authorisation, based on the environmental impact assessment, which meant that the development could not proceed. The Department argued that the main reason for refusing the authorisation was the proliferation of filling stations within close proximity of each other. The applicant appealed the Department's refusal. The case was referred to the Court for adjudication. The Court proceeded to analyse the importance of 'sustainable development' and confirmed that it would play a major role in determining important environmental disputes in future. The Court, as a consequence, found that there is a duty on the Department effect the environmental right and further, that the Department's mandate includes taking socio-economic considerations into account as part of its environmental responsibility (Kotzé, 2008, p.299).

National Environmental Management Act [NEMA] 107 of 1998

The NEMA was passed as an environmental framework Act upon which many Acts have been developed (Chinguno, 2011; Saidi, 2010). The Act protects South Africa against environmental hazards. The Act provides for cooperative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions to promote cooperative governance and procedures for coordinating environmental functions exercised by organs of state; and to provide for matters connected therewith (NEMA, 1998). This Act is significant in promoting sustainability in South Africa as it respects, protects, promotes and fulfils the social, economic and environmental rights of everyone and strives to meet the basic needs of previously disadvantaged communities. Moreover, the Act is effective in promoting sustainability, given the fact that it "prevents pollution and ecological degradation;

Green Selection Practices

promotes conservation; and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development” (NEMA, 1998, p.3).

Furthermore Ridi & Couzens (2010) argue that the fixing of time limits under the new regulations may be perceived as a long overdue solution to the vexed issue of delay in the completion and consideration of environmental impact assessments. As a result, the challenge of ensuring a speedy but complete and adequate process will still rest with the stakeholders. Although NEMA has some limitations, it has opened the door to a new and enhanced environmental impact assessment and management regime for South Africa.

Environment Conservation Act [ECA] 73 1989

The ECA was enacted with the sole aim of providing for the effective protection and controlled utilisation of the environment and for matters incidental thereto (Aucamp 2010). The ECA protects the environment against pollution and other environmental hazards. Chapter 5 section 21(1) of the Act states that the Minister may by notice in the Gazette identify those activities which, in his opinion, may have a substantial detrimental effect on the environment, whether in general or in respect of certain areas (ECA, 1989). Section 21(2) of the Chapter stipulates that the activities which are identified in terms of subsection (1) include: land use and transformation; water use and disposal; resource removal, including natural living resources; resource renewal; agricultural processes; industrial processes; transportation; energy generation and distribution; waste and sewage disposal; chemical treatment and recreation. Section 22(1) of Chapter 5 further provides that no person shall carry out any activity identified in terms of the section 21(1) or cause such an activity to be undertaken except by virtue of written authorisation issued by the Minister or by a competent authority or local authority or an officer, which competent authority, officer shall be designated by the Minister by notice in the Gazette (ECA, 1989).

While the ECA plays a key role in promoting environmental sustainability in South Africa, it is also effective in dealing with pollution or degradation of the environment. In reality, the relevant provisions of the ECA are limited to ordering the cessation of such activities, the prosecution of offending parties and the restoration of the environment. To complicate this matter further, the ECA does not provide for environmental offences or penalties. A careful review of literature suggests the interpretation of the requirements of the ECA and NEMA results in two different views regarding *ex post facto* environmental impact assessment authorisation in terms of activities such as land use and transformation, water use and disposal, resource removal, including natural living resources, resource renewal, agricultural processes, industrial processes, transportation, energy generation and distribution, waste and sewage disposal. In the case of *Silvermine Valley Coalition v Sybrand Van Der Spuy Boerderye and others 2002 (1) SA 478 (C)*, the view of the courts was that *ex post facto* authorisation was not allowed. From the above scenario, it can be argued that the ECA is ineffective in enforcing compliance, resulting in its inability to promote environmental sustainability.

National Water Act [NWA] 36 of 1998

Solomons (2013) postulates that although South Africa is a water-stressed country, its economic growth pathway has become water intensive. It is argued that the rapidly growing population in South Africa exerts strong pressure on the environment through the over usage of water and water pollution. Ziervogel, New, Van Garderen, Midgley, Taylor, Hamann, Stuart-Hill, Myers & Warburton (2014) contend that

South Africa's developmental needs are threatening the ecosystem. Colvin, Muruven, Lindley, Gordon & Schachtschneider (2016) estimate that the demand for water in South Africa will reach 17.7 billion cubic metres in 2030. Odendaal (2013) cautions that uncertain water security challenges, water quality and concomitant water management challenges could be a deterrent to South Africa's socio-economic growth. Donnenfeld, Crooke & Hedde (2018) point out that South Africa, as a water scarce country, needs to adopt innovative technologies that will assist in realigning supply and demand for the resource, while ensuring water security for future generations. To this end, the government commitment to the extension of water supply to every citizen and the judicious management of the resource has become a matter of urgency (Solomons, 2013). As part of the measure to address water pollution and scarcity in South Africa, the DEA was introduced.

The NWA came into effect to provide for fundamental reforms of the law relating to water resources; to repeal certain laws and to provide for matters connected therewith (Department of Environmental Affairs [DEA], 2013). The main purpose of the Act is to ensure that the country's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account, amongst other factors, promoting equitable access to water; redressing the results of past racial and gender discrimination; promoting the efficient, sustainable and beneficial use of water in the public interest; facilitating social and economic development; protecting aquatic and associated ecosystems and their biological diversity and meeting international obligations.

Part 2, sections (1) (2) (3) of the Act, outlines a series of measures intended to ensure the comprehensive protection of all water resources. "Part 4 of the Act deals with pollution prevention and in particular the situation where pollution of water bodies occurs or might occur as a result of activities on the land" (NWA, 1998:32). Part 4 further states that those who own, control, occupy and use the land in question are responsible for taking appropriate measures to prevent pollution of water resources. If such measures are not taken, the catchment management agency concerned will do whatever is deemed necessary to prevent the pollution or to remedy its effects, and to recover all reasonable costs from the person responsible for the pollution (NWA, 1998).

Research (Maphela & Cloete, 2019) shows that after several years, the implementation of the NWA is still meeting the resistance of many households, especially in Soweto, more than two decades after its adoption, because of differences in the expectations of the municipality and the residents in terms of the rights to water access and responsible usage. Muller (2017) further confirms that the NWA is ineffective in addressing sustainable water supply issues, particularly in the Western Cape, where available water is not adequate to meet the needs. Iny (2017) warns that if the current water challenge is not addressed, South Africa will be faced with a 17% water deficit and this will be progressively worsened by the changing climate by 2030. King & Reddell (2015) further maintain that, although the NWA seeks to provide a framework for ensuring the sustainable use of water resources, its application has been hindered by capacity and enforcement constraints, a legacy of water pollution and poor resource management. To aggravate this phenomenon, the challenges in effectively implementing the NWA are exacerbated by inadequate public participation in water use licensing processes. Schreiner (2013) states that despite the NWA's being hailed by the international water community as one of the most progressive pieces of water legislation in the world, 15 years after the promulgation of the act, its implementation has been only partially successful. Thus, the implementation of NWA has, in fact, been weak.

Protected Areas Act [PAA] 2003 of 2003

Chapter 1 section 11(1) of the Act states that the Minister may prescribe norms and standards for the achievement of any of the objectives of the Act, including the management and development of protected areas, as well as indicators to measure compliance with its norms and standards. The main purpose of the norms and standards is to prescribe norms and standards for the management and development of protected areas, with particular reference to the following objectives of the Act: to effect a national system of protected areas in South Africa as part of a strategy to manage and conserve its biodiversity; and to promote sustainable utilisation of protected areas for the benefit of people, in a manner that would preserve the ecological character of such areas (PAA, 2003).

Section 17 of the chapter provides general guidelines for norms and standards, namely: “to protect ecologically viable areas representative of South Africa’s biological diversity and its natural landscapes and seascapes in a system of protected areas; to preserve the ecological integrity of those areas; to conserve biodiversity in those areas; to protect areas representative of all ecosystems, habitats and species naturally occurring in South Africa; to protect South Africa’s threatened or rare species; to protect an area which is vulnerable or ecologically sensitive; to assist in ensuring the sustained supply of environmental goods and services; to provide for the sustainable use of natural and biological resources; to create or augment destinations for nature-based tourism and to rehabilitate and restore degraded ecosystems and promote the recovery of endangered and vulnerable species” (PAA, 2003:3-4).

It has been argued that the conservation objectives of PAA are to protect the biodiversity and ecological processes that are maintained by a highly threatened, traditional, silvicultural landscape. However, these goals are not being fully achieved (Arnaiz-Schmitz, Herrero-Jáuregui & Schmitz, 2018; Herrero-Jáuregui, Arnaiz-Schmitz, Herrera, Smart, Montes, Pineda & Schmitz, 2019; Schmitz, Arnaiz-Schmitz, Herrero-Jauregui, Dãaz, Matos & Pineda, 2018; Schmitz, Herrero-Jáuregui, Arnaiz-Schmitz, Sánchez, Rescia & Pineda, 2017).

Biodiversity Act 10 of 2004

According to DEAT (2010), the Biodiversity Act [BA] came into effect with the main objectives to provide for the management and conservation of South Africa’s biodiversity; the use of indigenous biological resources in a sustainable manner and the fair and equitable sharing among stakeholders of benefits arising from bioprospecting involving indigenous biological resource. Moreover, the Act effects ratified international agreements relating to biodiversity, binding on the Republic (BA, 2004). Research (Niesenbaum, 2019) shows that BA is critical for the ecosystem functions and services on which humans depend, and is directly linked to the economic, social, and environmental components of sustainability. Blicharska, Smithers, Mikusiński, Rönnbäck, Harrison, Nilsson & Sutherland (2019) confirm that the BA is effective in contributing to the attainment of Sustainable Development Goals (SDGs).

Integrated Coastal Management Act [ICMA] of 2008

The ICMA was introduced with the main aim of protecting South African coastal areas against environmental pollution as a result of industrialisation (DEA 2011a). According to DEA (2011a), the key objectives of the Act are to determine the coastal zone of the Republic; to provide, within the framework of the National Environmental Management Act, for the co-ordinated and integrated management of the

coastal zone by all spheres of government in accordance with the principles of co-operative governance; to preserve, protect, extend and enhance the status of coastal public property being held in trust by the State on behalf of all South Africans, including future generations; to secure equitable access to the opportunities and benefits of coastal public property and to effect the Republic's obligations in terms of international law regarding coastal management and the marine environment.

Chapter 2 section 15(1) of the Act imposes restrictions on the establishment of firms or industry near the coastal areas. The section (1) of the Act states that no person, owner or occupier of land adjacent to the seashore or other coastal public property capable of erosion or accretion may require any organ of state or any other person to take measures to prevent the erosion of the seashore or such other coastal public property, or of land adjacent to coastal public property, unless the erosion is caused by an intentional act or omission of that organ of state or other person. No person may construct, maintain or extend any structure, or take other measures on coastal public property to prevent or promote erosion of the seashore except as provided for in this Act (ICMA, 2008). According to Cuadrado Quesada, Klenke & Mejía-Ortíz (2018), ICMA has been globally considered a suitable approach to realising comprehensive schemes to protect or develop coastal regions.

Waste Act [WA] of 2008

WA deals with the management of waste in South Africa. Chapter 1 section 2 of the Act contains the objectives of the Act which are to protect health, well-being and the environment by providing reasonable measures; to ensure that people are aware of the impact of waste on their health, well-being and the environment; to provide for compliance with the measures set out in paragraph (a) and to give effect to section 24 of the Constitution in order to secure an environment that is not harmful to health and well-being (WA, 2008).

Chapter 4 of the Act deals with waste management measures. Section 14(1) provides that the Minister may, by notice in the Gazette, declare a waste to be a priority waste if the Minister, on reasonable grounds, believes that the waste poses a threat to health, well-being or the environment because of the quantity or composition of the waste. Moreover, section 15(1) places restrictions on manufacturing businesses. Section 15(1) states that “no person may import, manufacture, process, sell or export a priority waste or a product that is likely to result in the generation of a priority waste unless that waste or product complies with the waste management measures contemplated in section 14(4); an industrial waste management plan submitted in accordance with the requirements of a notice referred to section 28 or 29 or any other requirement in terms of this Act (WA, 2008).

Research shows that the broad, but very restrictive, protection-based definition of waste currently adopted by South African legislation is viewed by industry as an obstacle to the successful implementation of a waste hierarchy (Oelofse & Godfrey, 2008).

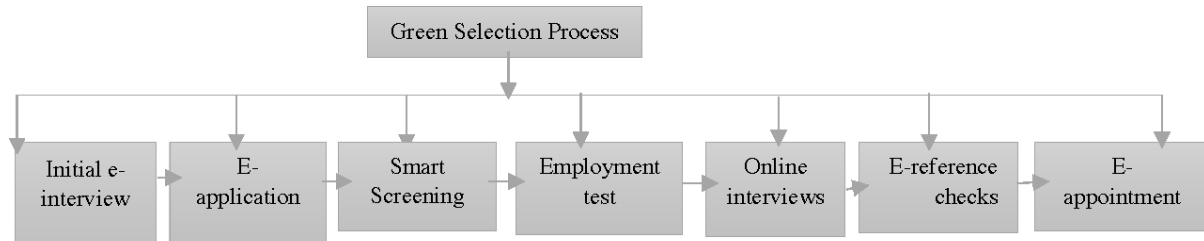
GREEN SLECTION PROCESS

There are different authors with different opinions on how selection processes should be conducted within organisations. Figure 1 depicts a typical selection process.

Green Selection Practices

Figure 1. Steps in Green Selection process

Source: Adopted from Kumar & Gupta, 2014



Initial Telephonic Interview

A preliminary interview is a general and the most basic interview conducted with the aim to eliminate applicants who are not qualified to be employed by the organisation. This process enables the organisation to concentrate on the suitably qualified candidates for the job. The preliminary interview is usually an informal interview and is very precise and short with the goal of identifying potential candidates (Haq, 2015). Preliminary interviews may be conducted by the relevant manager and a manager from another department. There are different types of interviews, but an e-interview is the most appropriate in promoting sustainability. The use of telephones as a medium for conducting interviews is becoming an increasingly popular method of screening job applicants. E-interviews promote sustainability given the fact that they reduce carbon emissions through the reduction in traveling either by air or road.

E-Application

After applicants have completed their application forms, they need to send them to the organisation or a designated office in the organisation. The application form normally contains vital information about each applicant, including bio-data, work experience, hobbies and interests. The information obtained from the completed application form is then compared to the job specifications to determine whether a potential match exists between the organisation's job requirements and the applicant's qualifications. However, the comparison is not an easy task, given the fact that applicants sometimes present themselves in an unrealistic light. There are different methods of submitting job applications, but in this study, the focus is on electronic applications. Today, many organisations have moved away from the traditional methods of completing and submitting job applications to e-applications. Many companies now require job seekers to apply for work online. The obvious reasons for the emergence of e-application include, but not limited to, cost reduction, availability and accessibility, transferability, usability and avoidance of errors, direct processing of data, low risk and good quality. E-recruiting makes it easier for job seekers to fill out applications and for employers to receive their resumes. Although there is no empirical evidence on how e-application promotes sustainability in organisations, this study suggests that to reduce environmental pollution, organisations should consider implementing electronic application systems where applicants are required to submit their applications online. The e-application process helps reduce carbon emissions associated with the process of travelling to submit the completed paper application, resumes and other hard copies of documents.

Smart Application Screening

The purpose of resume or application screening is to determine whether applicants qualify or match the job requirements. After job applicants have successfully completed their application forms and have submitted them, the applications must be screened to determine who meets the job requirements. Kapur (2018) maintains that resume screening is to narrow the field, so that recruiters can spend more time with candidates for formal interviews. Smart application screening, through the use of technologies, helps to reduce environmental pollution, thereby promoting sustainability

E-Employment Tests

The use of testing in the selection process has had periods of growth and periods of decline. Employment tests usually are standardised devices designed to measure skills, intellect, personality or other characteristics, and they yield a score, rating, description or category. According to Warnich *et al.* (2018), most selection tests are found not to be reliable nor to predict employees' job performance accurately. In the past, the primary problem with employment testing was the use of very general tests for many different jobs without serious consideration of their validity. It is advisable that the employment tests administered must be reliable and valid. Reliability refers to consistency of measurement, usually across time but also across judges. Put differently, reliability is a measure of how much error is present in a measure (Warnich *et al.*, 2018). Validity on the other hand, refers to the extent to which scores on a test or interview correspond to actual job performance.

Given the environmental concerns globally, many organisations are now considering e-employment tests as alternative to traditional employment tests. Accessing the employability of applicants online is considered to be a most effective way of enhancing sustainability in organisations. In an attempt to attract the interest of suitably qualified applicants, many organisations have been quick to explore and adopt an e-approach and have applied Internet technologies to gain competitive advantages over their rivals.

E-Interviews

The interview is considered a critical step in the selection process. The interview is a conversational encounter between the job applicants (interviewees) and the selection panel members (interviewers). Although most managers recognise the importance of selection process, they often dread the process-particularly the interviews (Warnich *et al.*, 2018). The aims of the selection interview are to determine whether the applicants have the ability to perform the job; to determine whether the applicants will be motivated to be successful and to assess whether the applicants match the needs of the organisation. To reduce environmental population and degradation, thereby promoting sustainability through the selection process, organisations should consider adopting e-interviews. Presently, the advancements in technology, coupled with increased usage, have led to telephone interviews and videoconferencing becoming more common than face-to-face encounters. Moreover, technology enables companies to recruit more applicants from further away. Although there is scarcity of research to determine the extent of e-interviews in promoting environmental sustainability, this study has made a strong case for companies to consider adopting e-interviews.

E-Reference Checks

In recent years, thoroughly checking the background of job applicants has become increasingly important. The background checking can be both an energy- saving procedure and a cost-efficient means of screening out unqualified applicants. There are different methods of checking references, but to ensure sustainability, companies should consider the use of the telephone. A telephone call is a useful method of reference checking, where applicants' previous employers are contacted via the telephone to provide useful information about the applicants. Telephone calls are time-efficient and accurate in getting complete information about applicants. Previous employers or supervisors are more likely to provide information about the applicants' backgrounds over the phone. Mostly, applicants are not informed about the outcomes of the investigation process. Although this is not normal practice, but it should be imperative for HR professionals to inform the candidates about the results of the reference checks. Applicants should be given the opportunity to challenge the results of the reference checks to ensure fairness, accuracy and transparency.

E-Appointments

Appointment is the last stage in the selection process. At this stage, the job is offered to the most suitably qualified applicant for the job requirements. Traditionally, the appointment is often made in the form of writing where the successful applicants are required to accept or reject the offer, normally in writing. Upon the acceptance of the job offer, this becomes a contract of employment, which defines the terms and considers of the employment. Today, many organisations have moved away from the traditional method of appointing job applicants towards a modernised approach called "e-appointment" (Atiku, 2018).

SELECTION LAWS IN SOUTH AFRICA

One needs to bear in mind that pre-1994, the South African workplace was characterised by racial discrimination, segregation and unfair labour practices which had a profound impact on employees, particularly black South Africans. Post-1994, several reforms took place in the South African labour market with the aim of eradicating labour inequalities and unfair labour practices by improving the working conditions of the majority of the workforce. A key reform was legislative changes. Just after the successful transition, the new cabinet approved the appointment of a ministerial legal task team to overhaul the laws governing labour relations. The team mandated to prepare a negotiating document to initiate a process of public discussion and negotiation between organised labour, on the one hand, organised business on the other hand, and other interested parties. The results of the review led to the passing of several pieces of labour laws to protect the interests of all the parties in the employment relationship.

In South Africa, there are many employment statutes or laws regulating recruitment and selection processes and practices. The purpose of these laws is to ensure that recruitment and selection processes and practices are conducted in a more transparent manner. In addition, they were introduced with the aim of eradicating unfair discrimination and labour practices in the workplace, especially when appointing candidates. The notable regulatory frameworks which regulate recruitment and selection processes and practices are the Constitution of the Republic of South Africa Act 108 of 1996, the Employment Equity Act (EEA) 55 of 1998, the Labour Relations Act (LRA) 66 of 1995 and the Public Service Act (PSA),

1994 . The Constitution is the supreme law of the land. In Chapter 2 it stipulates certain fundamental rights to be enjoyed by all South Africa citizens (Nel, Kirsten, Swanepoel, Erasmus & Jordan, 2018). Section 23 of the Constitution states that everyone has the right to fair labour practices. The Constitution provides protection against direct or indirect discrimination against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, belief, culture, language and birth.

The EEA has made a significant contribution to reshaping the socio-economic and political framework of South Africa. This is ultimately achieved through the normalisation of the workplace, as well as through the creation of a sense of equity and justice. The purpose of the Act is to achieve equity in the workplace by promoting equal opportunities and fair treatment in employment through the elimination of unfair discrimination. All forms of discrimination, whether direct or indirect, are forbidden. Direct discrimination is where, on racial grounds, a person is treated less favourably than others are, or would be, under the same or similar circumstances. Notably, section 6(2) of the EEA states that it is not unfair discrimination to: (a) take affirmative action measures consistent with the purposes of this Act; or (b) distinguish, exclude or prefer any person on the basis of an inherent requirement of a job. This clause suggests that an employer may treat an employee or job applicant from the designated groups (i.e. black people, coloured people and Asian people, women or those with disabilities) on a preferential basis. For example, where two candidates have the same qualifications/experience, the applicant from the designated group should be given preference. However, where the qualifications differ, one must define how they differ and also indicate the importance of this difference. From the above scenario, it is clear that the employer is not required to appoint people who are not 'suitably qualified' for the job. Sections 20(3), 20(4) and 20(5) explain the term 'suitably qualified' by stating that a person may be suitably qualified for a job as a result of any one, or any combination of the person's-(a) formal qualification, (b) prior learning, (c) relevant experience or (d) capacity to acquire, within a reasonable time, the ability to do the job. Section 20(4) states that when determining whether a person is suitably qualified for a job, an employer must-(i) review all the factors listed above and (ii) determine whether that person has the ability to do the job in terms of any one of, or any combination of those factors. Section 20(5) provides that in deciding under subsection (4), an employer may not unfairly discriminate against a person solely on the grounds of that person's lack of relevant experience.

The LRA has brought about fundamental revisions to employment relationships in South Africa. Its effects, in the first instance, constitutionally entrenched rights, including the right to equality. The purpose of the Act is to advance economic development, social justice, labour peace and democratisation of the workplace. Chapter II of the Act provides that no one may discriminate against an employee by forbidding an employee or a person seeking employment to be or to become a member of a trade union or workplace forum, or to give up membership of a trade union or workplace forum. The Act further states that no one may prejudice an employee or a person seeking employment for- (i) membership of a trade union or workplace forum; (ii) participating in forming a trade union or federation of trade unions or establishing a workplace forum; (iii) participating in the lawful activities of a trade union, federation of trade unions or workplace forum; (iv) refusal or failure to do something that an employer may not lawfully permit or require an employee to do (Nel *et al.*, 2018).

Chapter IV sections 9-11 of the PSA apply to appointments within the public service. Section 9 of the Act states that an executive authority may appoint any person in his or her department in accordance with this Act and in such manner and on such conditions as may be prescribed. However, section 10 stipulates that no person shall be appointed permanently, whether on probation or not, to any post in a department

Green Selection Practices

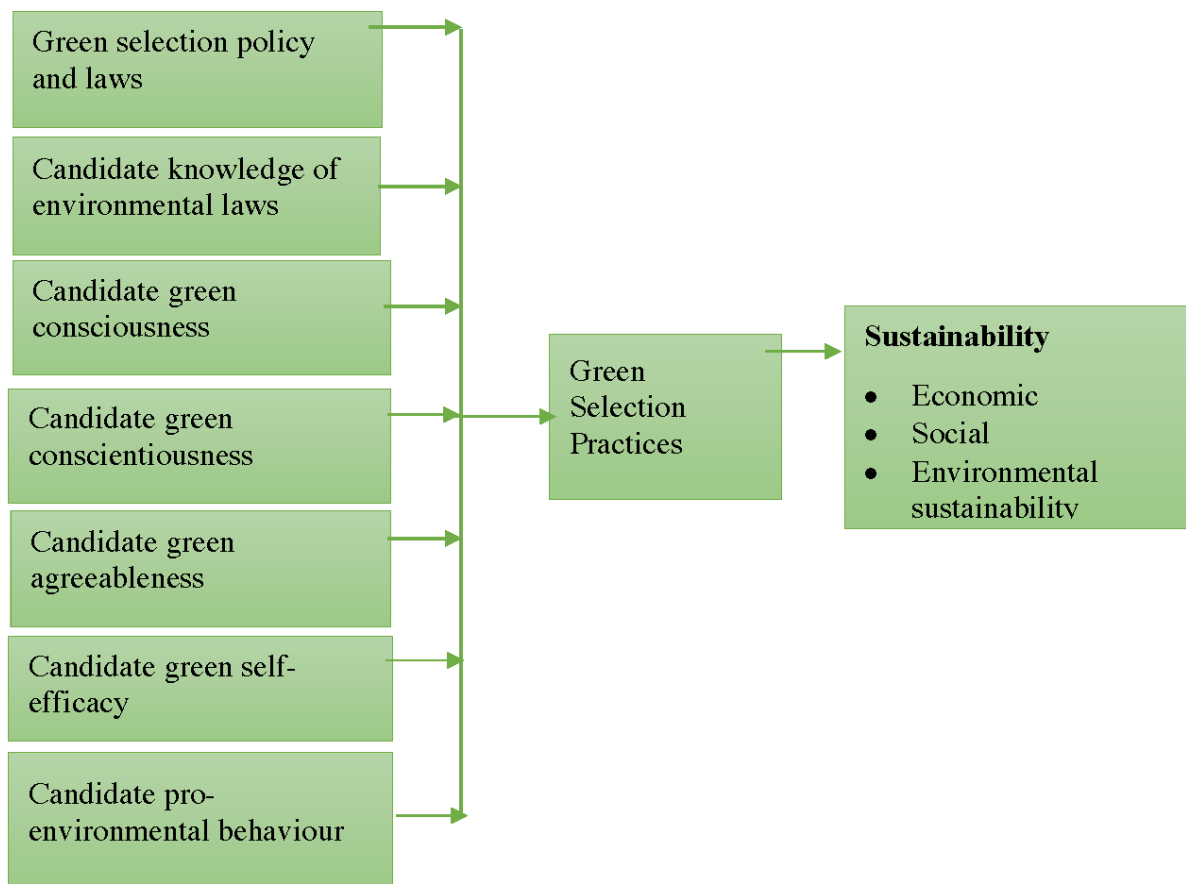
unless he or she- (i) is a South African citizen or permanent resident; and (ii) is a fit and proper person. Section 11(1) continues to say that, in making such appointments and the filling of posts in the public service, due regard shall be paid to equality and the other democratic values and principles enshrined in the Constitution. Section 11(2) requires that, when hiring in terms of section 9- (i), all persons who apply and qualify for the appointment concerned shall be considered; and (ii) the evaluation of persons shall be based on training, skills, competence, knowledge and the need to redress, in accordance with the Employment Equity Act, 1998 (Act 55 of 1998), the imbalances of the past to achieve a public service broadly representative of the South African people, including representation according to race, gender and disability.

GREEN SELECTION MODEL

Figure 2 below depicts the green selection model which can be adopted by organisations.

Figure 2. Green Selection Practice Model

Source: Author's compilation



As shown in the conceptual model on green selection practices, an effective green selection process first needs to be supported by the organisation's policy and government regulatory frameworks. Green selection policy is critical to every organisation in achieving environment sustainability. Organisations desiring to achieve sustainability through green selection processes and practices should ensure that they have a well-designed policy on green selection. Besides the green selection policy and government legal frameworks, organisations should consider the following criteria when appointing candidates: candidate knowledge of environmental laws; candidate green consciousness; candidate green conscientiousness; candidate green agreeableness, candidate green self-efficacy and candidate pro-environmental behaviour. These constructs have already been discussed in the chapter on green recruitment.

OBLIGATIONS OF EMPLOYER AND EMPLOYEES TOWARDS SUSTAINABILITY

Environmental sustainability is a shared responsibility, and as such both employers and employees have a huge role to play. Dögl & Holtbrügge (2014) postulate that corporate environmental responsibility (CER) is becoming more and more relevant as a determinant for employer attractiveness and employee commitment. The authors found that green strategy and culture, green technology and products, green recruitment and evaluation and green communication positively influence the environmental reputation companies as employers and, in turn, employee commitment. Currently, many job seekers are interested in working in sustainable environments. Moreover, employees are looking for organisations with strong environmental programmes, making these initiatives an important part of the overall employer brand. Against this background, this chapter suggests that corporate sustainability initiatives are vital in the battle for top talent. It must be noted that employee participation in green initiatives such as 'reduce, reuse, recycle' can increase employee morale, while having a positive impact on the employer's bottom line. Employers should encourage their employees to come up with innovative ideas for conservation. In addition, organisations should consider implementing paperless systems, by switching to electronic files and cloud-based collaboration options, such as Google Drive. Moreover, employers can promote sustainability by offering incentives to employees who exhibit pro-environmental behaviour. Furthermore, it is the responsibility of employers to design and implement policies on sustainability. In addition, employers should discipline employees who contravene rules relating to sustainability to serve as a deterrent to others. employers should consider training employees about environmental conservation. Training and development programs should be supported by evaluation and compensation systems that integrate the firm's sustainability goals. The assertion regarding training and development reflects a similar view of Renwick, Redman & Maguire (2013), that support training is another key intervention to demonstrate organisational support and awareness for sustainability impacts. Cantor, Morrow & Montabon (2012) concur that training assists firms attract, acquire and develop their human capital, which in turn enhances organisational capacity.

In promoting sustainability, HRM has an important role to play. HR functions such as recruitment and selection are critical to achieving success in a sustainability driven organisation. HR practitioners can use their skills, knowledge in three important ways to help organisations embed sustainability: partnering, engaging and aligning (Cohen, Taylor & Muller-Camen, 2012). In terms of partnering, the experience of several organisations suggests that HR managers can play a strategic role in helping to articulate the firm's social mission, expressing the role of the business in society beyond that of simply making a profit. HR Managers can help support alignment at an executive leadership level by contribut-

Green Selection Practices

ing stakeholder perspectives and employee interests (Cohen *et al.*, 2012). With regard to engaging, HR Managers should engage with both internal and external stakeholders in the identification of the ways in which the organisation can contribute to the social and environmental vitality of those most affected by their actions. The stakeholder engagement should include building partnerships with external organisations, such as non-profit making organisations, that can help identify and mitigate the impacts of the firm's operations. In relation to aligning, it is suggested that HR Managers possess the most important techniques, skills, knowledge and experience to support the design and implementation of a sustainability mission. The chapter suggests that all core HRM functions, practices and processes in an organisation should be aligned to the sustainable business strategy (Cohen *et al.*, 2012).

On the other hand, employees have the fiduciary duty to comply with all policies and procedures that promote sustainable business environment. Employees should develop pro-environmental behaviour towards sustainable initiatives or programmes within the organisation. In addition, employees should develop an interest in training and development programmes initiated by their employers aimed at promoting sustainability.

SOLUTION AND RECOMMENDATIONS

Sustainability is fast becoming an important concept in many fields of study, especially HRM, strategic management and marketing management, yet its conceptual meaning and relevance is often elusive. To some organisations, sustainability is restricted to environmental issues, while others see it as a social responsibility. Today, many organisations are confronted with serious environmental challenges which threaten their sustainability in the global market. On the other hand, the few organisations that have decided to incorporate environmental sustainability into their business activities are doing it haphazardly because of a lack of strategic plans or policies on sustainability. From an academic point of view, there is a dearth of research regarding how sustainability or green initiatives can be integrated into businesses practices in organisations. As discussed in this chapter, there are different green initiatives or strategies that can be pursued by firms to achieve environmental sustainability. One of such green practice is green HRM. Green HRM is made up of different branches or green practices. Among green HRM practices, green selection is seen as an effective HRM function which helps in hiring applicants with green knowledge or eco-friendly behaviour towards the environment. Organisations may gain a competitive advantage through sustainability by appointing applicants with green knowledge and behaviour towards environmental management. Further, to achieve a competitive advantage through environmental sustainability, organisations should select applicants who possess special traits like green consciousness, green conscientiousness and green agreeableness. Furthermore, organisations seeking to incorporate green initiatives into their core business functions should develop and implement green policies to enforce compliance for exceptional pro-environmental behaviour.

FUTURE AREAS OF RESEARCH

Although green selection is seen as an effective HRM strategy for choosing applicants with green knowledge or eco-friendly behaviour towards the environment, it is bound to fail if there are no policies to support it. In this regard, future chapters should examine how useful green selection policy is in promot-

ing environmental sustainability in an organisation. Furthermore, green selection in an organisation is bound to fail if it does not receive strong support from the leadership or top management. Green selection should not be seen merely as a function that should be conducted by the HR unit in the organisation. The next chapter may consider looking at the role of management with regard to green selection practices within an organisation. In addition, green selection in an organisation is likely to fail if the selection panel lacks adequate awareness or knowledge of environmental sustainability issues. A further chapter should consider knowledge, green agreeableness, green consciousness, green conscientiousness and eco-friendly behaviour/attitudes of selection panels in organisations.

CONCLUSION

Green selection is considered an important green HRM practice which plays an active role in appointing candidates who are aware of sustainability and are committed to the organisations' green goals. Green selection is critical to the success of any organisation given the fact that it increases organisational performance. An effective green selection process helps organisations to comply with government legal frameworks on environmental sustainability because the organisation is able to attract, develop and retain applicants who know about environmental management or sustainability. Green selection processes, when effectively used, enable organisations to gain a sustainable competitive advantage over their rivals (Atiku & Fields, 2019).

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KEY TERMS AND DEFINITIONS

Green Agreeableness: The tendency of people to respect or recognise social harmony and get along with others.

Green Awareness: Green awareness is pro environmental attitude-behaviour.

Green Conscientiousness: Green conscientiousness relates to impulse control and conformity.

Green Consciousness: The extent to which individuals are aware of the effects of the environment on businesses.

Green Selection: The process of hiring candidates who have personality traits such as green consciousness, conscientiousness, and agreeableness.

Selection: The process of making a choice of the most qualified applicants from the pool of job seekers recruited to occupy vacant positions.

Sustainability: Meeting the needs of the present without compromising the ability of future generations to meet theirs.

Chapter 7

Human Capital Development Strategy for a Sustainable Economy

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ABSTRACT

The current production and consumption systems have created many social and environmental issues in the global business environment. These issues are of concern for many policymakers across the globe. The essence of the policy framework on sustainability is to transform the global economy into a more sustainable economy. Human capital development is central to economic transformation. This chapter examines the human capital development strategy for a more sustainable economy. A desktop research approach was adopted to investigate the relationship between human capital development strategy and sustainable economic development. For an effective transition into a sustainable economy, this chapter upholds an alignment of human and organisational development strategy, as well as a national development plan with the economic, social, and environmental pillars of sustainability. Therefore, human capital development strategy is a holistic approach to explore the four greens (green savings, green opportunities, green talent, and green places) for a more sustainable economy.

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INTRODUCTION

The world is facing a paucity of essential resources in recent times. Human and industrial activities are causing devastating effects on the environment, with environmental issues including, deforestation, increasing carbon emission, and global warming. To curtail these problems, the policymaker at the global level has been championing the campaign for a more sustainable global economy through sustainable development goals. In 2015, one hundred and ninety-four (194) member states of the United Nations adopted the 2030 Agenda for Sustainable Development to promote a sustainable economy (Njoku & Onyegbula, 2017). A proactive way of promoting a sustainable economy by individual states is an investment in human capital development. The term human capital development can be defined as those activities geared towards improving knowledge, sharpening the skills, instilling values, and encouraging the behaviour necessary to actualise the potentials of staff of the organisation (Alo, 2000; cited in Njoku & Onyegbula, 2017). Since most of the sustainability issues worldwide are resultant effects of human and industrial activities, it therefore makes sense to offer training and/or organisational development programmes towards a sustainable economy (Atiku, 2020). The objective of such programmes is to update knowledge, and instill values (such as commitments, honesty, and loyalty) which encourage pro-environmental behaviour at all levels to actualise sustainable development goals.

Human capital development is vital to the growth and development of an economy (Noe, Hollenbeck, Gerhart & Wright, 2017). At the micro-level, human capital development is also vital to the growth and productivity of an organisation. Appropriate investment in human capital development and effective utilisation of human capital are profitable to the individual, organisation, and society at large (Nafukho, Hairston & Brooks, 2004). Strategically, human capital development interventions must be adequately aligned with sustainable development goals for effective transition into a sustainable economy. Hence, there is a need to put in place human capital development strategies for a sustainable economy.

The objective of this chapter is to examine human capital development strategies that are essential for a sustainable economy. This chapter examines the relationship between human capital development strategy and sustainable development. The unit of analysis is in relation to the pillars of sustainability, which are economic, social, and environmental sustainability. This chapter refers to human capital development as a strategy for sustainable development. The intervention will focus on the four greens such as green savings, green opportunities, green talent, and green places. Hence, the four greens are crucial for effective transition into a sustainable economy.

BACKGROUND

The emergence of a sustainable economy as a concept could be linked to the propagation of sustainable development, which focused on the idea that human societies must live and meet their needs without jeopardising the existence of future generations (Brundtland Report, 1987; cited in Du Pisani, 2006). The concept 'sustainable development' emerged due to a growing awareness of an imminent ecological crisis, which was one of the driving forces across the globe towards the end of the 20th century (Du Pisani, 2006). Accordingly, the propagation of different ideas about progress, sustainability, growth, and development could be traced to the late 1960s and early 1970s. As a concept, it became more popularised and widely used in the 1980s. In 1987, the World Commission on Environment and Development (WCED), defines sustainable development as 'development that meets the needs of the present without

compromising the ability of future generations to meet their own needs' (Brundtland Report, WCED, 1987, p.43; cited in Du Pisani, 2006). Hence, the ongoing tension between economic growth and environmental protection dates back to the 1980s. Therefore, sustainable economic growth will require societies to create conditions that allow people to have quality jobs that stimulate the economy while not harming the environment (United Nations, 2015).

Transition into a sustainable economy suggests the need for an understanding of the three pillars of sustainability, which are economic, social, and environmental sustainability by all players (Hansmann, Mieg & Frischknecht, 2012). For economic sustainability, human and industrial activities can be reshaped through human capital development or organisational development (development of green industry, and green supply chain) towards a more sustainable economy. Therefore, human capital development strategies should cut across all the pillars of sustainability for growth and development into a sustainable global economy. Human capital management specialists have roles to play in ensuring that human capital development strategies or activities not only add economic value to an organisation (business sustainability) but also make significant contributions to the other pillars of sustainability.

Social sustainability embodies the humanitarian context of business and relates to issues of poverty and income inequality, disease, especially HIV/AIDS and malaria, access to health care, clean water and sanitation, education, especially for females, and broader problems associated with the impact of globalisation on economic development (Haugh & Talwar, 2010). For example, a developmental programme on green human capital development through green consciousness and green self-efficacy can be enhanced to add value to the organisation (efficiency) and the environment by reducing the impact of business operations and human activities on nature.

Environmental sustainability considers the impact of business on the quality and quantity of natural resources, the environment, global warming, ecological concerns, waste management, reduction in energy and resource use, alternative energy production, and improved pollution and emission management (Townsend, 2008). For example, there is a need for human capital development at the individual and organisational level on the 3Rs (reduce, reuse, and recycle) principles of the circular business model as a panacea for the paucity of resources across the globe. The three pillars of sustainable development cannot be achieved if human capital development does not form an integral component of development (Chowdhury, Uddin, Uddin & Uddin, 2018). Therefore, human capital formation and organisational development strategies should be adequately aligned with the three pillars of sustainability for an effective transition into a more sustainable economy.

On account of the evolution of human capital and sustainability, Šlaus and Jacobs (2011) put it that the finite character of material resources leads to a concept of sustainability based on conservation; whereas the concept of human capital necessitates an evolutionary perspective on sustainability. Hence, the efforts in ensuring sustainable development will have to give due attention to meeting the needs of the present and indeed the next generations through human capital development (Chijioke & Amadi, 2019). Accordingly, human capital development is the process of improving human knowledge or dynamic capabilities through formal training and education, aimed at increasing employees' productivity and inspiring their resourcefulness strategically and sustainably.

METHODOLOGY

This chapter adopted a literature-based methodology by examining the ‘textual data’ and showing the place of human capital development in ensuring effective transition into a sustainable economy. A critical examination of literature was engaged in tracing the background of a sustainable economy and tackling the challenges of sustainable development, as well as highlighting the importance of management support for effective implementation of green human capital development policies. Fundamental changes in societies are attainable through human capital development. For example, most economic recoveries recorded after the Second World War came as a result of human capital formation in the areas of science and technology. It is by the foregoing that this chapter explores the human capital development strategies that are important for effective transition into a sustainable economy.

The Challenges of Sustainable Development

Tackling the challenges of a sustainable economy involves the proper identification of the global challenges to sustainable development. Some of these challenges are poverty, inequality, climate change, environmental degradation, peace, and justice (United Nations, 2015). Accordingly, the global challenges to sustainable development have been driven by a broad set of trends such as changing economic and social dynamics, advancements in technology, and trends towards environmental deterioration. Another challenge arises from unsustainable consumption and production patterns that have evolved in developed countries and have been emulated by the developing countries. For example, an attempt to increase the economic value through consumption and industrial activities often contributes to greenhouse gas emissions, leading to climate change and environmental degradation. Addressing the tension between economic growth and environmental protection has been a challenge. Therefore, the holistic approach to tackle the challenges of sustainable development is by developing a set of strategies cutting across the pillars of sustainability.

Sustainable development of societies requires integration and coordination regarding land-use issues, food security, employment creation, transportation infrastructure development, biodiversity conservation, water conservation, renewable energy sourcing, waste and recycling management, and the provision of education, health care, and housing (World Economic and Social Survey, 2013). This also reemphasised the need to put in place a holistic strategy to tackle the sustainability challenges emanating from either economic, social, or environmental aspects of an economy. Sustainability is often conceived of as an attempt to balance competing economic, environmental, and social priorities (Boyer, Peterson, Arora & Caldwell, 2016). Therefore, the efforts of all stakeholders are important in striking a balance between the competing economic and environmental or social priorities.

Dealing with the challenges to achieve sustainable development requires action plans on four greens - green savings, green opportunities, green talent, and green places (Sustainable Systems Inc., 2020c). Accordingly, green savings could be achieved by encouraging businesses, families, communities, and governments to cut costs and save energy using renewable resources and by reducing or reusing waste to solve economic, social, and environmental issues. Green opportunities could be taken advantage of by growing ‘‘Cleantech’’ companies, creating green jobs and incomes through business process improvement for the development of products and services that conserve resources and prevent pollution. Development of green talent is also necessary to supply the world’s most vital green economic resource for sustainable economic development, by investing in the fundamental assets of education, research,

and technological innovation. Green places require action plans in promoting Eco-Smart Development that features low-impact, resource-efficient design, and utilises multi-modal transportation systems, sustainable infrastructure, and green energy to protect and enhance the natural and built environment. This leads to communities and regions that are more attractive, liveable, healthy, vibrant, prosperous, and productive (Sustainable Systems Inc., 2020c).

Specifically, different industries have roles in considering the issues of sustainability across all the pillars in their choice of technology to meet the economic objectives of their companies (Brönnner, Salah & Lienkamp, 2020; Oguntoye & Evans, 2017). The products of such efforts by different industries include green factory, green supply chain, eco-industrial park, eco-design, or eco-innovation. These are essential at the industrial level for tackling the challenges to sustainable development and ensuring effective transition into a more sustainable economy.

Apart from handling the sustainability issues at the industrial level by developing green industry and green supply chain to enhance cleaner production (Oguntoye & Evans, 2017), human capital development can also be used to resolve the sustainability challenges by developing green human capital (green talent) and green employee behaviour. This chapter aims to examine the human capital development strategies that are essential in promoting sustainable development for effective transition into a more sustainable economy. The next subsection explains the importance of management support in promoting sustainability.

Importance of Management Support for Sustainability

The place of management in promoting sustainability through human capital development and sustainable business solutions for effective transition from a linear economy into a sustainable economy cannot be overemphasised. In the context of corporate sustainability management, management could be referred to as a major change agent, and without management support, sustainable development goals will continue to suffer a major setback (Kiesnere & Baumgartner, 2019). More explicitly, the authors put it that lack of human capital, financial capital, management support, and governmental incentives are major factors strongly inhibiting sustainability implementation in organisations. Therefore, the inability of management to make adequate provision for human and financial capacities and lobby government for incentives will have adverse effects on sustainability implementation and effective transition into a sustainable economy (Kiesnere & Baumgartner, 2019). The implication is that the development of the green industry and green supply chain largely depends on management support. For example, management support and investment in human capital are very important because the sustainability of human capital is interwoven with the sustainability of all other forms of capital (Šlaus & Jacobs, 2011).

Furthermore, top management commitment is the most significant factor driving corporate sustainability in the last decade (Network for Business Sustainability, 2010). According to the survey, employees are much more likely to exhibit sustainable behaviours when there is a perceived corporate commitment to green initiatives from top management. Based on the findings from a survey of 147 supervisors in a multinational company operating in two countries, the following explains why management support for sustainability is important:

- The pro-environmental behaviour from top management affects the whole business. Supervisors are more likely to exhibit sustainability behaviours if they perceive corporate commitment to sustainability.

Human Capital Development Strategy for a Sustainable Economy

- Supervisors are more likely to feel positive about their organisation if they think top management is committed to sustainability and top management can be trusted.
- The supervisor's personal environmental beliefs do not affect ecological sustainability behaviour; rather supervisors often take their tone from top management.
- Supervisors are the key link between broad-level corporate commitment to sustainability and lower-level employee engagement.
- In a large corporation where contact between top management and supervisors is limited, the top management team must show support for sustainability. This could be achieved through environmental awareness training or incentives and rewards for environmental achievements.
- Creating a corporate culture of sustainability will help supervisors feel more connected to the organisation.

APPROACHES TO HUMAN CAPITAL DEVELOPMENT

Human capital development is the process of improving employee capabilities and performance within an organisation. Human capital development could also be referred to as a vital programme for the growth and productivity of an organisation (Noe et al., 2017). A systematic approach to human capital development is essential in meeting the operational needs of modern organisations (Boon, Eckardt, Lepak & Boselie, 2018). For example, the operational needs of modern organisations in line with the United Nations Sustainable Development Goals are about sustainable business practices and solutions to ensure stakeholders' satisfaction without jeopardising the existence of future generations. For a sustainable competitive advantage, Human Resources (HR) practitioners need to consider the most appropriate human capital development programme in achieving the strategic goal and objectives of the organisation. This means that human capital development strategy, policies, processes, and practices must be strategically aligned with the business strategy.

The strategic dimension of human capital development provides the context for the development of intangible assets by setting out how such assets are expected to help the organisation accomplish its goals (Bailey, Mankin, Kelliher & Garavan, 2018). The human capital development approaches that must be strategically aligned with corporate strategy by the HR specialist include executive development programmes, professional coaching and mentoring, and company-specific programmes.

Executive Development Programmes

Executive development programmes are often developed and run by various business schools in conventional universities across the globe. Similarly, corporate universities and other specialised executive education professionals are also providing management and leadership development programmes for business executives. Such programmes are generally geared towards upskilling individual executives. For example, Harvard Business School was ranked as the world's best business school by the Financial Times in the 2020 Global MBA Ranking (Murray, 2020).

Executive development programmes focus on different continuing human capital development needs of organisations to help the executives in navigating the complex or global business environment. These include specific or functional development and business management programmes as well as courses geared to help executives make successful career transitions. Based on the need for contemporary mul-

ticultural orientations and practices for global leadership effectiveness in various sectors of the economy (Atiku, 2019), leadership development programmes have been established by business schools and corporate universities to bridge the gap. A new set of global leadership competencies and orientations such as tolerance, global psychological capital, business, and technology-savvy, among others, are inculcated through such leadership development programmes (Atiku & Fields, 2019). Leadership development programmes are often updated in line with the business needs and changing nature of business in the global business environment.

Professional Coaching and Mentoring

Professional coaching and mentoring programmes are usually an in-house arrangement for succession planning in organisations. Coaching and mentoring can be referred to as a development method to promote subordinates' development and improve their performance on the job. It is often delivered on a one-on-one basis where a mentor is mandated to inspire and empower, build commitment, increase productivity, grow talent, and promote the success of a mentee on the job (Serrat, 2017). A mentor has been defined as an individual with more experience and knowledge and is committed to providing upward career guidance and advice to a mentee (Kram, 1985, cited in Freedman, 2009).

A mentoring programme involves a more experienced and usually more senior person assisting a less experienced employee through discussion and guidance (Bailey et al., 2018). Accordingly, through mentoring, a developmental relationship is formed between a mentor and a mentee, which is focused on supporting the mentee's ability to achieve his/her career ambitions. For example, leadership development through a coaching and mentoring programme is effective in providing feedback to a mentee, and in ensuring effective transfer of learning outcomes into work outcomes.

Company-Specific Programmes

A company-specific programme is a learning experience that is tailored to the business needs of a specific industry and provides managers and executives with the innovative knowledge and skills necessary to support the organisation's vision. These programmes may also include workshops, seminars programmes designed to develop staff to meet the company's current and future challenges, and opportunities in today's dynamic fast-paced global world (International Institute for Management Development, 2019). Business schools that promote applied research and corporate universities also provide custom programmes that address specific company challenges as well as drive human capital development in a strategic, company-wide manner (International Institute for Management Development, 2019). Accordingly, these human capital development programmes are strategic and based on case studies on the HR policies, situations, and challenges of an existing company.

Company-specific programmes are highly innovative through the use of active learning techniques that include case studies, business simulations, and teamwork, among others. Corporate universities provide world-class training programmes that utilise global best business practices adapted to the local business environment. Participants on such programmes are mandated to develop complex problem-solving skills at individual and group levels. Active learning and action research are highly recommended on company-specific programmes. A company-specific programme is directed at building specific capabilities to translate strategic direction into actionable results. Therefore, human capital development

at various levels in an organisation is fundamental to the growth and development of the organisation. The next section explains the connection between human capital development and economic growth.

HUMAN CAPITAL DEVELOPMENT AND ECONOMIC GROWTH

Human capital development could be referred to as those learning activities geared towards improving knowledge, sharpening skills, instilling values, and encouraging the behaviour necessary to actualise the potentials of staff of the organisation (Njoku & Onyegbula, 2017). Human capital development is human-centred due to its major impact on human empowerment that would lead to active participation in economic activities (Chowdhury et al., 2018). Economic growth, on the other hand, includes expanding the productive capacity over time, increasing real Gross Domestic Product (GDP) over some time, or an increase in per capita income of a nation (Weil, 2014). GDP is the broadest quantitative measure of a nation's total economic activity. Empirical studies found a strong positive relationship between human capital development and economic growth (Chowdhury et al., 2018; Folaranmi & Laniran, 2014; Weil, 2014). Todaro and Smith (2009), cited in Folaranmi and Laniran (2014), noted that human capital development remains a fundamental element in the economic progress of a nation.

Investment in human capital development is generally beneficial to employees, employers (in the form of improved business performance and competitive advantage), and the wider economy at large (World Economic Forum, 2016). In essence, human capital and its management have a huge impact on an organisation's ability to create value and sustain future growth (International Integrated Reporting Council, 2016). Hence, human capital development has been recognised as one of the crucial interventions that drives business performance and economic growth (Marimuthu, Arokiasamy & Ismail, 2009). Adequate investment in human capital development and optimal utilisation of human capital has been recognised as a source of competitive advantage in many industries, thereby culminating in economic growth and development (Boon et al., 2018).

The overall aim of human capital development is to contribute to the attainment of economic growth (Marimuthu et al., 2009). Accordingly, human capital is an important tool in spurring on employees and in improving their commitment to creating an avenue for research and development, which will eventually allow the generation of new knowledge for the organisation and society at large. Alike and Aibieyi (2014) noted that the purpose of human capital development is not entirely for the benefit of the employees, but the employers and the economy at large. In a nutshell, the purpose of human capital development is basically to facilitate economic growth through investment in education and training. Similarly, Eigbiremolen and Anaduaka (2014) noted that the purpose of human capital development is ultimately to enhance the prosperity of a nation. Therefore, along with natural resources, human capital is a vital and dynamic factor of production for the sustainable competitive advantage of an organisation, as well as economic growth and development of a nation (Folaranmi & Laniran, 2014). Human capital has been an important factor in the growth of an economy (Ogunleye, Owolabi, Sanyaolu & Lawal, 2017). Hence, human capital development has been a fundamental tool in enhancing economic growth and the development of a nation. At organisational level, it can be viewed as an important tool to improve the productivity of an organisation, and specifically the individuals working within the organisation (Folaranmi & Laniran, 2014). Therefore, human capital development is essential for organisational development at the industry level and for economic growth of a nation.

Furthermore, human capital development is crucial to the socio-economic development of a nation, which includes labour, health, women affairs, and employment (Kanayo, 2013). For example, an empirical study conducted in Sudan by Arabi and Abdalla (2013) showed the impact of human capital development on economic growth. The study adopted the use of secondary data that was gathered from relevant agencies in Sudan from 1982 to 2009. The study adopted variables such as total factor productivity and school attainment. The study revealed that illiteracy was very high in Sudan and most of their employees are not skilled. The study also found that illiterate employees make use of antiquated capital equipment and old procedure of production. This implies that the marginal productivity in Sudan is very minimal and this can consequently lead to low income and saving, low investment, and poor capital formation. The study concludes that the quality of the education of a country has a significant role in economic growth and development. Given the foregoing, there is no gainsaying that human capital development is essential for the economic growth and development of a country. The next section provides insights into human capital development strategies for effective transition into a more sustainable economy, having justified the place of human capital development in enhancing sustainable economic growth.

HUMAN CAPITAL DEVELOPMENT STRATEGY FOR A SUSTAINABLE ECONOMY

The place of the human capital development strategy for a sustainable economy cannot be overemphasised, considering the unique role of human capital in economic activities and development of any nation. The human capital development strategy includes different planned programmes to build, develop, and retain employees needed to achieve organisational set goals (Oppong, 2017). Nkogbu (2015) puts it that investment in human capacity development, optimal utilisation of human capital, and exceptional talent strategy are essential in enhancing sustainable economic growth and development of a nation. It becomes imperative to note that investments in human capital development without optimum utilisation of human capital and talent retention in any company or nation will be fruitless. For example, many African countries have recorded less growth in their economies due to a lack of effective utilisation of human capital and brain drain. Sustainable economic growth and development are achievable when all individuals are fully engaged and contribute to national development efforts (Nkogbu, 2015). An essential factor in the three pillars of sustainable development is green human capital (Chowdhury et al., 2018). Therefore, an effective transition into a more sustainable economy revolves around green human capital development strategies, health, and effective talent retention strategies.

Developing a strategy on capacity building for sustainable economic development requires a clear vision and mission statement, goal, objectives, as well as environmental scanning (Bailey, 2018). There is no doubt that the United Nations had envisioned the year 2030, analysed the global business environment, and communicated the goals and objectives of sustainable economic development to its member states. Hence, the basic steps in formulating a human capacity development strategy for a sustainable economy have been completed. The human capital development strategy provides strategic direction on how to address capacity development issues in the environmental sector (Department of Environmental Affairs Republic of South Africa, 2014). This will ultimately take care of the environmental pillar of sustainable economic development. Human capital development strategy on environmental management is essential for pollution mitigation, conservation, and restoration. The rationale behind such capacity development is to provide sustainable business solutions that help enterprises in developing technologies to reduce

Human Capital Development Strategy for a Sustainable Economy

pollution or conserving and restoring natural ecologies (Chuang & Huang; 2018; Cohen-Rosenthal & Musnikow, 2017). The foregoing informs how human capital development strategy is necessary for resolving environmental issues and building the environmental pillar of sustainability.

The human capital development strategy addresses the issues affecting the economic pillar of sustainability that involves research and development in clean energy sources to maintain a high level of energy efficiency in the production process (Bloor & Wong, 2019; Gökğöz & Güvercin, 2018; Inayat & Raza, 2019). This strategy is implemented with adequate investments in capacity development, and building clean energy infrastructure for production, storage, and distribution of renewable or low carbon energy sources (Gui & MacGill, 2018; Weiss & Obi, 2016). Energy efficiency is the use of technologies that requires less amount of energy in different sectors of the economy (Tvaronavičienė, Prakapienė, Garškaitė-Milvydienė, Prakapas & Nawrot, 2018). Development of clean energy sources and ensuring energy efficiency in the production and consumption systems will reinforce the economic and environmental pillars of sustainability, which is mandatory for the sustainable economic development of any nation.

The green human capital formation could be referred to as a capacity development strategy to address the issues of social sustainability. This strategy is effective in promoting green consciousness and encouraging pro-environmental behaviour in an industrial society (Atiku, 2019). An organisation can enhance green talent (the world's most vital green economic resource) by investing in the fundamental assets of education, research, technological innovation, and modern entrepreneurial and workforce skills (Sustainable Systems Inc., 2020c). This strategy is implemented through green production practices (Song, Wang & Ma, 2019), which has to do with the establishment of green industries that create green jobs (Park & Lee, 2017) and produce products and services that are eco-friendly with less consumption of natural resources (Atiku, 2019; Sharma, 2020).

For the sustainable economic development of any nation, the government needs to provide support services to help enterprises in developing and implementing green and clean technologies through green business consulting, research and development, as well as education (Leonidou, Christodoulides, Kyrgidou & Palihawadana, 2017; Zokaei, Lovins, Wood & Hines, 2017). National strategy for a sustainable economy will include capacity developments in the areas of institutional development (green industries and jobs), resourcing, and infrastructural development (Department of Environmental Affairs Republic of South Africa, 2014). Therefore, developing knowledge-based strategies for sustainable economic development and the establishment of green industries and jobs are fundamental in achieving economic, social, and environmental sustainability.

Phases in the Implementation of Sustainable Economic Development Strategy

Sustainable Systems Inc. (2020b) recommends the following stages (five) in the implementation of a sustainable economic development strategy based on the success stories recorded in cities, regions, and states. These phases are presented below:

- **An Initial Consultation** to establish the goals and objectives and the work plan for the strategy creation process.
- **A Strategic Assessment and Opportunity Analysis** of the area-wide economy, to identify its current direction, its strengths and weaknesses, and the opportunities and challenges for sustainable economic development.

- **Design of a Sustainable Economic Development Strategy** that builds on the momentum that already exists and weaves together a set of initiatives, and to create a clear, coherent, easily understood, dynamic strategy, with a strong business model.
- **Formulation of an Implementation Plan** - including a system for monitoring progress - that addresses who is responsible for each initiative, the timeline and milestones, the costs, the sources of potential revenues, and the processes for mid-course corrections.
- Initiation and, subsequently, full implementation of the **Strategy and Implementation Plan**. Hence, the following sustainable economic development best practices should guide the implementation plan.

Sustainable Economic Development Best Practices

A sustainable economic development strategy uses the following best practices in a modified fashion to encourage (Sustainable Systems Inc., 2020a):

- Businesses that specialise in environmental products and services (the Clean Tech Industry Cluster) to start-up, locate, and grow in the city, community, or region.
- All businesses in the city or region to become more energy and resource-efficient and, at the same time, more profitable and economically productive.
- Sustainable real estate development to take place - a development that is mixed-use, energy and resource-efficient, low-impact, walkable, and transit-oriented.
- The regional financial, workforce, and educational infrastructure to understand sustainable enterprises, to encourage investment in the sustainable economy, and to prepare people to participate effectively as workers, entrepreneurs, managers, consumers, and investors.
- The regional physical infrastructure to provide energy, water, materials, buildings, and mobility in a way that is both ecologically and economically efficient.
- The city or region to be recognised as a place that is at the forefront of the sustainability revolution, becoming an economically, socially, and environmentally better place to live, work, and locate a business. The three pillars of sustainability are incorporated in these sustainable economic development best practices for effective transition into a more sustainable global economy.

THE BENEFITS OF A SUSTAINABLE ECONOMY

Sustainable development is defined as the process of meeting the developmental goals of people while satisfying the environment's ability to deliver the natural resources and services upon which society depends, now and in the future (Econation, 2018). Sustainable economic development could be referred to as a goal that features a holistic perspective that integrates economic, social, and environmental dimensions in its activities. This shows that the benefits of sustainable economic development are three fold, namely economic, social, and environmental benefits. The following are the holistic benefits of a sustainable economy:

- Efforts towards a sustainable economy help in setting the priorities right (Econation, 2018), meaning putting the planet first, people second, and production and profits in the third position. A

Human Capital Development Strategy for a Sustainable Economy

sustainable economy is unlike the traditional production and consumption systems where profit maximisation from economic activity and utility derived thereon were given higher priority.

- It leads to financial benefits through green saving by encouraging businesses, families, communities, and governments to cut costs and save energy using renewable resources and reducing or reusing waste solving economic, social, and environmental issues.
- A sustainability strategy can improve the eco-innovation performance of a business through green production practices (Song, Wang & Ma, 2019). This has to do with an establishment of a green industry that can create green jobs (Park & Lee, 2017) and produce products and services that are eco-friendly with less consumption of natural resources (Atiku, 2019; Sharma, 2020).
- It helps in setting green action plans for green places that feature low-impact, resource-efficient design and utilise multi-modal transportation systems, sustainable infrastructure, and green energy to protect and enhance the natural and built environment. This leads to communities and regions that are more attractive, liveable, healthy, vibrant, prosperous, and productive (Sustainable Systems Inc., 2020c).
- It brings about a new community design with efficient transportation infrastructure, biodiversity conservation, water conservation, renewable energy sourcing, waste and recycling management, and the provision of education, health care, and housing (World Economic and Social Survey, 2013).
- It enables the government to provide clean energy infrastructure for the production, storage, and distribution of renewable or low carbon energy sources (Gui & MacGill, 2018; Weiss & Obi, 2016).

RECOMMENDATIONS

Based on the findings from the literature reviewed in this chapter, capacity development is important for individual, organisational, community, and regional development, as well as economic growth and development of a nation. Challenges in the global business environment can be resolved through human capital development strategies for sustainable economic development. For example, research shows that most of the issues in the global business environment are caused by production and consumption systems (Blok et al., 2015). The reality is that people are involved in production and consumption systems, causing various forms of pollution, resource depletion, and other ecological issues globally. Hence, there is a need for global sensitisation on setting the priorities right for sustainable economic development (Econation, 2018), meaning putting the planet first, people second, and production and profit maximisation in the third position.

Human capital development is at the centre stage of individual or organisational development strategy and national development plans (Chowdhury et al., 2018). A plausible recommendation to overcome the challenges in the global business environment requires a holistic approach that aligns an organisational development strategy and national development plan with the three pillars of sustainability. This will promote responsible business practices for economic benefits in many industries and different sectors of an economy, without compromising the social and environmental benefits from such practices. The principles of ecological modernisation of business are essential for an effective transition into a more sustainable economy.

Green human capital development strategy could be implemented by investing in the fundamental assets of education, research, and technological innovation to meet the demands for green economic resources (green talent) for sustainable economic development. Green talents is an initiative of the German Ministry of Education and Research (BMBF) to promote innovative green ideas, which are essential in establishing green industries and creating green jobs, thereby solving ecological issues across the globe. Other developing and developed countries should follow suit by providing a platform for green talent awards to promote and reward innovative green ideas.

The government needs to provide action plans for sustainable infrastructure, and green energy to protect and enhance the natural and built environment, leading to communities and regions that are more attractive, liveable, healthy, vibrant, prosperous, and productive (Sustainable Systems Inc., 2020c). This chapter holds that government support is important for effective transition into a more sustainable economy by providing essential resources required in developing a new community with efficient transportation infrastructure, biodiversity conservation, renewable energy sourcing, waste and recycling management systems, and the provision of education, healthcare, and housing.

Finally, all stakeholders in any economic system have a role to play by ensuring that their activities in any sector of the economy add value to the economic, social, and environmental pillars of sustainability to ensure sustainable economic development. Hence, the human capital development strategy for a sustainable economy should be regarded as an intervention to reshape human and industrial activities such that they meet present needs without jeopardising the existence of future generations. This strategy must involve all players (households, business, government, and foreign sector) in economic activity (processes of production, consumption, and exchange) for effective transition into a sustainable economy.

FUTURE AREAS OF RESEARCH

This chapter conducted desktop research by examining ‘textual data’, to establish the relationship between human capital development strategy and sustainable economic development. This study shows that human capital development is at the centre stage of households and business developments, as well as economic growth and development of a nation. This chapter found that investment in green talent development is essential for the establishment of green industries and creation of green jobs, leading to a more sustainable economy. However, there is a need for an empirical study with the use of primary data to establish the cause and effect of human capital development strategy on a sustainable economy.

Research on the relationship between human capital development strategy and a sustainable economy should be conducted in developing and developed countries. A comparative study to establish the cause and effect of human capital development strategy on sustainable economic development in different countries should be conducted. Such studies will add value to the body of knowledge in the human resource management discipline, and assist the government in national manpower planning in many countries. Further research should be conducted to measure the individual country’s contributions to meeting the United Nations Sustainable Development Goals by collecting primary data from different member states.

CONCLUSION

This chapter examined the human capital development strategies that are essential in promoting sustainable economic development. The background of a sustainable economy was explained in this chapter. Acknowledging the challenges of different countries across the globe, different turnaround strategies to overcome the challenges of sustainable economic development were recommended. However, the chapter holds that an effective transition into a sustainable economy requires a holistic human capital development strategy in line with the three pillars of sustainability. This green human capital development intervention integrates organisational development and a national development plan with economic, social, and environmental sustainability. The chapter identified and explained the four greens (green savings, green opportunities, green talent, and green places) that are important in ensuring sustainable economic development of a nation.

At the national level, the government needs to provide action plans for investments in green talent development and sustainable infrastructure, and green energy to protect and enhance the natural and built environment, leading to communities and regions that are more attractive, liveable, healthy, vibrant, prosperous, and productive (Sustainable Systems Inc., 2020c). There is a need for national reorientation on setting the priorities right for sustainable economic development, which is putting the planet first, people second, and production or profit maximisation in the third position. The reorientation will promote pro-environmental behaviour from different households and businesses in the production and consumption process for an effective transition into a sustainable economy.

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Chapter 8

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

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ABSTRACT

The insurance sector consists of two branches: life and non-life. Non-life is commonly referred to as general insurance. Insurance is a service industry and client retention influences growth and business sustainability. Being a service industry managerial skills for client servicing is essential for effectiveness in the insurance sector. Further, middle-level management directly deals with clients. So, to mitigate the challenges of privatization, competition, stakeholder's expectations, etc., appropriate managerial skills for middle management is critical. A mixed-methods approach was adopted, primary data collected through questionnaires and secondary data from published records. The sample consists of middle-level managers of the general insurance industry from the Pune region, India. The analysis was done using descriptive statistics. Findings reflect that higher managerial quotient is associated with client servicing quotient.

INTRODUCTION

A healthy and developing insurance sector is of vital importance to every modern economy. First as it encourages the savings habit, second because it provides a safety net to rural and urban enterprises and productive individuals. Further, it generates long-term funds for infrastructure development. The insurance industry plays a significant role in India's modern economy. Insurance is necessary to protect enterprises against risks such as fire and natural disasters. Individuals require insurance services in such areas as health care, life, property and pension (Sinha, 2007). Development of insurance is therefore necessary to support continued economic transformation. Social security and pension reforms also benefit from a mature insurance industry. Table 1 gives the development events chronology of the insurance sector in India.

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Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

Table 1. Development Chronology of Insurance Sector in India

Year	Event
1912	The Indian Life Insurance Company Act
1938	The Insurance Act: Comprehensive Act to regulate insurance business in India
1956	Nationalization of life insurance business in India
1972	Nationalization of general insurance business in India
1993	Setting up of Malhotra Committee
1994	Recommendations of Malhotra Committee
1995	Setting up of Mukherjee Committee
1996	Setting up of (interim) Insurance Regulatory Authority (IRA) Recommendations of IRA
1997	Mukherjee Committee Report submitted but not made public
1997	The Government gives greater autonomy to LIC, GIC and its subsidiaries with regard to the restructuring of boards and flexibility in investment norms aimed at channeling funds to the infrastructure sector
1998	The cabinet decides to allow 40% foreign equity in private insurance companies -26% to foreign companies and 14% to NRI;s OCB 's and FII's
1999	The Standing Committee headed by Murali Deora decides that foreign equity in private insurance should be limited to 26%. The IRA bill is renamed the Insurance Regulatory and Development Authority (IRDA) Bill
1999	Cabinet clears IRDA Bill
2000	President gives Assent to the IRDA Bill

Source: Banga, (2011).

Insurance sector was opened for private participation with the enactment of the Insurance Regulatory and Development Authority Act, 1999. Since opening up, participants in the industry has gone up from seven insurers (including Life Insurance Corporation of India, four public sector general insurers, one specialized insurer and General Insurance Corporation as the national re-insurer) in the year 2000 to 49 insurers as on 30th September, 2011 operating in the life, non-life and re-insurance segments (including specialized insurers, viz., Export Credit Guarantee Corporation and Agricultural Insurance Company).

Insurance is service industry. Insurance is having two branches. 1. Life Insurance 2. Non- life insurance (General Insurance) General Insurance Industry is having typical type of contract with clients. They are selling only one year policies except some policies to the clients. Prior to 2001 there was monopoly of the four companies namely:

- The New India Assurance Co. Ltd.,
- The Oriental Insurance Co. Ltd.
- The National Insurance Co. Ltd.
- The United India Insurance Co. Ltd

These were dealing with general insurance that is other than life and are Public Sector companies. But in the year 1999 due to GATT (General Agreement on Trade and Services) and due to continuous international pressure the Government of India passed an IRDA Act 1999 and opened the Insurance sector to private players also. The clients are exposed to foreign market due to privatization. Previously they were buying Public Sector Company framed policies. Now the policies are framed as per the needs

of clients. IRDA has given guidelines and as per guidelines each company can frame policies in General Insurance Market. Rating structure was also detariffed by IRDA. Previously TAC (Tariff Advisory Committee) was deciding all tariff rates in respect of Fire, Engineering, Marine branches of General Insurance. Now the tariffs are no more and each company has a right to accept the premium with different rates. Therefore, clients are having wider choice for purchasing product with minimum premium. The insurance companies are also concentrating on the profitability of their business by selling products at lower rates. The profitability of general insurance company = premium – (Incurred claims commission/brokerage paid Management expenses). For doing profit or for minimizing losses, old clients are retained properly as well as the new clients are introduced properly on the books of company. In the said process, the middle level managers play crucial role in the industry, as they are front line managers who are directly or indirectly servicing clients' in general insurance industry.

The client servicing is having four dimensions in general insurance sector.

- Procurement of business:- Retention as well as for introduction of new business
- Prudent Underwriting: proper wording of policies, drafting of policies as per the requirement of client, proper interpretation of the wording of insurance terms and conditions in simple language
- Settlement of claims: This comes after sale service. If the client is satisfied with the claim settlement he will not shift his business to any other company.
- Redressal of grievances: immediate and proper attention towards clients' complaint is very important.

Today as it stands, due to privatization and these companies being public sector organizations, the General Insurance Industry is having following challenges.

- Competition from Privatizing
- Heavy Marketing Cost
- Unethical Practices
- Client unfriendly attitude
- Volumes as yardstick of success and not quality
- Stakeholders pressure to perform and improve
- Distribution channel unfriendly
- Lack of value driven leadership
- Outdated Organizational structure especially in respect of Public Sector Undertakings.

To face these challenges the managerial skills are very important, hence the objective of this study is to develop managerial quotient on the basis of managerial skills and client servicing dimensions. Thus, adopting a mixed-methods approach with field survey, primary data collected through questionnaires and secondary data from published resources and analysis done by means of descriptive statistics, the objective of this chapter is to develop managerial quotient for sustainable client servicing in the insurance sector. The sample consists of middle-level managers of the general insurance industry from the Pune region, India. Findings reflect that when the managerial quotient is higher the client servicing quotient is better. In addition, a sustainable client servicing quotient model is also developed.

Insurance is a contract between proposer and insurance company. Proposer is a person who requires the insurance coverage for his property (other than life) from insurance company in case of mishap.

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

Insurance company charges the premium as consideration of contract for coverage of the property to be insured as per proposer's requirements. After consent of both the parties in contract the policy is issued to the proposer. Insurance policy is an evidence of contract. Insurance policy is stamped and legal document. After issuance of policy the proposer becomes client of the insurance company. Clients are main asset of general insurance industry. Clients' should be treated very well as per their expectations. Main income of general insurance industry is premium. The profitability of general insurance industry = Premium – (Incurred claims + commission paid to agents/brokerage paid to brokers+ Management expenses incurred). As the premium is main income of general insurance industry the management has to concentrate on retention of premium as well as increase the premium every year. In addition, the specialized insurers Export Credit Guarantee Corporation and Agriculture Insurance Company (AIC) are offering credit guarantee and crop insurance respectively. AIC, which was initially offering coverage under the National Agriculture Insurance Scheme (NAIS), has now started providing crop insurance cover on commercial lines as well. It has introduced several innovative products such as weather insurance and specific crop related products.

General Insurance Corporation

General Insurance Corporation of India (GIC Re) was approved as "Indian Reinsurer" on 3rd November, 2000. As an Indian reinsurer GIC has been giving reinsurance support to four public sector & other private general insurance companies. It continues its role as reinsurance Company, facilitates managing Marine Hull Pool & Terrorism Pool on behalf of Indian Insurance Industry. The Reinsurance programme of GIC aims at optimizing the retention within the country and developing adequate reinsurance capacity. The GIC has its presence in foreign reinsurance business through branch office in Dubai and London and representative office in Moscow. Apart from reinsurance business, GIC continues to participate in the share capital of Kenindia Assurance Company Ltd. (Kenya), India International Insurance Pvt. Ltd., Singapore and LIC (Mauritius) Offshore Ltd., a joint venture company promoted by LIC of India in Mauritius (Sinha, 2007, Chakraborty, 2018).

Public Sector General Insurance Companies

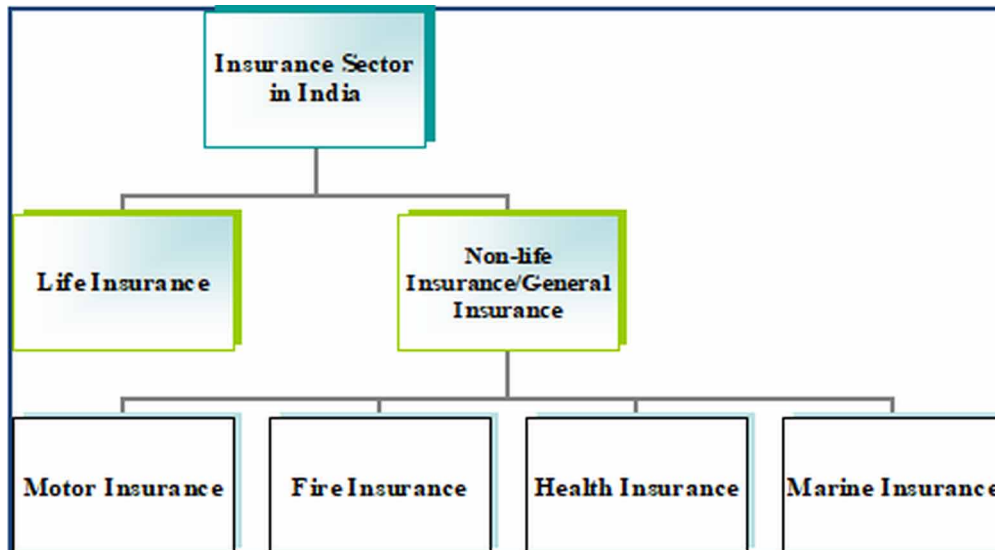
Johnson, (2015), Palande, Shah, Lunavat (2004), and Sinha, (2007) discuss the changing policies and emerging opportunities and focused on changes in Indian insurance sector. The General insurance industry was nationalized in 1972 and 107 insurers were amalgamated and grouped into four Companies - National Insurance Co. Ltd., The New India Assurance Co. Ltd., The Oriental Insurance Co. Ltd. and United India Insurance Co. Ltd. The four entities were set up as subsidiaries of General Insurance Corporation of India (GIC) which also played the role of Re-insurer. As a part of liberalization process, with the enactment of IRDA Act, 1999, it became necessary to nominate Indian Re-Insurer under Insurance Act, 1938. GIC was, therefore, notified as Indian Re-Insurer on 3rd November, 2000 under Section 35 of GIBNA Act, 1972. Through enactment of the General Insurance Business (Nationalization) Amendment Act, 2002, the four PSGICs were delinked from GIC and the holdings of GIC in the four Public Sector General Insurance Companies (PSGICs) were transferred to the Government. Presently, all the four Public Sector General Insurance Companies are Board run Companies and enjoy operational and functional autonomy. Before 2001 there was monopoly of general insurance companies' in India for general insurance market. All the 4 companies are Public Sector companies.

Private Sector General Insurance Companies.

In the year 1999, due to GATT (General Agreement on Trade and Services) and continuous international pressure the Govt. of India passed an IRDA Act 1999 and opened the insurance sector to private players also. Now there are Public Sector general insurance companies and Private Sector general insurance companies in Indian general insurance industry. Before 2001 above public sector companies were controlled by General Insurance Corporation. After 2001 each public sector company is treated as separate entity and General Insurance Corporation is working as reinsurer. Public Sector Company is having 51% share of Govt. of India. Private sector is having collaboration of Indian company with foreign company. Private sector is having 26% share from foreign insurance companies and remaining share is from Indian company. Middle level management is having important role in general insurance industry as it directly deals with clients of insurance industry. Middle level management is mediator between clients and top level management. Middle level management conveys the specific and important aspects received through client and which leads to top level management to take specific decisions (Sinha, 2009). Effective client servicing managerial skills are required and study focuses on these skills. Today there are more than 25 general insurance companies in India out of which 4 companies are public sector undertakings (Sinha, 2007). Figure 1 gives the classification of insurance industry in India.

Figure 1. Classification of Indian Insurance Industry

Source: Self-Developed



Structure and Working of General Insurance Industry

Each company is having Head Office which controls Regional Offices. Regional offices control Divisional Offices. Divisional offices are performing two activities. They are controlling the various branches allotted to them as well as they are accounting the premium on their books, these Divisional offices are called

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

as Composite Divisional Offices. These offices are controlling marketing staff as well as administrative staff directly. The Branch offices are working under Divisional Offices and controlling marketing staff as well as administrative staff directly.

Pune Region

The geographical jurisdiction of general insurance industry Pune region consists of Pune, Pimpri-Chinchwad, Satara, Sangli, Kolhapur, Ichalkaranji, Nasik and Ahmednagar for all companies. Pune region is one of the regions in Western Zone. The regions are divided into 4 Zones as east, west, north and south.

LITERATURE REVIEW

The concept nor the development or application of managerial quotient concept prevails in insurance industry. Private companies like Infosys mapped managerial quotient from early 2000 by embarking on leadership programmes which entailed the first step of mapping the managerial quotient (MMQ). MMQ is a technique that is aimed at measuring the extent to which executives or managers have successfully internalized the managerial capabilities within themselves (Hossein, Hojjat, Zeinab, Esmail & Negar, 2016). These employees are chosen from across the organizational spectrum and are classified as strategic, operational and business leaders (Viriyaividhayavongs & Jiamsuchon, 2001). Professionals are considered as potential executives or managers not merely because they could internalize the competencies but more importantly because they are able to have an excellent power to influence in any of the core fundamentals of business dynamics - that being strategy, operation and overall business efficiency.

Managerial Quotient (MQ) – It is quantitative managerial assessment tool which can be used to relatively assess the managerial skills and grading the evaluation against set standards (Hossein, Hojjat, Zeinab, Esmail & Negar, 2016). The structure of managerial quotient tool can be indicated by the following:

Key Performance Indicators (KPIs) - Managerial skills and testing of these key performance indicators like various managerial skills with four dimensions of client servicing i.e. Procurement of business, prudent underwriting, and settlement of claims and Redressal of grievances has to be done. This study used measuring scales to facilitate the quantitative aspect and to arrive at conclusions.

Developing means making larger or more advanced than prevailing system. Each and every general insurance company is having own system for appraising middle level management. Each company is rating middle level management differently. The study focuses on making larger or more advanced technique than prevailing system in each general insurance company.

For making larger and advanced model 16 managerial skills with their description considered are given in Table 2.

CLIENT SERVICING

The greatest proponent and practitioner of human aspects in the political system in recent times, Mahatma Gandhi, outlined the following message: “A customer is the most important visitor on our premises. He is not dependent on us. We are dependent on him. Customer is not an interruption to the work. He is the

Table 2. Managerial skills

Serial Number	Managerial Skill	Authors	Description
1.	Communication	Redfield 1954; Koontz & O'donnell 1972; Newman and Sumner 1965; Allen 1958; Drucker 1970; Brech 1972; Baporikar, 2017	Communication is the broad field of human interchange of facts and opinions, and has nothing to do with technologies of telephone, telegraphs, radio and the like. For managerial functions, communication is a way that one organization member shares meaning and understanding with another. In the management process communication is an exchange of facts ideas opinion or emotions by two or more persons. It is also the sum of all the things one person does when he wants to create understanding in the mind of another and is a tool of supervision which is in constant use and must always be in good condition. Manger has specific tool – information and he needs to not only to handle people, but motivate, guide and organizes people to do their own work. For this the only tool is communication he it written or oral in any form and channels/ methods.
2.	Conflict Resolution	Blum & James 1997; Segal and Smith, 2013; Baporikar, 2017	Resolving conflict is a normal part of healthy relationships. After all, two people can't be expected to agree on everything at all times. Learning how to deal with conflict – rather than avoiding it – is crucial. When conflict is mismanaged, it harms the relationship, but when handled in a respectful, positive way, conflict provides an opportunity for growth. These skills make personal and professional relationships strong and growing. When you can recognize the legitimacy of conflicting needs and are willing to examine them compassionately, it opens ways for creative problem solving, team building, and improved relationships.
3.	Developing Staff	Koontz, & O'donnell, 1972; Baporikar, 2019	The management has six key responsibilities for the development of subordinates. This can be done by identifying key individuals and organization development needs, coaching the subordinate and select areas for developmental concentration, help to construct development plan, fund and support, create developmental opportunities and follow up to ensure successful execution.
4.	Planning	Koontz & O'donnell, 1972; Baporikar, 2017; 2018; 2019	Planning is an analytical process to assess the future, determine objectives in the light of the future and development of alternative course of action to achieve such objectives. It means looking ahead and chalking out future courses of action to be followed. It is a preparatory step. Therefore planning takes into consideration available and prospective human and physical resources of the organization so as to get effective co-ordination, contribution and perfect adjustment. A basic management function which includes formulation of one or more detailed plans to achieve optimum balance of needs/demands with the existing resources. Planning bridges the gap between where we are to, where we want to go.
5.	Delegation	Koontz & O'donnell, 1972; Sherlekar & Sherlekar, 2012	There is a limit to the number of subordinates a manager can effectively supervise and control and for whom he makes decisions. Once this limit is crossed, delegation of managerial authority is inevitable. Delegation of authority is the most important process in organizing. Managerial work is divided into manageable assignments by decentralization. Yet management has to find some means to tie these organizational units together so that total group can work together effectively. Delegation of authority provides the means of tying together the various positions in the executive pyramid and it alone can provide a mechanism for integrated and co-operative group action. Just as authority, i.e. a right or power to command, direct, or to act, is the key to the job of a manager, delegation of authority is the key to organization.
6.	Motivation	Koontz, & O'donnell, 1972; Sherlekar & Sherlekar 2012; Maslow 1958; Kanfer, 1990	Motivation is the process which influences people to act. The process involves needs, drives and goals. Drivers are called motives and they represent the behavior in the process of motivation. Psychologists define motivation as that which arouses behavior, sustains behavior and channels behavior. Motivation is always internal to the person. It is externalized via behavior- motivation-behavior-goal is called the cycle of motivation. The cycle continues till the goal is achieved. Motivation can be defined very simply as the willingness to exert toward the accomplishment of some goal. It focuses the attention on those inner drives that activate or move an individual to action. A human being is an organic and not a mechanical system. By nature a person is self-activated or motivated person, hence force of motivation lies within the mind. It is a dynamic force setting a person into motion and action. Motivation is a leadership function to inspire, encourage and impel people to take required action. The skill of motivating the people is the life-blood of an organization as human behavior is purposeful and it is caused.
7.	Decision-making	Koontz, & O'donnell, 1972; Harrison, 1995; Welch, 2002; Baporikar, 2018	Every organization needs to make decision on a continuous basis as part of managerial process. Decisions are made in the best interest of the organization. Further complex organizations largely depend on a team of professionals specially trained to make decisions. Yet, decision making process is cumulative and consultative process. The process, on the whole, bears its pros and cons and would by and large emanate results and consequences in the organizations' overall growth and prospects. Decisions are taken to support organizational growth. Day to day operation is rightly built on managerial decisions. As a matter of fact capacity to take critical decision is one of the key attributes of any manager. The effectiveness and quality of those decisions determine how successful a manager will be. Sometimes the decision-making process is extremely short, and mental reflection is essentially instantaneous. In other situations, the process can drag on for weeks or even months. The entire decision-making process is dependent upon the right information being available to the right people at the right times.

continued on following page

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

Table 2. Continued

Serial Number	Managerial Skill	Authors	Description
8.	Managing Change	Burnes, 2004; Carnall, 2007; Westover, 2010	Nothing is more permanent than change. Organizations face the continuous prospect of change as they fight to stay afloat and compete in an increasingly competitive and globalized economy. It can be argued that the successful management of change is crucial to any organization in order to survive and succeed in the present highly competitive evolving business environment. Change is an ever-present feature of organizational life, both at an operational and strategic level. Therefore, there should be no doubt regarding the importance to any manager as to how to manage the change and ensure for organizational growth and sustainability.
9.	Influencing Others	Covey, 1989; Bourgeois, Sommer & Bruno, 2009; Daly, 2011	A manager having leadership qualities influences others. Business success relies on good leadership. Leadership skills help manager to make more effective decisions, focus on personal vision and progress towards achieving goals of your business. Though different leadership styles can be used at different times some character traits are important: self-awareness, decisiveness, fairness, enthusiasm, integrity, knowledge, creativity and imagination and endurance. A manager can establish excellent working relationships only with the ability to influence others with appropriate actions, words and decisions.
10.	Control	Brech, 1972; Koontz & O'donnell, 1972; Merchant, 1982; Nixon, & Burns, 2005	Controlling is a systematic exercise. It is a process of checking actual performance against the standards or plans with a view to ensure adequate progress and also recording such experience as is gained as a contribution to possible future needs. Controlling ensures that there is effective and efficient utilization of organization resources so as to achieve the planned goals. Controlling measures the deviation of actual performance from the standard performance, discovers the causes of such deviations and helps in taking corrective actions. Thus, controlling has two basic purpose of facilitating co-ordination and help in planning.
11.	Sustaining Pressure	Morton, 2010; Eromafuru, 2013; Kakabadse, 2011	Most organizations are under intense pressure – be it economic, global, government or political. Joint ventures, takeovers, reorganizations are extremely common. These changes present new challenges and demands and need to be handled well. If not it may lead to workforce demoralization, increased turnover; decreased cooperation and teamwork; increased levels of stress, anxiety, absenteeism, illness leading to slip-ups. Hence, all members of the organization must therefore learn to cope with change and sustain pressure.
12.	Negotiating	Koontz & O'donnell, 1972; Shell, 2006	Negotiation is a dialogue between two or more people or parties, intended to reach an understanding, resolve point of difference, or gain advantage, to produce an agreement upon courses of action, to bargain for individual or collective advantage, to craft outcomes to satisfy various interests of two people/parties. Negotiation is intended to aim at compromise. Professional negotiators are often specialized. Examples include: union leaders, leverage buy outs, peace makers, diplomats, legislators etc. There are different styles/responses to negotiation and individuals/managers can have but the style used during a negotiation depends on the context and the interests of the other party, among other factors.
13.	Maintaining System and Procedures	Martin & Bartol, 1998; Prabhakar & Ram, 2011	Implementing business systems is to provide consistency and predictable quality of outcomes. It also establishes the means for day-to-day operational activities to manage themselves, leaving managers with the time they need to deal with exceptions and to work on business development. A system is basically a set of rules for processing information and facilitating decisions. The other benefit of systems and procedures is that it helps to personalise-proof the business. Ineffective systems usually lead to having dissatisfied customers because the level of service and quality is unpredictable. Good business systems must be documented and have some level of automation in data capture and processing information.
14.	Periodic Review	Martin & Bartol, 1998; Prabhakar & Ram, 2011	Periodic Review is very useful technique of performance management. It is an approach which allows managers to impact their goals and responsibilities in serving the client internally and externally. It calls for clarifying business goals, client needs and then agreeing individual objectives and standards of performance. Once key result areas and measures of success have been set, it is not sufficient to review them once a year. Reviews should take place on a rolling basis with new key result areas and further measures should set on the way. The review process should be forward looking and also an opportunity to identify training and development needs. Finding the time to review business and staff performance can help managers to improve the way business scores and build strong and effective team. Establishing a performance review process is an essential part of effective business leadership.
15.	Punctuality	Basu & Jorgen, 2003; White, Valk & Dyalmy, 2011; Rubenstein & Herrick, 2012	Punctuality, or the ability of different individuals to exchange some words and then coordinate on time, is one of the essential ingredients of modern life and progress. For managers in this competitive world it is an essential trait. For one to be punctual it is required to be conscious of the time, keep watch accurate, be realistic about time requirements, wake up when supposed to wake up and commit to being 15 minutes early for everything. Being organized, proper scheduling and prioritizing and checking for traffic jams and weather conditions also helps to be habitual punctuality.
16.	Commitment	Ghemawat, 1991; Watson, 2003; Colquitt, Lepine, Wesson & Gellatly, 2011	Commitment means an agreement to perform a particular activity at a certain time in the future under certain circumstances. Since the philosophy, spirit, and drive of an organization has far more to do with its relative achievements than technological, economic resources or organizational structure as these are resources are exceeded by how strongly the people in the organization believe in its basic precepts and how committedly they are.

purpose of it. Customer is not an outsider to our business. Customer is part of it. We are not doing him a favor by serving him. Customer is doing us a favor by giving us the opportunity to do so.” Mahatma Gandhi. This is apt for general insurance industry in respect of clients (Mehta, 1999. Martis and Diwan (2000), explain that fundamental feature of services for insurance employees. Service is required in every sphere including manufacture because the goods manufactured must be reached to the clients and in this process a number of services like transport, banking and marketing play their role (Chakraborty, 2018). Services have their own unique characteristics which must be borne in mind for effective client servicing.

In most cases the service giver and the client are face to face. In some of the services like medical care, beauty parlors and other such services the service giver and the client are even in physical contact. The lawyer and his clients the consultant and his clients, the insurance agent and his prospects, the salesman and his buyers – all of these persons are physically close to each other. This physical nearness gives rise to interesting aspects. Clients tend to identify the service with the service giver. If the service is not good for any reason they are apt to blame the person who rendered it to them rather than the Organization which the service provider represented. From a positive point of view we can think of many enlightened agents in the insurance industry who are held in such high esteem by their policyholders that they deal with only those trusted agents and refuse to take insurance through other agents

When a service fails then it is difficult to win the client’s trust back. Unlike a product like say a torchlight, which can be repaired or even replaced, a failed service cannot be replaced. Moreover when service fails the customer’s feelings are to be repaired first. There is an interesting concept known as ‘moments of truth’. These are any incidents, however, small in which a client comes into contact with an organization and forms a first impression, which is likely to last in his/her mind for a long time. He/she is likely to judge the organization always on the basis of the first impression. The moment of truth could be anything- the sight of a posh office with a welcome atmosphere or the instant, proactive courtesy shown by one of the employees. Interaction with human beings is likely to remain longer as moments of truth than mere physical sights. Unlike manufactured goods, services cannot be stored on the shelf of the shop. Nor can we try to give a sample to the client or allow him to examine it, weight it and perhaps taste it. A service is produced rendered and enjoyed (consumed) simultaneously and that too only when the client wants it. Above all, there is no question of storing unconsumed services for future consumption. The vacant seats in the plane are of no use once the plane takes off. Similar is the case with the vacant rooms in a hotel. Quality control of services is not easy. The only quality control one can think of would be a client’s feedback but this will help only in improving future services and not the service which has already been rendered.

Efficacy of services depends to a large extent on the client himself or herself. Different clients have varied perceptions. It is difficult to standardize a service on the basis of client expectations which vary widely and what is more, which are highly unpredictable. Clients now days are getting used to integrated services like for instance a client desiring consultation on good avenues for saving. This expectation from customers for what may be termed as a singly window offer makes it all the more incumbent upon managers to train their employees in patience, empathy and courtesy. The importance of service is such that even while selling identical products the service involved in making the sale can make a big difference. Courteous and efficient service provides value addition to products.

All these special features of services cast a heavy burden on the service providers who are none other than the people working in organization. For these reasons human resources managers have to pay special attention to the development and motivation of their men engaged in client service, Special training has to be imparted to the persons whose duty it is to meet clients interact with them and ensure

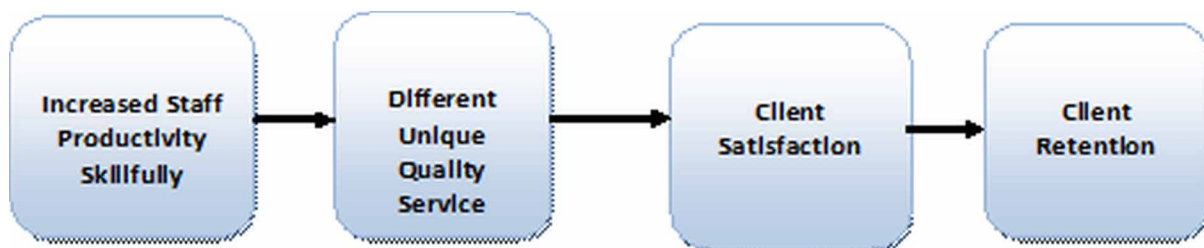
Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

their satisfaction. Especially delicate is the role of the persons who have to attend to the clients with complaints or grievances. The staff dealing with clients must also be well groomed business etiquette and manners. In most of the service organizations the functions are interdependent and therefore, the staff needs to work as cohesive teams. Special attention will therefore, have to be paid to training people to work in teams. It follows that if the employees have to work as teams then there is a heavy demand on the managers to become effective leaders. Here the motivating factor is empowerment which plays a distinguished role in service organizations. In order to render efficient service to clients and to make them happy the employees must feel a sense of empowerment.

Organizations would do well to spend more time training their people to take decisions and solve problems rather than in preparing voluminous manuals and rule books. No manual can serve all the myriads situations that arise in day to day transactions and therefore there will definitely be occasions when employees find themselves called upon to take on the spot decisions to help a client and make her happy. People with a sense of empowerment can be expected to rise to the occasions. It is often the extrinsic, hard, factor which organizations focus on when it comes to deciding how to motivate and reward their staff, using such as improved working conditions or improved status. Intrinsic factors such as sense of purpose, feeling of achievement recondition, responsibility and reviewing feedback in a job are often overlooked as they belong to the touchy, feely school of management which is less easy to control. Due to potential market opportunities are much wider for general insurance. Free act markets and globalization have increased competition. In the changed scenario general insurance business has to reengineer its approaches and strategies on quality basis. The quality for client servicing improvement is essential. Service is an act or performance that one party can offer to another that is essentially intangible. The services are intangible, inseparable, variable and perishable. Banu (2006) describes vital aspects of client servicing for retention as shown in Figure 2.

Figure 2. Vital Aspects for Client Servicing and Retention

Source: Self-Developed



So the general insurance companies can improve their market share which is possible only by client satisfaction and retention. Client satisfaction can be achieved by quality service so the quality service is an important aspect that general insurance business needs to concentrate. Cook (2002) writes how to create an effective customer focus by good service which meeting clients' expectations. Excellent service is exceeding client expectations. To provide world class service, the need to improve the total relationship with the client has been emphasized, improving the process through which service is delivered to the client. In service sector the nature and number of competitors and ability to offer similar products at similar prices has led to increasing emphasis being placed on personal service as a means of adding value to clients.

MIDDLE LEVEL MANAGEMENT IN GENERAL INSURANCE INDUSTRY

Koontz (1972) states that, management is the art of getting things done through and with people in formally organized groups. According to Drucker (1990), management is multipurpose organ that manages business and manages managers and manages workers and work. For Follet (1996), management is the art of getting things done through people and according to Harze & Hardkar (1994) the meaning and importance of management and levels are specific. Many managers work in an organization. However, these managers do not work at the same level. They work and operate at different positions. Hierarchy of these managerial positions is called levels of management which generally consist of three levels: administrative or top level of management, executive or middle level of management and supervisory or lower level of management. At each level, individual manager has to carry out different roles and functions.

The middle level management in general insurance industry consists of the Departmental Heads (HOD), Branch Managers, and the Junior Executives. The Departmental heads are Finance Managers, Purchase Managers. The Branch Managers are the head of a branch or local unit. The Junior Executives are Assistant Finance Managers, Assistant Purchase Managers. The Middle level Management is selected by the Top Level Management.

The middle level management emphasizes more on following tasks:-

- Middle level management gives recommendations (advice) to the top level management.
- Middle level management executes (implements) the policies and plans which are made by the top level management.
- They also have to communicate with the top level Management and the lower level management.
- They spend more time in co-coordinating and communicating.
- They prepare short-term plans of their departments which are generally made for 1 to 5 years.

The middle Level Management has limited authority and responsibility. They are intermediary between top and lower management. They are directly responsible to the chief executive officer and board of directors. However, they require more managerial and technical skills and less conceptual skills. In the organization structure middle level management is below the top management. Middle managers are also called junior executives or administrators. Co-ordination is the central problem of management and the middle management provides the key people in achieving effective co-ordination upward, downward, and also sideways in the managerial hierarchy. Middle level management requires all skills such as conceptual, human and technical skills for better client servicing. Thus, critical attributes for a middle manager to excel include: over view and foresight, communicates the vision, works through managers, drivers change, focuses own time and energy, solves conflicts, good judge of people, represents the organization and senior management and be a good role model (Baporikar, 2018).

Hypotheses

H1: The mean total managerial quotient of middle level management has a significant co-relation with the mean total client servicing quotient of middle level management in general insurance industry.

H2: Higher managerial quotient of middle level management leads to better client servicing in general insurance industry.

METHODOLOGY

This study on managerial quotient is as an exploratory research since data on managerial quotient is to be explored. Researcher has for that reason followed the empirical method of social research. Table 3 shows classification of the companies selected as sample under the present research study.

Table 3. Companies Selected as Sample

Company	Sector	Grades
The New India Assurance Co. Ltd.	Public Sector	I,II,III,IV
National Insurance Co .Ltd	Public Sector	I,II,III,IV
Oriental Insurance Co. Ltd.	Public Sector	I,II,III,IV
United India Insurance Co .Ltd	Public Sector	I,II,III,IV
Bajaj Allianz General Insurance Co. Ltd.	Private Sector	Zonal Manager, Sr. Manager
Apollo Munich Health Insurance Co. Ltd.	Private Sector	Development Manager

Population: 573 officials form Grades I to IV from 4 companies of public sector and managerial cadres form two private companies constituted the population for this study.

Sample Size: A random sampling of 250 employees from scale I to scale IV of Pune city and outside Pune City has been selected from Public Sector General Insurance Companies and 50 employees have been selected from Middle Level Management from Private General Insurance Companies. The total sample size is 300.

Responses received: 104

Literature Survey: Library work was undertaken to create a foundation for the field work. The research is based upon findings of the scholars in the field and outcome of the survey conducted by the researcher.

Field Survey: A 'Likert' scale was used for measuring the attitude of respondents. The questions were framed with multiple choices / alternatives with measuring numbers allotted for conversion of qualitative data into quantitative data. Scores of 1 to 5 were allotted to Never, Sometimes, No Opinion, Many Times, and Always Respectively.

Data Analysis Procedure: Testing of hypotheses was done based on the data is collected from the population. For coming towards conclusion on the basis of collected data some statistical tests are required for findings whether the conclusion is wrong or right. Statistical tests applied for hypotheses testing.

Pilot Study: Initially pilot study of questionnaire was undertaken by distribution of questionnaire to middle level managers outside Pune region and as per suggestions minor changes were done.

Finalization of Questionnaire: The questionnaire was finalized after verifying the response to the pilot study and then distributed among middle level managers of Pune region.

Secondary Data: Published documents, reports and research papers.

Questionnaire Design: The survey questionnaire was framed in two parts.

Part I: related with personal information of the respondent giving, Name, Company Name, Designation, Email I D, Office address, Office code No., Regional/Divisional/Branch, Date of Joining the Company, Qualifications, Insurance Qualification, Any other details

Part II: it contained 52 questions related with managerial skills. The set of questions were designed to obtain client servicing dimensions.

Questions relating to communication skill, conflict resolving skill, staff development skill, planning skill, delegation skill, motivation skill, decision making skill, change managing change skill, influencing others i.e. leadership skill. Control skill, pressure sustaining skill, negotiation skill, system and procedure maintaining skill.

Other questions were designed to give information about periodic reviews, punctuality and commitment skills.

Details of Questionnaire

In short the following table 4 gave idea about the question-wise skill allocated.

Table 4. Description of the Questionnaire

Managerial Skills	Question Nos.
Communication	1 to 6
Resolving Conflicts	7 to 10
Developing Staff	11 to 14
Planning	15 to 18
Delegation	19 to 22
Motivation	23 to 25
Decision Making	26 to 29
Managing Change	30 to 32
Influencing Others	33 to 36
Control	37 to 40
Sustaining Pressure	41
Negotiating	42 to 45
Maintaining system and Procedures	46 to 49
Review Periodically	50
Punctuality	51
Commitments	52
Total Questions	52

Table 5 provides the details of the client servicing dimensions statements. Client servicing dimensions were set as per skills required:

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

- Prudent underwriting needs communication, resolving conflict, developing staff, planning, delegation, motivating staff, decision making, managing change, influencing others, control, negotiating, maintain system and procedures, review periodically, punctuality and commitments.
- Settlement of claims needs communication, resolving conflict, developing staff, planning, delegation, motivating staff, decision making, managing change, influencing others, control, maintain system and procedures, review periodically, punctuality and commitments.
- Redressal of grievances needs communication, resolving conflict developing staff, planning, delegation, motivating staff, decision making, influencing others, control, maintain system and procedures, review periodically, punctuality and commitments.

Table 5. Client Servicing Dimensions Statements

Client Servicing Dimensions	Question/Statement Numbers in the Questionnaire
Procurement of Business	1,7,11,15,19,26,30,33,37,42,46,41,50, 51,52,
Prudent Underwriting	4,5,6,8,12,16,20,23,27,31,34,38,43,44,45,47,41,50, 51,52
Settlement of Claims	2,9,13,17,21,24,28,32,35,39,48,41,50, 51,52
Redressal of Grievances	3,10,14,18,22,25,29,36,40,49,41,50, 51,52
Total Questions	52

The questions were framed for getting data of factual position about behavioral pattern of respondents. The study considered 16 managerial skills (52) (# i.e.) communication(6), resolving conflicts(4), developing staff (4), planning(4), delegation(4), motivation(3), decision making(4), managing change(3), influencing others(4), control(4), sustaining pressure(1), negotiating(4), maintaining system and procedures(4), review periodically(1), punctuality(1), commitments(1). These skills were co-related with four dimensions of client servicing (64) (##, i.e.) procurement of business (15), prudent underwriting (20), settlement of claims (15) and Redressal of grievances (14). The figures mentioned in the brackets are the number of questions associated to the questionnaire as above. Sustaining pressure, review periodically, punctuality and commitments were considered (questions number 41, 50, 51, 52 respectively) as common skills applicable to all four dimensions of client servicing, hence single question was framed.

- Total number of questions associated with managerial skills.

- Total number of questions associated with client servicing.

The options used in the questionnaire were 5 as per Likert's scale and the mark allotted for each option was: Never=1, Sometimes=2, No opinion=3, Many times=4, Always=5 for quantification of qualitative data.

The total managerial quotient for each respondent was calculated as under:

(Option selected for each question) * (mark allotted for each question as per selected option) = mark received for each question.

Total of marks of all questions = Grand total

Managerial quotient = Grand total.

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

The total client servicing quotient for each respondent was calculated as under:

(A) (Option selected for each question [excluding option selected in respect of questions sustaining pressure, review periodically, punctuality, commitments {questions No. 41,50,51,52 respectively}]) *(mark allotted for each question as per selected option).

(B) (Option selected for each question [in respect of sustaining pressure, review periodically, punctuality, commitments {questions No. 41,50,51,52 respectively}]) * (mark allotted for each question as per selected option).

Total of marks of all questions for (A) above

Total of marks of all questions for (B) above

Grand total = Total (A) + Total (B)

Client servicing quotient =Grand total

RESULTS

The study developed ‘managerial quotient’ for middle level management in client servicing. It selected middle level managers from general insurance industry as respondents. The survey covered Pune region as the basis of geographical area. Researcher used questionnaire as a research method. Table 6 gives the minimum and maximum managerial and client servicing quotient.

Table 6. Minimum and Maximum Managerial and Client Servicing Quotient

Option as per questionnaire (1)	Mark allotted to option (2)	No of questions allocated Managerial skills (3)	No of questions allocated to client servicing dimensions (4)	Minimum managerial quotient (2)*(3) (5)	Maximum managerial quotient (2)*(3) (6)	Minimum client servicing quotient (2) * (4) (7)	Maximum client servicing quotient (2) *(4) (8)
Never	1	52	64	52	N.A.	64	N.A
Sometimes	2	52	64	N.A.	N.A.	N.A.	N.A
No Opinion	3	52	64	N.A.	N.A.	N.A.	N.A
Many times	4	52	64	N.A.	N.A.	N.A.	N.A.
Always	5	52	64	N.A.	260	N.A.	320

Table 7 gives the descriptive statistics of managerial quotient

Analysis of the above data revealed as under:

- Out of 104 responses three managers are having managerial quotient between 130 up to 180 that means 2.9% managers are having managerial quotient between 130 up to 180.
- Out of 104 responses 55 managers are having managerial quotient between 180up to 230 that means 52.9% managers are having managerial quotient between 180up to 230.

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

- Out of 104 responses 46 managers are having managerial quotient between 230 up to 280 that means 44.2% managers are having managerial quotient between 230 up to 280.
- Minimum managerial quotient is 130 and maximum managerial quotient is 280.

Table 7. Descriptive Statistics of Managerial Quotient

	Managerial Quotient	Frequency	Percent	Valid Percent	Cumulative Percent
1	130 to 180	3	2.9	2.9	2.9
2	180 to 230	55	52.9	52.9	55.8
3	230 to 280	46	44.2	44.2	100.0
	Total	104	100.0	100.0	

Table 8 gives descriptive statistics of client servicing quotient
Analysis of the data reveals that:

- Out of 104 responses 4 managers have been found with client servicing quotient from 180 up to 230 that computes to a mean of 3.8%.
- Out of 104 responses 48 managers have been found with client servicing quotient from 180 up to 230 that computes to a mean of 46.2%.
- Out of 104 responses 52 managers have been found with client servicing quotient from 180 up to 230 that computes to a mean of 50%.
- Minimum client servicing quotient 180 and maximum client servicing quotient is 330.

Table 8. Descriptive Statistics Client Servicing

		Frequency	Percent	Valid Percent	Cumulative Percent
1	180 to 230	4	3.8	3.8	3.8
2	230 to 280	48	46.2	46.2	50.0
3	280 to 330	52	50.0	50.0	100.0
	Total	104	100.0	100.0	

Table 9 gives Pearson’s Correlation test that is the co-relation values of managerial quotient and client servicing the two dependable variables. This study examines relationship between total managerial quotient and total client servicing quotient.

Table 10 gives the Pearson’s correlation between total managerial quotation and various managerial skills

Table 11 is the ANOVA test and gives the correlation between client servicing quotient and four dimensions of client servicing. It gives F value with different level of significance. If worked out value is less than the table value of F the difference is taken as insignificant i.e. due to chance and the null hypotheses of no difference between sample means stands.

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

Table 9. Pearson's Co-relation between Managerial Quotient and Client Servicing

Statistics	Managerial quotient	Client Servicing quotient
Mean	226.154	280.519
Biased Variance	489.303	627.115
Biased Standard Deviation	22.120	25.042
Covariance	546.084	
Correlation	0.976	
Determination	0.953	
T Test	45.599	
p- value (2 sided)	0	
p-value (1 sided)	0	
Degrees of Freedom	102	
Number of Observations	104	

Table 10. Pearson's Co-relation between Managerial Quotient and Various Managerial Skills

Total managerial quotient to total client servicing	0.976
Pearson's co relation between Managerial quotient and various managerial skills	
Managerial quotient to communication	0.727
Managerial quotient to resolving conflicts	0.691
Managerial quotient to Developing staff	0.712
Managerial quotient to Planning	0.711
Managerial quotient to Delegation	0.834
Managerial quotient to Motivation	0.480
Managerial quotient to Decision making	0.758
Managerial quotient to Managing Change	0.689
Managerial quotient to influencing others	0.602
Managerial quotient to control	0.649
Managerial quotient to sustaining pressure	0.672
Managerial quotient to Negotiating	0.653
Managerial quotient to maintaining system and procedures	0.183
Managerial quotient to review periodically	0.373
Managerial quotient to punctuality	0.379
Managerial quotient to commitments	0.328

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

Table 11. ANOVA Test - Correlation between Client Servicing Quotient and Various Dimensions of Client Servicing

Client Servicing and Procurement of business	0.884
Client Servicing and Prudent underwriting	0.914
Client Servicing and Settlement of claims	0.810
Client Servicing and Redressal of grievances	0.866

Table 12 is the ANNOVA test for Managerial quotient. As the probability is 0.148, the null hypothesis is accepted. It means there is no significant difference amongst the managerial quotients assigned by different groups.

Table 12. ANNOVA - Total Managerial Quotient

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3336.362	4	834.091	1.737	.148
Within Groups	47551.176	99	480.315		
Total	50887.538	103			

Table 13 is the ANNOVA test for Client servicing quotient. It shows probability between groups as 0.279; therefore, the null hypothesis is statistically accepted. It means there is no significant difference amongst the client servicing quotients assigned by different groups.

Table 13. ANNOVA – Total Client Servicing

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3232.802	4	808.201	1.291	.279
Within Groups	61987.159	99	626.133		
Total	65219.962	103			

Discussion of Findings

Managerial quotient model is developed. From Table 7 it revealed that In General Insurance Company Pune Region the 52.9% middle level managers are having higher managerial quotient i.e. between 180 up to 230. Only 44.2% middle level managers are having highest managerial quotient i.e. between 230up to260.

Client servicing quotient model is developed. From Table 8 it revealed that 50% middle level managers are having highest client servicing quotient i.e. 280up to 320 and 46.2% middle level managers are having client servicing quotient between 230 up to 280. These managers can improve their client servicing quotient by improving managerial skills with the help of training.

From Table 9 it is clear that co-relationship between managerial quotient and client servicing quotient is established. The co relation is positive and client servicing variable depends on managerial quotient variable. It is 97%.

From Table 10 the correlation percentage is up to 35% in respect of Commitment and maintaining systems and procedures which is positive but poor relationship.

The co-relation percentage is 70% in respect of punctuality, review periodically, negotiating, sustaining pressure, control, influencing others, managing change, motivation, resolving conflict.

The correlation percentage lies above 70% in respect of decision making, planning, developing staff, communication. The maximum co relation is in respect of delegation of authority.

From Table 11 as the probability is 0.148, the null hypothesis is accepted. It means there is no significant difference amongst the managerial quotients assigned by different groups.

From Table 12 the table shows probability between groups as 0.279; therefore, the null hypothesis is statistically accepted. It means there is no significant difference amongst the client servicing quotients assigned by different groups.

Implications

Managerial quotient model is developed which is useful for any insurance company for assessment of quotient of managers in respect of recruitment, promotion exercise, incentives, any managerial work.

Client servicing quotient model is also useful for assessing the Higher Level Managers to focus on weakness and strengths in respect of four dimensions of Client Servicing.

Managerial skills correlation and client servicing skills correlations are developed, which will help Higher Management to find out strength and weakness in Organization of General Insurance Industry.

Help the Higher Management to plan training programmes. The study quantifies the qualities of managerial skills and client servicing skills which will be useful as internal rating system.

SOLUTIONS AND RECOMMENDATIONS

Managerial quotient developed which is useful to any general insurance company in case of promotion exercise, motivation exercise, and Training exercise for managerial skills.

Client servicing quotient developed which is useful to any general insurance company in case of Training, deciding strategies in respect of any weak dimension of client servicing.

Under the study there is poor but positive relationship in respect of commitment, maintaining systems and procedures managerial skills. Improvement in these managerial skills by paying attention will definitely reduce the grievances. Also help the higher management to retain the old clients as well as establishing relationship with new clients.

As per secondary data it revealed that the pendency of grievances increased as well as most of grievances is related with issued policies and/or claims.

Reduction in grievances with prudent underwriting the policies will help the management in both the ways. It will also help the management to reduce the complaints in respect of claims and fast settlement of claims will definitely helpful for retaining old clients and developing new clients.

Suggestive Model for Managerial Quotient and Client Servicing Quotient

(A) Questionnaire framed on the basis of specific managerial skill and client servicing dimensions i.e. Procurement of business (P.B.), prudent underwriting (P.U.), settlement of claims (claims) and Redressal of grievances (grievances) as given Table 14.

Table 14. Questionnaire Framed on Basis of Specific Managerial Skill and Client Servicing Dimensions

Sr. No.	Questions	Never	Some Times	No Opinion	Many Times	Always
1	Specific Skill And Procurement Of Business			*		
2	Specific Skill And Prudent Underwriting				*	
3	Specific Skill And Settlement Of Claims		*			
4	Specific Skill And Redressal Of Grievances					*
5	Common Skill Applicable To All Dimensions Of Client Servicing	*				

Mark allotted for each option in the questionnaire is: Never= 1, Sometimes=2, No Opinion =3, Many times=4, Always=5

(B) Question-wise allocation of marks on the basis of option selected by respondents' given in table 15.

Table 15. Question-Wise Allocation of Marks

Questions Respondents	1	2	3	4	5	Total
1	1	1	1	1	1	5
2	2	2	2	2	2	10
3	3	3	3	3	3	15
4	4	4	4	4	4	20
5	5	5	5	5	5	25

In the above table the respondents are 5 and option selected for each question is: 1st respondent selected "Never" option for all questions, 2nd selected "Sometimes" option for all questions, 3rd selected "No opinion" option for all questions, 4th selected "Many times" option for all questions and 5th selected "Always" option for all questions.

(C) Quotient developed is given in table 16 and table 17 respectively.

Quotients: Four questions are related to specific managerial skill and 5th question is a common skill which is applicable to all dimensions of client servicing. Hence managerial quotient is the total of all questions, however, client servicing quotient is the total of marks obtained for first 4 questions and mark obtained for question No. 5 is added in a mark obtained for each question from question 1 to 4.

Developing Managerial Quotient for Sustainable Client Servicing in Insurance Sector

Table 16. Quotient Development

Questions Respondents	Specific Skill & P.B.	Specific Skill & P.U	Specific Skill & Claims	Specific Skill & Grievances	Common Skill Applicable to Dimensions	Total
1	1	1	1	1	1	5
2	2	2	2	2	2	10
3	3	3	3	3	3	15
4	4	4	4	4	4	20
5	5	5	5	5	5	25

Table 17. Managerial and Client Servicing Quotient Developed

Managerial Quotient	Client Servicing Quotient
5	8 (1+1)+(1+1)+(1+1)+(1+1)
10	16 (2+2)+(2+2)+(2+2)+(2+2)
15	24 (3+3)+(3+3)+(3+3)+(3+3)
20	32 (4+4)+(4+4)+(4+4)+(4+4)
25	40 (5+5)+(5+5)+(5+5)+(5+5)

FUTURE RESEARCH DIRECTIONS

The study only covered 16 managerial skills. Further study can be done in respect of unidentified managerial skills. Studies to compare private insurance companies with public sector companies would also be interesting. Further studies to develop appropriate managerial quotient for financial services industries can also be undertaken.

CONCLUSION

The training programme in respect of managerial skills will definitely help the middle level managers to develop the skills up to highest level. To control the existing situation the higher management can review the weakness of existing manpower, review the areas where in the development is required for achieving final positive results in competitive and liberal market situation with the help of managerial quotient and decide the further steps to be taken.

The General Insurance companies in Pune Region is having higher managerial quotient hence the client servicing quotient is highest, which is between 280 up to 330. Finally from the study of middle level management of general insurance industry of Pune region in respect of client servicing it is to be reckoned that the mean total managerial quotient of middle level management has a significant correlation with the mean total client servicing quotient of middle level management in general insurance industry. Further, it is true that higher managerial quotient of middle level management leads to better client servicing in general insurance industry.

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Chapter 9

Greening the Compensation Design and Management of the Human Resource Function

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ABSTRACT

There is a rising necessity for the incorporation of environmental management into human resource management (HRM) practices. This attempt is recognized as the Green HRM initiative. An organization's human resource function can be powerful in aiding an all-inclusive approach to building a culture of sustainability. The strategy entails executing transformations to the diverse functions of HR like determining employee compensation. Gaps continue to exist in the literature on the green aspects of compensation and reward systems. This chapter considers the environmental management features of the compensation and reward system and factors a mould of the procedures entailed in green compensation and reward system. it cores on examining green reward management systems practices from the standpoint of subsisting research in the area and proposes inventive process moulds in green reward management systems. The green reward management system is presented as a smart and superior method of reward management systems.

INTRODUCTION

Green HRM (GHRM) is a materializing theme in contemporary circumstances. It is developing into a trendy subject in the contemporary world for several motivations such as surplus consumption of natural resources and raw materials by diverse commercial organizations and industries. At the moment, problems like carbon credits, global warming, and pollution ensuing from high profile industrial accidents and the transformations in the climate are talked about with elevated significance. The problems could consequence in earthquakes, recurrent floods and extinction of definite species and animals. Shaikh (2010) contends that the misuse of natural resources worldwide has resulted in concerns like global warming, depletion of ozone layers and augmentation of CFC and CO₂ in the environment. Misuse of

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natural resources has in addition impinged on the flora and fauna, consequences in decrease in forest animals, disturbances to the food chains and the ecosystems. Therefore, world environmentalists have been talking about ecological concerns worldwide.

In the management field, there is rising research literature on green management in general but, in contrast, research on green human resource management (GHRM) is comparatively varied and little by little. Studies contend that workers must be motivated, empowered, and environmentally conscious of green initiatives to exhibit expected workplace green behaviour (Atiku, 2019; Fields & Atiku, 2017; Mandip 2012; Mathapati, 2013; Prasad, 2013). An organization's human resource function can be powerful in aiding an all-inclusive approach to building a culture of sustainability. The strategy entails executing transformations to the diverse functions of HR like recruitment, induction, training and development, carrying out performance appraisal, and determining employee compensation. Wekesa and Nyaroo (2013) affirms that green HRM entails two fundamental constituents: environment-friendly HRM practices and conservation of knowledge capital. Reine (2015) contends that proper management of people by organisations especially in a tumultuous environment is fundamental to the achievement of sustainable competitive advantage and accomplishment of organisational goals. Gaps continue to exist in literature on the - Green aspects of Human Resource Management especially as it concerns an informative guide on the evolving literature, its scale and coverage, in addition to a procedural form in the area. This chapter considers the environmental management features of the compensation and reward system and factors a mould of the procedures entailed in Green compensation and reward system. The chapter cores on examining the practices from the standpoint of subsisting research in the area. It reviews and documents green Reward Management Systems practices based on subsisting literature and utilizes a new and combined examination of literature in Green Reward Management Systems. It charts the field in the turf, and proposes inventive process moulds and research outlines in Green Reward Management Systems. It further presents the conception of green Reward Management Systems as a smart and superior method of Reward Management Systems.

BACKGROUND

Human Resource Management

Key elements in the factors of production include capital, natural and human resources. While Capital and natural resources are passive agents of development, only human beings constitute the active agents since they alone are equipped to accumulate capital, exploit natural resources and build political and social organizations. Fapohunda (2003) suggests that human resources are the energies, skills, talents and knowledge of people that are, or have the prospect of being applied to the production of goods and the rendering of services. Thus, of all the resources an organization or nation needs, human resources are the most imperative. Human beings make things happen and efficient human beings make things happen efficiently. The importance of human resources to an organization whether it is private or public cannot be over-emphasized. Efficiency of other factors of production is largely dependent on the quality and quantity of the available manpower/human resources. Moreover, human resources are themselves the most dynamic, complex and unpredictable.

Hence managing human resources effectively is principal to the realization of organizational goals and visions. Cole (2012) and Prasad (2013) affirm that managing human resources involves the organization

Greening the Compensation Design and Management of the Human Resource Function

of staff resources in order to allow people to make flexible, multi-skilled inputs to the general aims of the organization whether it is a business or in the public sector. Effective human resource management has become vital to organizations today. Porter and Kramer (2011), Peattie (2012) and Opatha (2013) indicate that more prominently, contemporary organizations do not only seek for sufficient human resources but also devise objective programmes intended to augment the quality of their work force. The intensified altitude of global competition, necessity for tactics to eliminate competitors, the volatility of the labour market and the advancement in technological knowhow, most particularly in the area of information technology has alerted all organizations to the truth that all their resources must be of best functionality and must be employed better than ever before. Fapohunda (2013) asserts that Human Resources Management refers to the management of people at work in an organization. It is concerned with the development and effective utilization of human resources to achieve organizational goals and objectives. HRM is the management function through which managers recruit, select, train, and develop organization members. French (2018) distinguishes HRM as entailing the philosophies, policies, procedures and practices related to the management of people within an organization. It is that element of management, which is concerned with the management of people at work and their affiliations within an enterprise. It concerns not only industry and commerce but also all areas of employment. HRM involves the design and execution of policies and all the practices that can aid the promotion of proficient employment of human resources.

French (2018) further depicts HRM in the process-systems terms. Here, a process is a particular course of correlated incidents moving towards identical goals, outcome or conclusion e.g. the staffing process, which is a flow of correlated incidents that results in the constant filling of positions within an organization. Such incidents comprise actions like recruiting candidates, taking hiring decisions and managing career changes such as transfers and promotions. A system is a group of processes and mechanisms assigned to administer a process in an expected way. This notion of system indicates a mutually supporting connection of constituents e.g. the staffing structure of an organization could comprise such mechanisms and practices as application blanks, interviews, reference checks, a six-month probation period, a procedure for applying for transfers. Consequently, the expression process implies an amalgamation of events that produce some result and the term “systems” recognizes particular modus operandi and mechanisms employed to direct those events. According to the process-systems view, HRM constitutes the methodical planning, development and control of a system of correlated processes influencing and entailing members of an organization. To successfully manage these processes, HR schemes are planned, developed and executed utilizing the merged efforts of all managers and HR specialists in an organization. In all, the schemes are projected to add to the accomplishment of significant organizational results, such as efficiency, competence, enlargement and member satisfaction. The excellence of the design and administration of the systems employed to direct and manipulate HR processes is straightforwardly associated with an organization’s general efficacy. Systems in HRM must be devised to advance, not encumber, the achievement of organizational goals. In some organizations, the system employed in HRM can be so burdensome that its own officialdom stifles the organization.

Green Human Resource Management

Pillai and Sivathanu (2014) asserts that Green Human Resource Management (HRM) entails the integration of environmental management into Human Resource Management (HRM) research and practice and the obligation for it is rising. Cole (2012), and Milliman and Clair (2016) suggest that in current

times, numerous organizations in the worldwide setting seem to be practicing green human resource management. Dessler (2005), Daily, Bishop and Steiner (2007), and Bird (2011) indicate that considering and combining such green HRM practices either already in practice or designated for practice by organizations adds significantly both academically and fundamentally to the HRM territory. Green HRM represents an evolving area of research in contemporary organisational studies. To aid scholars, researchers and practitioners, a concise cataloguing, indicating ample existing research to direct the moulding is obligatory in the area. Green human resource management (GHRM) refers to a set of HRM practices that organizations adopt to improve employee workplace green performance.

Waddock, Bodwell, and Graves (2002) affirm that for some time now, the corollaries of business activities on the environment have been strictly examined by diverse stakeholder groups. Consequently, business organizations face enhanced demands to execute green schemes, which constitute a vital piece of corporate social responsibility. As Porter and Kramer (2011) observe, effective commitment to green initiatives has consequently; developed into an organizational responsibility and a vital source of organizational competitive advantage. Guest (2011), and Kehoe and Wright (2013) add that successfully managing an organization's human resources (HR) plays a significant role in the successful accomplishment of organizational strategies through developing positive employee workplace attitudes and behaviours. Organizations have to assume effective green human resource management (GHRM) to encourage and educe employee green behaviour with the aim of achieving organizational green goals. Jackson and Seo (2010) define Green HRM as a set of HRM practices adopted to achieve organizational green goals that are a part of perceived CSR initiatives. Studies like Benz and Frey (2013), Ayesha, Amna, Tahleel, and Hina (2015) and Arulrajah, Opatha and Nawaratne (2016) observe that green HRM practices may comprise thinking about a candidate's green values during the recruitment and selection process, carrying out green awareness and skills training, thinking about an employee's green behaviour during periods of promotions, compensation, and performance appraisals. Moreover, according to Berrone and Gomez-Mejia (2009) and Bird (2011), Green HRM facilitates the development of employee green skills and awareness, and inspires employees to share in organizational green initiatives and activities. Green HRM is therefore a vital organizational device used to execute green initiatives.

HRM practices are the tangible human resource programmes, processes and techniques that are actually implemented in an organisation. Similarly, Dessler (2005) observes that green HRM practices comprise the tangible green HRM programmes, processes and techniques that in actuality are utilized in organisations with the intention of trimming down destructive or enhancing cooperative environmental effects of the organisations. Firdaus and Udin (2014) elucidates that the vital objective of green HRM practices is to brighten organisation sustainable environmental performance. Jackson, Renwick, Jabbour and Muller-Camen (2011) emphasize that, surrounded by the environmental management structure; human resources are required to attain environmental management plans suitably. Consequently, as argued by Guest (2011) and Garg (2014) this resulted in the management of employees 'greenly', utilizing the green human resource management (GHRM) structure. In a nutshell, green HRM should be distinguished as employing and retaining employees that are environmentally careful. Wekesa and Nyaroo (2013) notes that, to many professionals and scholars in human resource management (HRM), worldwide and particularly within the African context, the initiative of green human resource management (GHRM) is a comparatively novel one. Opatha (2013) asserts that green HRM is associated with every practice obligatory for the formation, handling and constant preservation of a system that is instituted with the intention of making the delegates of a company green. Phillips (2011), and Wekesa and Nyaroo (2013) explicate that it comprises the components of human resource management engaged with adapting ev-

Greening the Compensation Design and Management of the Human Resource Function

eryday delegates into green delegates with the intention of realizing the environmental objectives of the company, and finally making a pledge to being sustainable. It is connected to the approaches, actions and structures that adjust the employees of the organization into the green association for the advantage of the individual, society, natural environment and the business. This exhibits the underlying principle why green HRM practices are basic to the management of businesses sustainably in a turbulent environment.

The United Nations General Assembly (1987) observes that the idea of sustainable development is cored on cultivating economic development and growth, while simultaneously preserving the quality of the environment. It establishes a scheme for the integration of environmental policies and strategies for development. Renwick, Redman and Maguire (2013) insist that the incorporation of environmental management into HRM is termed green HRM.

Lado and Wilson (1994) defines HRM system as a set of separate but interconnected activities, functions, and process aimed at attracting, developing, and maintaining an organization's human resource. Organizations commonly arrange HR practices into systems that are consistent with their culture and business strategy. Waddock, Bodwell and Graves (2002) propose that Green initiatives incorporated into HRM proposals constitute an element of corporate social responsibility in the long run. Nowadays, organizations are executing and assimilating green initiatives in their plans with the assistance of their human resource. Managers certify that their HR is making use of the green human resource practices in suitable ways. In the same vein, Shane (2003) argues that it is imperative to encourage many technical and management skills among all workers of the organization with the aim of executing a successful corporate green management system in organizations. Organizations across the globe are integrating and aiming at employing GHRM practices to achieve competitive advantages in the business world. Furthermore, Roa (2011) contends that while totally embracing and incorporating GHRM in business may be unattainable, it necessitates a transformed method pertaining to the subsisting HR practices by both the management in addition to workers at the same time. A principal task for HR environmental executives could be to direct line managers regarding gaining complete workforce co-operation as it pertains to putting into action environmental policies which connotes HR requirements to care for supporters and generate systems of problem-solvers prepared to do something to alter the existing status quo. Various concerns associated with GHRM that must be considered by the HR department prior to executing green initiatives.

Compensation and Reward Management Systems

One of the most vital human resource management functions able of augment the productivity and growth of an organization is the Compensation and Reward Management Systems. Organisations utilize and administer a team of individuals that allow them to execute their purposes and aspire to attain the stated goals for which they are instituted. Compensation is a contractual occurrence. It is a dual input and output exchange between a worker and an employer. The input of efforts and the output of remunerations to workers are time-honoured. According to Wekesa and Nyaroo (2013), Compensation and reward management also called wages and salaries administration is one of the most important features of HRM and it includes economic remuneration such as wages, salaries and other forms of economic payments known as fringe benefits, indirect compensation or supplementary pay. Cole (2012) adds that it includes everything that a worker receives in return for his labour i.e. basic pay and other financial and non-financial rewards all of which define how well the worker lives in the society.

The Roles of Compensation and Reward Management Systems

Firdaus and Udin (2014) demonstrate that compensation is important since it offers income to workers and institutes a significant cost item to the employer. It is the largest single cost item for many organizations. For the workers it provides the means of satisfying their wants and needs. Again, as Dessler (2005) indicates, compensation involves the various devices that provoke the loyalty, cooperation and efforts of individuals. The consistency and recognized objectivity of pay by workers institutes a dire element in compensation management. Studies like Fapohunda (2013), Daily, Bishop and Steiner (2007) as well as Fapohunda and Azeez (2017) illustrate that the bulk of employee satisfaction or dissatisfaction and work performance is founded on pay. Garg (2014) corroborates that differences in pay (whether internal or external) can completely pressure employee-employer rapport and jeopardize industrial peace. Employee compensation is commonly not disturbed by levels of aspirations and pay history. Holt, (1993) posits that, to individual employees, compensation plays economic, social and psychological roles in their lives and all of them are contemplations for the importance of pay. Ayesha, Amna, Tahlee and Hina (2015) affirm that it is routinely recognized that employees are people who ascertain important sources of competitive edge for organizations. Therefore, employees are the priceless resources of any organization. To maintain competitive and productive edge the employees require sufficient compensation.

Roa (2011) emphasizes that compensation is what employees are given in exchange for their input to the organization. Employees typically proffer their services for three types of rewards which are base pay, pay incentives and benefits. Wekesa and Nyaroo (2013) affirms that Benardin and Russel (1993) observes that compensation has an enormous control on workers' recruitment, motivation, productivity and turnover. Organisations employ and administer a group of individuals that facilitate them to execute their functions and aim to accomplish the affirmed goals for which they are instituted. The core tactic for attaining organisational goals is by having competent and efficient workers. Holt (1993) contends that compensation includes the yield and the benefit that workers obtain by way of pay, wages and also some rewards like monetary exchange for the employees to increase the performance. Dessler (2005) adds that it is all types of payments or rewards given to workers which emanate from employment. It constitutes one of the fundamental motivations for workers to seek employment. Workers are reimbursed for their services and endeavours on their work. Harrison and Liska, (2008) established that reward is the focal point of the employment contract since; it is the foremost rationale for working.

Ivancevich (2004) observes that reward system is a human resource management function that is concerned with all types of reward individuals obtain in return for executing organizational duties, with a preferred upshot of an employee who is attracted to the work, satisfied, and motivated to do a good job for the employer. The consistency and perceived objectivity of pay by workers constitute a serious issue in compensation management. Yet again, disparities in pay (whether internal or external) can extremely pressure employee /employer relationship and endanger industrial peace. In addition, employee compensation is frequently unaffected by levels of ambitions and pay history. Pay is a means of acquitting necessities, luxuries and needs. It is the worth or price of one's labour.

Moreover, Fapohunda (2012) advises that pay is a mark of social status and defines social ranking in the society. Acceptability in the society is regulated by the extent of a person's financial assets. Furthermore, Mandip (2012) found that pay and higher financial standing provides one access and the use of power and influence which consecutively puts the individual on greater financial footing. Social status and the political role of compensation reinforce one another. Similarly, Margaretha and Saragih (2013) assert that growth and maturity within an organization is habitually revealed in a worker's pay. It designates

age, performance and capability in the organization. In the same vein, pay works as a mechanism for encouraging desired behaviour. Kehoe and Wright (2013) note that it stimulates and chastises and also moderates anxiety. The necessity for financial compensation conditions a person's behaviour. Arising from these roles and the contribution of compensation, efficient packages that will meet the expected desires of workers and fulfil organization productivity and development objectives need to be formulated.

Objectives of a Good Compensation and Reward System

The major objectives of a good compensation and reward system are numerous. These include the attraction, motivation and retaining of workers. As Lado and Wilson (1994) puts it, an organization's level of pay is a foremost enticing dynamic to prospective workers or newcomers. Next, as corroborated by Mandip (2012), management regulates wages and salaries and labour costs through sensibly packaged compensation schemes with job evaluation etc. Furthermore, Margaretha and Saragih (2013) and Masters (2014) observe that worker loyalty and commitment to the employer as well as increased job satisfaction, reduced (turnover, absenteeism, complaints and grievances) which could arise with non-competitive and inadequate pay levels can be built. Moreover, pay is perceived as a motivator to increase employee morale and subsequently expand productivity. Fapohunda (2014) submits that wages are anticipated to have maximum positive influence on performance when workers: perceive a perfect correlation between their performances and their wages; pecuniary intentions are strong; the pre-existing stimulus to perform their jobs successfully from non-economic motives is feeble; workers' ability to perform their jobs is high and special pressure to increase output is not created. Financial reward is a foremost factor in attracting individuals to an organization, persuading them to remain and inducing them to contribute possibility to the achievement of corporate goals.

Green Reward Management Systems

Green compensation and reward management seek to distinguish the inputs of workers in the construction of a more sustainable organization. It is the consequence of the achievement of workers in their ecological performance assessment and the evidence that an organization's tactical sustainability objectives are being emulated and achieved (at any rate up to a particular level) from the top to the bottom. There are three diverse kinds of rewards. First are monetary-based rewards- by way of salary increase, cash incentives, and bonuses. Second involves non-monetary rewards like sabbaticals, special leaves, discounts or gifts to workers. Third, involves recognition-based rewards which entail emphasizing the green involvements of workers through wide publicity, public praise and gratitude for sustainability endeavours by the top management.

It is imperative nevertheless, to take into account that such a structure with efficient monetary motivations could be testing to grow since it is tough to correctly and reasonably assess environmental behaviours and performances all over the organization. Rewards and compensation constitute the foremost HRM functions for rewarding workers for their performance. Rewards and compensation functions are the most commanding techniques that connect a person's interest to that of the organization. Ramus (2002) contends that incentives and rewards are capable of manipulating workers' interest to the utmost at work and inspire them to put forth greatest attempts on their part to accomplish organizational goals. Within the agenda of Green HRM, rewards and compensation can be understood as prospective tools for maintaining environmental activities in organizations. Contemporary organizations are growing reward

schemes to promote eco-friendly programmes brought on board by their employees. Phillips (2011) affirms that a CIPD/KPMG survey carried out in the United Kingdom approximated that 8% of UK firms were remunerating green behaviours with diverse kinds of awards or financial incentives. Ramus (2002) states that these practices can be valuable in stimulating workers to create eco-initiatives. In the same vein, Forman and Jorgensen (2001) in a study on the significance of worker's participation in environmental programmes detected that worker's commitment to environment management programmes was enhanced by the offer of compensation to assume responsibilities associated with environmental accountability. Berrone and Gomez-Mejia (2009) in a study conducted on 469 United States organizations working in high-polluting industries asserts the usefulness of green rewards and compensation. The study reports that organizations boasting eco-friendly performance remunerated their CEOs more than non-eco-friendly organizations. They concluded that long-term business outcomes in agreement to pay were connected with better pollution prevention accomplishment.

Renwick et al, (2013) asserts that green compensation and rewards initiate the utmost degree of job satisfaction which considerably augments environmental performance. Green rewards and compensation boast a considerable impact on employee satisfaction for eco-initiatives. The employment of rewards and recognition founded on environmental sustainability puts an affirmative effect on employees' motivation to try out green initiatives.

Compensations and rewards constitute reinforcement to motivation and obligate workers to be environmentally accountable. Daily and Huang (2001) emphasize that a reward system can be employed methodically to inspire workers to execute craved behaviours with the intention that the organization and its workers can obtain gains from the plan. Compensation and reward management should distinguish assistance in green management.

Compensation schemes are supposed to be tailored to reward the attainment and successes of green skills by employees. For green achievements of workers, monetary- based, non-monetary based and recognition- based rewards can be employed. Prasad (2013) affirms that monetary-based remunerations for inputs in environment management can be billed through salary increase, cash inducements and bonuses whereas non-monetary compensations may comprise sabbaticals, special leaves and gifts to workers as well as their family members. For the recognition-based awards, the CEO or top management executives could emphasize green inputs of workers by way of extensive publicity and public eulogies and positive reception of green endeavours.

The Importance of Green Reward Management Systems

Embracing green HRM helps the organization to realize its green goals. Renwick et al (2013) suggest that by implementing green HRM practices, the organization transmits an obvious message to employees that it is dedicated to the social green cause ahead of any financial gains. Owing to their self-enhancement motives, employees are predisposed to respond positively to perceived green HRM practices. Ranganajan and Rahm (2011) reports that the adoption of GHRM practices by organizations, indicate to both current and prospective workers that they boast a well-built corporate social programme and value the environment and social priorities. They suggest that these messages encourage external reputation, and the organizations have a higher propensity to become more "attractive" to workers. Besides, implementing GHRM practices (like offering green training and recognizing and rewarding green behaviour) persuades and affords workers with chances to partake and connect with green activities.

Greening the Compensation Design and Management of the Human Resource Function

Green reward management systems entail assuming environment-friendly schemes to support sustainable practices and enhance worker commitments and corporate sustainability. It entails reducing expenditures and augmenting worker engagement and retention which, consequently, assists organizations to decrease workers' carbon trails.

As part of reward management systems, organizations can proffer green rewards to employees such as a nature-friendly workplace and lifestyle advantages. Consequently, this could incorporate carbon credit offsets, free bicycles and pollution-free vehicles for commuting to and from the workplace in order to engage people in the green plan. Additionally, talented employees seek self-actualization in their jobs to facilitate staying committed to their organizations. Green reward management systems can facilitate the formation of this by following green values and practices. Other green activities can incorporate the least use of paper and printed materials in reward management systems. To boot, green business can incorporate amplified recycling, reusable grocery and lunch bags, and proscribing the use of bottled water and plastic and Styrofoam cups in the workplace. Work stations can include fluorescent light bulbs and other energy saving and green appliances.

Also to underscore the significance of green reward management systems, organizations can initiate their workers to modify their travel and transportation inclinations by restricting official car trips, employing public transport for business travel and carpooling, offering interest-free loans to acquire hybrid cars, and cycling or walking to work. Business meetings and conferences can be carried out through the internet with the aim of reducing business travel. Greening is vital to circumventing or curtailing global warming; evading or reducing natural disasters, health diseases arising from pollution, injury to animals and other natural creatures guarantee balance in affiliations between life and environment and making certain of survival of humans and business organizations.

Effectiveness generated by Green Reward Management Systems can reduce operational expenditures and make it possible for industry professionals to achieve their corporate social responsibilities in a better way. Green Reward Management Systems consist of all the activities, practices, and policies that are concerned with the growth, accomplishment, and continuing upholding of a system that is intended at turning workers of an organization green. It is the side of GHRM that aspires to accomplish the environmental goals of the organization and at last to make a considerable input to environmental sustainability.

Several organizations are employing a greener approach in their operations. They reflect on two vital components: environmentally friendly HR practices and the protection of knowledge capital. Besides, they are indenting affirmative and pleasant consequences on the models of reward management systems in the organization. This also has a positive power on the attitude of workers because they think that aside from their practical involvement on the job, they have an imperative duty in conserving the environment. Therefore, as Shrivastava (1994) observes the environmentally negative nature of organizational activities and results has added to the present environmental concerns worldwide. Rugman and Verbeke (1998) assert that environmental concerns are a few of the mainly intricate and important managerial tests of the twenty-first century. They comprise climate change, resources reduction and decline of biodiversity, and ecosystem integrity. Organizations are liable for the environmental deprivation. Governments and organizations are employing natural resources generously for the creation of diverse goods and services required by people who desire to augment their living standards.

Providentially, a few governments, organizations, and individuals, as well as environmentalists and nature lovers, are presently and progressively paying solemn attention to conserve and protect the environment and decrease environmental pollution. Consequently, amplified awareness was created among

policy makers, leaders, and owners of the organizations, managerial employees, customers, and scholars concerning environmental sustainability.

Green Reward Management Systems actions assist companies locate alternate ways to reduce outlays exclusive of losing their talent in green economy. Organizations boast remarkable growth prospects by going green and constructing a new environmental DNA which can result in enormous operational savings by trimming down their carbon trail. As part of reward management systems, organizations can proffer green rewards to employees such as a nature-friendly workplace and lifestyle advantages. Consequently, as mentioned earlier, this could incorporate carbon credit offsets, free bicycles and pollution-free vehicles for commuting to and from the workplace in order to engage people in the green plan. Green reward management systems can facilitate in the formation of self-actualization in their jobs by following green values and practices. To boot, green business can incorporate amplified recycling, reusable grocery and lunch bags in the workplace. Greening is vital to circumvent or curtail global warming; evade or reduce natural disasters, health diseases arising from pollution, injury to animals and other natural creatures guarantee balance in affiliations between life and environment and make certain of the survival of humans and business organizations. Employees can also be presented chances to “tele work” or work from home. With the internet and intranet organizations can now commune with workers via emails thus decreasing the necessity for printing and of paper. Moreover, to emphasize physical fitness, good nutrition, and healthy life-style, wellness programmes for workers, their family members, and the general public can be arranged.

Greening the Reward Management Systems

To the extent that the Rewards Management function is concerned, work organisations are appropriately distinguished to profit from establishing a reward management scheme for group developed waste reduction practices. Because they are differentiated as central elements in enduring performance, compensation schemes are correlated to the achievement of particular skills and proficiencies rather than just performance only. As Peattie (2012) delineates, occurrences of severe accidents or proscribed discharges could be forestalled by a comprehension of environmental laws or composition. Masters (2014) avows that in the United States, several organizations have Environmental Respect rewards schemes that discern employee environmental achievements, while others offer rewards for schemes created by individual employees to relieve the environment and boost organizational prosperity. Generally, such organisations are perceived to oblige the development of compensation schemes that engender required behaviours in environmental management, and this obliges proficient use of both incentives and disincentives. Conceivably as designated by the U.S. episode, negative reinforcements (for example suspensions, reprimands and warnings) are mandatory to get employees to attain environmental improvements. Peattie (2012) nevertheless proposes that as an alternative, organisations could assume offering workers positive inducements like oral responses from managers, that could aid workers drive to environmental upgrading. Again, economic-based environmental compensation systems have been developed, particularly with performance upshots in environmental management determining considerable ratios of monthly managerial bonuses. Reiner (2015) observes that some organisations initiate their executive compensation and bonus plans in part on environmental stewardship exercises and integrate environmental performance goals as a standard constituent of the bonus system. The managers are permitted to allot compensations to motivate workers. Bird (2011) adds that some organizations now integrate environmental management issues into their performance associated payment plans, either as a supplementary performance gauge or standard

to be attained to be entitled to performance related payment. Furthermore, Firdaus and Udin (2014) establish that in diverse organisations in the United States, there are recognition-based compensations for supervisors though the calculated swell of such compensation schemes to all workers is attributable to the fact that the majority of organisations have relatively new environmental evaluation plans. Some of the issues here include: novel compensations obligatory to inspire more youthful individuals, and how compensations such as promotion can be linked to workers' environmental performances. Margaretha and Saragih (2013) designate that there are several methods of offering encouragements in an environmentally pleasing method together with expanding car mileage for corporation vehicles to bicycle rides. Furthermore, employees could be offered economic substitutes for car allowances besides encouraging carpooling and sharing provisions. Monetary carrots can as well be included into compensation plans, as tax incentives and eliminations encouraging bicycle lending and less contaminating car convoys too. It could in addition involve offering financial inducements to workers for their good green performance of job and non-financial compensations like praise and recognition to employees for their greening. Green reward and compensation must be integrated in organization HRM policies and practices. Mandip (2012) indicates that reward systems have the capability to develop the organization's efforts to executing sustainable practices and they include more than just financial recompense. Schedule flexibility, profit-sharing, benefits and incentives, recognition, paid time off and holidays, favoured parking and gift certificates are also forms of rewards. Integrating green reward and compensation practice in HRM policies and practices can be done by compensating environmental champions with bonuses. It could be by way of employee recognition where the environmental stars are given public praise. Furthermore, green reward and compensation can be integrated through the incidence of a policy on green reward in the organization.

In the framework of Green HRM, rewards and compensation can be presumed as prospective tools for sustaining environmental activities in organizations. Garg (2014) in a study exploring the involvement of workers in environmental work programmes indicates that rewards and compensation can be employed to make workers take on accountability of partaking in environmental endeavours. Organization management could tailor their reward package to reveal their environmental objectives. There could be offering of gifts to staff members deemed environmental champions to emphasize positive environmental behaviours and certificating remuneration policies and computerization of reward processes. Other forms of reward include schedule flexibility and organization shared profits as a form of appreciation. In addition, workers who champion environmental issues can be given paid time off. Reward perks up organization attempt to execute sustainable practices. Employees' recognition can be utilized as a type of reward in the organization. Green reward and compensation practices can manipulate environmental sustainability to a reasonable level.

Impact of Greening the Reward Management Systems

With Green Human Resource plans organizations receive assistance in discovering replacement options to slash expenditure. It entails the involvement of people management procedures and actions towards this more extensive programme. It is a significant concern for Human Resource since it is as well very imperative for all workers, in addition to customers and other stakeholders. Moreover, greening the Reward Management Systems certifies that Human Resource can boast an immense effect devoid of originating a great deal of overheads. Furthermore, by offering financial support for green benefits to keep staff occupied, excellent environmental management can perk up sales and decrease expenditures.

If greened, the conventional reward management systems function will facilitate organisation(s) attainment of sustainable development in addition to assisting in appropriate management of people in tumultuous environment(s).

Arulrajah, Opatha and Nawaratne (2016) suggest that Green Reward Management Systems practices are charts, processes and techniques implemented in the organisations aimed at shrinking negative environmental upshots or advancing positive environmental influences of the organisations. Thus, the decisive rationale of green reward management systems practices is to augment organisations' sustainable environmental performance especially in turbulent environment(s), where managing people effectively is desirous. Milliman and Clair (1996) affirms that greening the reward management systems presents environmentally affable items for consumptions and procedures to administer corporate environmental agendas effectively, and to surmount execution challenges of corporate environmental agendas.

As Ayesha, Amna, Tahleel, and Hina (2015) stipulates, organizations that are capable of lining up compensation and rewards practices with intents of environmental management can be victorious in the corporate environmental management journey. The reality that the most advanced attributes of environmental management of the ISO 14001 certified organizations are inclined to be connected with just about all of the practical and cutthroat elements of human resource management was established by a 2010 study conducted by Jabbour and Santos. In sum, some central effects of Green rewards management include: achieving insight, reputation and benevolence. It also brings about cost efficiency and smarter performance converted into less expensive products. Moreover, it results in improved power function. In addition, it is cost-effectively functional, consequently having undeviating effects on earnings while also augmenting the return on outlays.

Rewards and compensation are the foremost HRM processes through which workers are rewarded for their performance. It is the HR practice that serves as the most potent technique which connects an individual's concern to that of the organization. Motivations and rewards can sway workers' consideration to the utmost at work and stimulate them to apply greatest effort on their part to realize organizational goals.

In the perspective of Green HRM, rewards and compensation are potential tools for supporting environmental activities in organizations. Benz and Frey (2007), (2011) and (2013) also show that inducements persuade executives to employ accounting and other works to attain short-term outcomes and improve themselves. Increased prominence should be provided on studies that establish efficient techniques that will aid creating and executing green compensation practices and possibly initiate the accomplishment of corporate environmental goals.

Milliman and Clair (1996) suggest that green compensation and rewards develops into an obligation so as to present environmentally friendly products and operations to manage corporate environmental programmes productively, and to surmount accomplishment challenges of corporate environmental programmes. Jabbour (2011) affirms that organizations with the capability to array compensation and rewards practices with goals of environmental management can be successful in the corporate environmental management expedition. Jabbour and Santos (2010) confirm that the most developed features of environmental management of the ISO 14001 certified organizations have a tendency to be connected with nearly all of the functional and competitive elements of compensation and rewards. Green HR compensation and rewards strategies assist organizations in locating substitutes to slash expenditures. It alludes to the input of people management policies and activities towards the wider plan. It is a vital subject for HR since it is as well extremely essential for all workers, customers and other stakeholders. Besides, it is a subject where HR can have a huge effect devoid of originating many expenses. Furthermore, good environmental management can advance sales and decrease expenditures by offering

Greening the Compensation Design and Management of the Human Resource Function

funding for green gains to keep staff occupied. In recent times, across many organizations, to facilitate counselling of employers on “green” consciousness in the workplace, various practice groups are being initiated with the intention of the groups executing best practices that will develop the work environment through decreasing, reprocessing, and recovering some materials. Moreover, the practice groups counsel employers on educating their employees on how their activities both in the office and at home influence the environment. Organizations should adjust to transforming lifestyles and altering workforces. Benz and Frey (2011), indicate that an ample number of employees in organizations that assumed the agenda made considerable transformations in their everyday activities, comprising augmented recycling, reduced printing, eradication or decrease in the utilization of bottled water, plastic and Styrofoam cups, employing re-serviceable grocery and lunch bags, changing to compact fluorescent light bulbs and other energy saving and green products, and modifying transportation traditions. Therefore, a few significant effects of green compensation and rewards include: achieving insight, reputation and good will; cost efficiency; more elegant performance converting into more economical products; improved power function and reasonably helpful and consequently undeviating effect on profit as well as improved returns on investments.

An increased attention is now created among stakeholders with respect to environmental sustainability. Improved employee morale, stronger public image, increased consumer/ customer confidence, employee loyalty and brand recognition, position as an employer of choice, increased workforce productivity, efficiency, and motivation and employee retention are few of the many advantages and benefits an organization can have by committing to green compensation and rewards.

Challenges to Greening the Reward Management Systems

The use of green reward and compensation persuades environmental sustainability of the organizations. Fernandez, et. al. (2003) however observe that while green compensation and rewards increase green initiatives in organizations, it is by no means absolutely free from a few mismanagements. Developing effective monetary incentives can be challenging by reason of the complexity of correctly and reasonably assessing environmental behaviours and performances. Again, including green rewards in the human resource policies does not necessarily influence environmental sustainability at any rate. While some studies like Shane (2003) indicate that it involves the organization recognizing diverse reward strategies which may possibly be monetary and non-monetary gains offered to workers in return for their environmental contributions. Other studies like Daily and Huang (2001) designate that rewards are reinforcements to inspiration and entrust workers to be environmentally accountable. A reward system can be utilized methodically to stimulate workers to execute required behaviours so that both the organization and its employees can obtain gains from the programme. These gains incorporate bonuses, special leaves, gift vouchers, flexible schedules, paid holidays, profit sharing schemes, and paid time off and they improve workers’ execution of required behaviours, which consecutively makes certain that organizations sustainable practices are enhanced. Where such rewards are established, it constitutes a sign that non-monetary incentives are significant and workers value them but it is not designed to lure them to work towards developing the environment. Compensation and reward management must distinguish inputs in green management. Prasad (2013) contends that for green attainments of workers, monetary- based, non-monetary based and recognition- based rewards can be employed. Monetary-based remunerations for involvements in environment management can be assigned through salary increments, cash induce-

ments and bonuses while non-monetary rewards could embrace sabbaticals, special leave and gifts to workers and members of their families.

Aligning green rewards and compensation schemes to the HRM process, motivates a green culture in organizations and integrating components of green management in the compensation programme, allows managers to encourage the green behaviours among the workers. Additionally, managers can request workers to convey precise green proposals relating to their personal jobs which can by way of joint decisions be incorporated into the goals to accomplish in the approaching year. Accomplishing the goals would constitute the foundation of obtaining incentives. Employee compensation plans can be adjusted to offer bonuses founded partly on the worker's assessment ratings on the behavioural and technical capabilities and workers may possibly be given bonuses for their exceptional work on unique schemes. Pillai and Sivathanu (2014) observes that green compensation and rewards could embrace the utilization of workplace and lifestyle gains, varying from carbon credit compensations to free bicycles, involving people in the green plan and persisting in identifying their input.

Worldwide, modern environmental concerns have further compounded the environmentally pessimistic character of organizational acts and outcomes. Environmental concerns constitute some of the mostly complicated and significant managerial tests of the twenty-first century. They comprise reduction in climate change resources and decrease in biodiversity, and ecosystem uprightness. Alshuwaikhat and Abubakar (2008) and Haden, Oyler and Humphreys (2009) contend that organizations are liable for the environmental deprivation. Governments and organizations are employing natural resources generously for the production of diverse goods and services considered necessary by people who desire to improve their living standards. Providentially, a few governments, organizations, and individuals, comprising environmentalists and lovers of nature, are presently and more progressively giving solemn consideration to conserve (to shield) and protect (to keep) the environment and curtail environmental pollution.

RECOMMENDATIONS

It is important to employ green rewards to promote worker's behaviour towards realizing environmental goals. Compensation schemes have to be tailored to remunerate the possession and attainment of green skills by workers. Rewards and compensation constitute the principal HRM process through which workers are rewarded for their efforts. These HR practices are the most powerful methods which links together an individual's interest to that of the organization. Therefore, organizations are required to design reward programmes that can be inspirational to all workers in order to enhance environmental sustainability. As earlier mentioned, a few of the recommended green reward and compensation practices consist of gifting workers who are campaigners of green practices, receiving bonuses and directives for positive behaviours. Green reward can be exercised through computerization of reward processes, granting of exceptional leaves and sabbaticals to employees. To offer financial incentives and non-financial rewards to workers for their good green job performance, the HR Department can create Green/EM (Environmental Management) job descriptions for workers with higher-level executives taking superior responsibility for green schemes. Besides, green objectives must be incorporated into managerial job descriptions.

Organizations are required to devise energy-competent products and procedures, and develop motivations to speed up their reception. Sustainability is becoming a principal focus for several organizations. Going further than environmental sustainability, the idea incorporates all kinds of social and environmental effects that demonstrate why employers are obligated to build up a novel scheme of do-

Greening the Compensation Design and Management of the Human Resource Function

ing business. Beyond centring on financial profits, sustainable organizations must also reflect on social and environmental effects in taking business decisions. The HR functions have a vital responsibility in environmental sustainability. The green work-life interface to green compensation and rewards has revealed that it can be valuable to go ahead of “greening workers” and to think about the whole human being together with their private life and consumer behaviour. Such an idea builds on the grave appreciation of environmental concerns in an organization’s management. The greening support of workers as human beings only becomes successful if environmental features are reflected on in all central business procedures and practices. More organizations build on the grave appreciation of environmental concerns in an organization’s management.

CONCLUSION

More organizations now appreciate the significance of sustainability which is offered in incorporating green customs as a foundation which human resources has on their competitiveness, reputability, and capability to attract and retain strong talent. Sustainable organizations now look for contributions from a wide and varied set of stakeholders-both in-house and outside-in forming their business tactics and operations being watchful of their economic, societal, and environmental effects. The HR function generally has a vital role to play. HRM can facilitate the creation and implementation of sustainable business strategy all over the organization employing the HR skills in organizational procedures, change management and culture stewardship. This could necessitate the development of innovative HR proficiencies. HR must therefore, in addition to becoming proficient at using Green HRM tools to entrench the sustainability strategy and mission in the organization, also gain knowledge of shaping the structure itself so that its effects on workers, districts, and other stakeholders support the sustainability dream of the organization. Organizations are encouraged to create committees on environmental and sustainability awareness which are multidisciplinary and have activities in diverse units. For most organizations in today’s economic ambience, the resources are already drawn out to the utmost where they can attain the height of going green.

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Chapter 10

Green Health and Safety Management System

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ABSTRACT

The objective of this chapter is to fulfill the aim of the book by developing two of its major topics, green health and safety management, and to show their positive impact on the business success and sustainability. A number of factors, including environmental consideration, as well as the well-being of the human capital at workplace, must guide the current business practices. Today, business centers are becoming spaces where people spend most of their times as either managers, employees, shoppers, bankers, or eaters, as well as many other different activities that push people to visit the shopping malls. For these reasons and many others, businesses are becoming more complex, multicultural, and multifaceted resulting in green business practices more imperative today than ever before.

INTRODUCTION

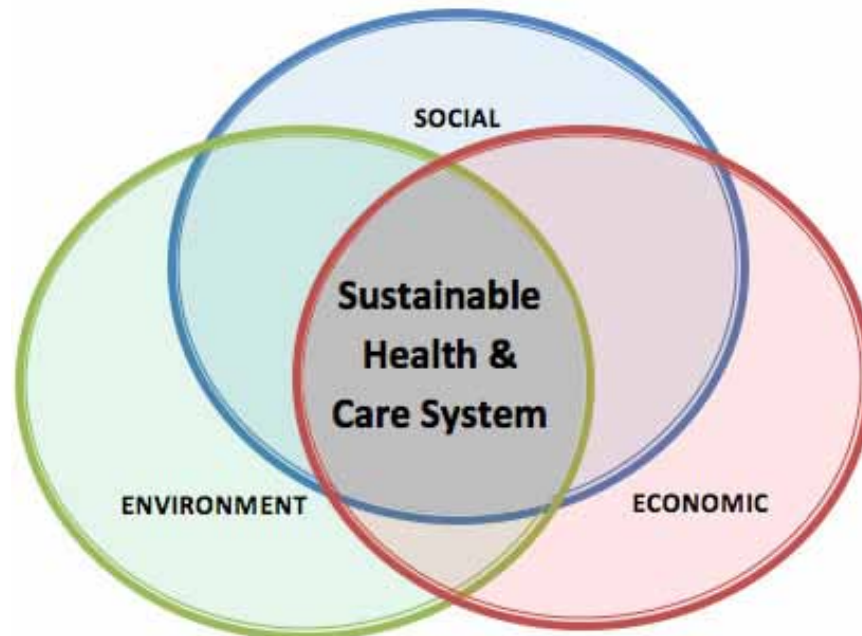
Businesses as well as individuals' activities are threatening and degrading many of the life-sustaining systems such as the purification of atmosphere, building and equipping the hospitals and many more (Atiku, 2019; Fields & Atiku, 2017). Energy production and distribution, food production, land development and chemicals must be re-imagined if human being is to survive and build individual and communities resilient to new and emerging health threats. The above activities are indispensable for human survival and prosperity. However, the impact they bring to the society and ecological system is unprecedented.

A sustainable health and care system is achieved by delivering high quality care and improved public health without exhausting natural resources or causing severe ecological damage. Coincidentally, it is ascertained that the health sector is uniquely positioned to achieve this sustainability. However, a partnership with other economic actors (see Figure 1 below) to lead the transformation of the society, individuals and communities is now required than ever before.

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Figure 1. Partners of sustainable health care

Source: Sustainable development unit (2020. P. 1).



This chapter, as part of the book concentrated on “Human Resource Management Practices for Promoting Sustainability”, discusses both the concepts of green health and safety management at work place, by highlighting the paramount importance of both concepts towards the adoption of best practices in human resources management as well as the adoption of green practices by the organization. Section one focuses on green health since its beginning in 1800s, the major stages it went through, its current drivers as well as its future orientation. The second part of this chapter discusses safety management at workplace. The essence of safety and in relation to an organization will be discussed, followed by the elements of effective safety management system.

International Electrotechnical Commission (2015) defines safety as freedom from unacceptable risk of physical injury or of damage to the health of people, either directly or indirectly, because of damage to property or to the environment. Accidents free environment is the dream of each and every employee, and management has a crucial role in the establishment of such conditions. Safety management is also a concern of employees who have to be trained in accident prevention, accident response, emergency preparedness and the use of protective clothing and equipment. It can however, be argued that despite having safety management policies, accidents can still occur because of the unsafe work conditions that employees are sometimes forced to work in. This opinion is shared by Dejoy (2005) who articulated that a company might have well-managed safety management and all the policies regarding safety, however, there are quite a few accidents that may occur.

An equal important concept of discussion in this chapter is the concept of green building. As a number of businesses’ stakeholders spend some of their times at the shopping malls, it is imperative that organizations become environment friendly by adopting green building practices thereby improving the safety of all stakeholders. According to US Green Building Council (USGBC, 2009), green buildings have

become one of the main practices to save the costs of the resources. Those practices around the building include but not limited to site conditions, energy consumption, water efficiency, indoor environmental quality, material uses, innovation and design and regional characteristics (USGBC, 2009).

GREEN HEALTH

“Health must become the focus of economic and social discourse, ushering in fundamental system changes to support social and ecological restoration and resilience” (Practice Greenhealth, 2019).

The concept of green health refers to the incorporating of business environmental friendly practices into healthcare dispensation, and make appeals to health professionals and institutions to make a significant contribution towards environment protection. Green Health in its current form sounds a new concept, but in reality, it is not the case. According to the Institute for the Future (ITF) (2009), the notion of Green Health has been the foundation of the worldviews and healing practices of many different cultures, from ancient to modern times.

Green Health represents movements from all over the world, and though North America has played a leading role in catalyzing it, its principles and values are universal. These values are blended from health and environmental consciousness that have converged before, and are new knowledge; new tools and new urgency have forced them to converge again. In other words, the emergence of Green Health renews old stories and practices while they reshape the way we use them today.

As pointed out by ITF (2009), the story of Green Health unfolds over 200 years. Since the beginning of 1800, there has been the following seven major back-stories or “roots” that have laid foundation to the Green Health as we see it today:

Humoral Causality: Connecting bodies and landscapes

Contemporary natural medicine is the descendent of para-scientific systems that tried to make sense of the empirical practices such as herbs, massage, exercise, and positive attitude. It is believed that about twenty-five hundred years ago, Europe’s Hippocratic tradition, India’s Ayurvedic medicine, and East Asia’s traditional medicine understood the cause of disease in terms of humors, intrinsic qualities in our bodies that reflect the elements of nature such as water, fire, earth and wind and others.

According to these traditions, there is the larger physical and spiritual world “above” that effects change in the body “below”. Their perception of health was a complex balance of the above qualities (water, fire, earth and wind) that are brought by means of regulating emotion, food, exercise and religious practice. As opposed to that, disease was said to come from many causes (internal, external, spiritual and physical) that interacted in many different and complex ways, and health was achieved by many different kinds of intervention from spiritual advocacy to change in diet, but importantly, healers treated the person rather than the disease (English-Lueck, 1990).

Natural places: The spiritual and the healthy

In the 19th century, a philosophy – American Transcendentalism - emerged in the United States to emphasize the spiritual aspects of nature. In the view of its major proponents –Ralph Waldo Emerson

Green Health and Safety Management System

and Henry David Thoreau), a central tenet was that nature had healing power, while place was somehow integral to health, both physical and spiritual. This philosophy, though influenced by European and Indian philosophies, it was purely American and its main purpose was to glorify the state of nature Americans were believed to reside (Albanese, 2007). Transcendentalism undermined the 18th and early 19th century belief that environment shaped behavior – a philosophy from which Europeans viewed Native Americans and other colonial subjects all over the world who lived bereft of urban civilization) as savages.

Germ-based Interventions: Biomedicine ascends

Germ theory emerged in the late 19th century and proposed that pathogenic microorganisms cause disease and eliminating these pathogens is the way to prevent or treat disease. This view constituted a strong foundation for modern medicine and brought a new perspective where medicine turned from treating each unique patient to treating the disease itself. Furthermore, the hygienists who emphasized sanitation caused the introduction of the fields of biomedicine and public health (warner, 1997).

Risky cities, risky Farms: Health disparities recognized

Towards the end of the 19th century, America was becoming more and more urban and multicultural whereby from 1880 to the end of that century, 15% of the population were foreign-born (Hirschman, 2005). After the civil war (1861-1865), immigration, urbanization and industrialization took root and the larger and growing cities experienced high level of diseases due to poverty and poor health care. Cities as well as the farms became risky places to live in, while social and economic inequalities aggravated these risks: racialized epidemiology played out while some populations were subject to stressors that were not experienced by powerful segments (Farmer, 2005).

Shifting Responsibilities: From families to institutions and back again

In the 20th century, there was a round movement of health care responsibilities, first from families to the institutions and back again, before the reconstruction of health care structure from the period of depression (1929-1941) until the aftermath of the WWII. From this time, medicine became hospital-centered service. As a result, we had:

- Medical specialization led to new niches in practitioner care and public health,
- Professional associations became critical policy players,
- New forms of payment, such as private and employer-based insurance
- Creation of more complex and bigger bureaucracies such as
 - Centre for Disease Control and Prevention
 - Medicare
 - Medicaid

Well Beings: health is more than not being sick

Mears and Ellison (2000) assert that health must no longer considered in the context of not being sick, rather being actively well. Mears and Ellison (2000) refer to all kinds of humor to be found in

stereotypes of aging baby boomers, twisting themselves into complicated yoga positions and advocate the promotion of wellness. As a result, practices such as acupuncture and acupressure from Asia have found market especially that they have been legally accepted internationally.

Ecological Bodies: Humans are part of the ecosystem

As people feel the proximity of ecological risks, they end up considering themselves as ecological bodies in many different ways (English-Lueck, 1990). Anthropologists and socialists have noticed that in the spirit of protecting the environment, people are mobilized by their concrete participation, that of their families, as well as that of their friends and neighbors rather than abstract beliefs (Brandt, 2007).

Brandt (2007) illustrates his position highlighting the role of every stakeholder in the Pajaro, a costal agricultural area in Monterey County, had various views and interests in 1959: farmers were concerned about the water regulation and the theft of their crops by pedestrians walking along the levees, as well as the loss of valuable farmland for public works. Local residents were concerned about the contamination with the pesticide, while environmentalists were keen for the restoration of the riparian habitats. It is clear that every stakeholder and each body in Pajaro had a different interest to defend that requires different action to take.

DRIVERS OF GREEN HEALTH

Issues such as climate change, resource constraints and new chronic and infectious disease are making people to rethink about their behaviors, especially in areas such as overeating, behaviors of larger body politic such as farm policies that encourage the conversion of corn into high-fructose corn syrup. Five major forces are driving the change toward Green Health:

DRIVER 1: Climate Change Gets Personal

Evidence from scientific research has revealed that the rising atmospheric levels of carbon dioxide will correlate with an increase in the rate of asthma and allergy diagnoses. Furthermore, it was proven that the number of asthma diagnoses is higher in developed world than in developing countries (Baer, 2009). Similarly, the World Health Organization (WHO) has also raised its voice and warns that the systemic threats of climate change, are unprecedented in scope and that a clear education of those changes will lead to a clear understanding of their effects on us all.

Individuals and organizations will fight climate change by the implementation of green buildings principles that offers several benefits such as the minimization of global warming and climate change, minimization of CO₂ emissions and pollutants, protection of ecosystem (Ahn, Pearce, Wang & Wang, 2013). Accordingly, the use of renewable natural resources, improving health, comfort and well-being, poverty alleviation, improving economic growth, raising rental income and decreasing healthcare costs.

It is therefore critically important that we get a strong awareness around these new connections with climate change, the impact of our environment on our health from cancer clusters to sick building syndrome and increasing allergies in the entire world (IFTF, 2008). The good news however is that 80% of the United States of America population believes that climate change is a reality and 78% of that percentage show a real concern about the effect of the climate change on our health (Hitti, 2008).

Green Health and Safety Management System

Prior to the publication of these statistics, WHO (2003) had noted that climate change differs from other environmental issues such as endangered species or industrial pollution because it is directly related to personal choices where everyone can do something about it. It therefore recommended that individuals, organizations and governments, all have to make rational decisions in terms of the products they buy, cars they drive and so forth. WHO further warns that change in our behavior, technology usage and our practices must change if we are to achieve sustainability (WHO, 2003).

DRIVER 2: Disease Burden Reshapes the Lines of Intervention

In the western countries, infectious diseases have been wiped out, resulting in longer life expectancies. This achievement is a result of advanced medical techniques, the significant role played by the public health sector as well as the environmental interventions (Jackson, 2008). While this is the case about infectious diseases, the rate of chronic diseases continue to be high. In the 21 century, diseases of aging and costs of care for aging populations, lifestyle illnesses such as Type 2 diabetes and heart disease, mental disorders including depression, anxiety and substance abuse and macro-environmental disturbances of climate change are likely to be the burdens to pay attention to (Falcon and Lueck, 2009). Our lifestyles and attitudes towards environment will play a key role in the way we face these 21st century diseases.

It is the responsibility of the Green Health movements, together with other relevant stakeholders to think of new ways of intervening for these 21st century diseases. The areas of focus for these interventions would be the places where we spend most of our times such as workplaces, homes, and the layout of the cities, energy, climate and emotional impacts of our buildings (Falcon and Lueck, 2009).

DRIVER 3: Resource Constraints - The Cost of Chronic Care and Resources for Human Well-Being

The correlation between the scarcity of natural resources and rising costs makes the problem to increase exponentially. In its 2007 report, The Milken Institute shows that the failure to deal with the following seven medical conditions (diabetes, heart disease, hypertension, cancer, stroke, pulmonary conditions and mental disorders), costs the USA economy more than \$1 trillion annually (DeVol, Bedroussian, 2007). Similarly, research by Anderson and Wilson (2006) have pointed out that the burden of caring for patients with chronic conditions accounts for more than four-fifths of all health care expenditures, or more than \$1.4 trillion per year.

From these experiences, the WHO has issued guidelines concerning the fight against the chronic diseases, taking into consideration the rising costs to deal with them. The core of these guidelines are the promotion of healthy lifestyles and the prevention of premature death and unnecessary disability due to chronic illness (WHO, n,d). The WHO organization supports a “health care triad”: a partnership between patients and their families, health care teams and the supporters in the community (Whelan, 2008).

DRIVER 4: Shifting the Responsibilities of Regulation

It is argued that environmental legislation as well as the effort of legislators failed to produce positive results about environmental awareness. Furthermore, regulatory agencies in the USA and in many other parts of the world, have failed to fully implement clear precautionary principles (IFTF, 2008). This is an unfortunate situation because as ascertained by Darko, Zhang and Chan (2017), legislation was ranked as

top driver that encourages change, especially in the construction industry. This finding came in support of Arif, Egbu, Haleem, Kulonda and Khalfan (2009a) findings in India, that where academic studies, private and public sectors, as well as regulatory bodies were unanimous on the major drivers for the GB.

As a result, a group of third party certification was born to establish a kind of independent regulation and non-governmental structure: those are:

- Non-governmental and non-profit organizations such as the U.S. Green Building Council and the pharos Project to advocate for environmental health through advancing and certifying green building materials and practice.
- Third-party corporate social responsibility (CSR)
- Equal Exchange and Fair Trade Certified

Unfortunately, the third-party certification is yet to produce results. As a proof, we still see unverified health claims, labels and seals about the “healthiness” of a variety of products and services. However, one can recommend a collaboration between government and these third-party agencies in order for the results to be achieved swiftly. Furthermore, there is hope that this should change soon as concerns about environmental health continue to move into the domain of personal health values. Sooner than later, consumers will request the third-party certification of those health claims (Falcon and Lueck, 2009).

Rethinking Values and Valuation

Today, we observe the shift in the way cultural values see “health” and “green”. Moreover, this is an encouraging move as the challenges of chronic diseases and our current health care system affect our lives on daily basis, driving us to position our judgments towards being healthy and consider all the factors that lead to quality health (Falcon and Lueck, 2009).

Green values are already taking place in people’s behaviors in many different domains:

- Transport and energy use
- Food and nutrition
- Personal health
- Parenting
- Work
- Finances and
- Home care.

Different people interpret these values in many different ways, where some care while others do not. However, the prospects of positive attitudes are high as a whole range of values about Green Health is rapidly spreading in the public minds (Falcon and Lueck, 2009). There is a need to create a link between these values and health and affect health officials for a better future.

In a specific industry of construction, which together with mining and manufacturing constitute the main environmental hazards, green health gets a momentum with the adoption of the green buildings (GB) principles and practices. Yudelson (2009a) defines GB as a building that “considers and minimizes, its impact on the natural environment and human health, utilizes considerably less water and energy

Green Health and Safety Management System

than a non-GB, generally has higher levels of indoor air quality, and accounts for some measure of the lifecycle impact of choices amongst different kinds of building materials, furnishings, and furniture”.

The following stakeholders have been identified by Darko, Zhang and Chan (2017) as the main concerned with the GB drivers in most studies:

- Architects
- Construction units (main contractors and subcontractors)
- Client/owners
- Engineers
- Developers
- Designers
- Government authorities
- Consultants
- Educators/universities/academics/researchers
- Manufacturers
- End-users/customers/consumers/tenants
- Suppliers
- Project/construction managers
- Law unit
- Private sector departments
- Investors
- Facilities managers
- Development managers
- Financial institutions such as banks
- Others (economists, quantity surveyors, etc.)

In the field of real estate investing, Darko, Zhang and Chan (2017) and Falkenbach, Lindholm and Schleich (2010) classify GB drivers into three categories; external drivers, corporate level drivers and property-level drivers.

External Drivers

Qian and Chan (2010) and Wang, Toppinen and Juslin (2014) refer to external drivers “as drivers that are mainly set by external parties, such as government, United Nations (UN), European Union (EU), trade unions, and clients/customers, to companies or organizations that building green”. Simply put, external drivers refer to events that occur outside the company that develops GBs. In recent years, many governments around the world have intensified their involvement with the GB market, and the literature supporting that government’s role is important for driving the GB agenda is extensive (Qian & Chan, 2010; Wang et al., 2014).

Corporate Level Drivers

It is important to understand the internal drivers that enhance business in terms of sustainability. Falkenbach et al. (2010) identified only one corporate-level driver -the image benefits –as the most rewarding

for the real estate investor. However, many more drivers at the corporate level in addition to green image have been identified in the literature.

- Corporate image, culture, and vision
- Corporate social responsibility
- Marketing benefits
- Competitive advantage
- Improved occupants' productivity
- High return on investment
- Attraction and retention of quality staff
- Company policy
- Improved indoor environmental quality
- Improved occupants' health, wellbeing, and satisfaction
- Impress regulators
- Reduced payback period
- Creation of better future opportunities
- Helps to transform the market
- Familiarity with green products/processes
- Recognition within the industry

Property-Level Drivers

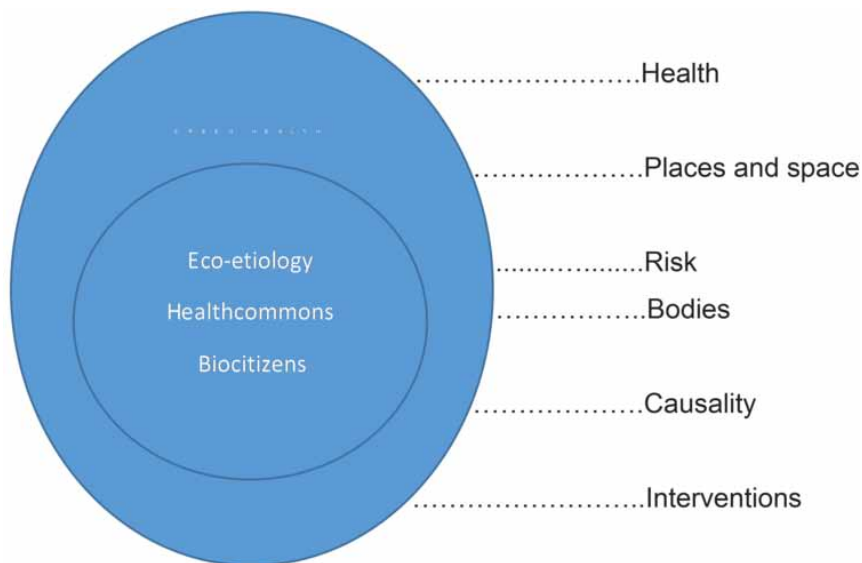
Property-level drivers for GB can be explained by 17 different drivers, which include increased property values, high rental income, and reduced risks.

- Reduced whole lifecycle costs
- Increased property values
- Attract premium clients and high rental returns
- Reduced liability and risks
- Lower vacancy rates
- Decreased obsolescence
- Energy conservation
- Water conservation
- Environmental protection
- Resource conservation
- Ease in resale and high resale value
- Reduced depreciation in rent and price
- Increased probability of lease renewal
- Decreased tenant rent concessions
- Achieve high quality building
- Increased longevity of building
- Reduced insurance costs

FORECATS: LENSES ON THE FUTURE OF GREEN HEALTH

The lenses on the future of the Green Health are converging into what can be called experiments – new practices at the scale of the individual, organization, community and even society as a whole. There is no doubt that the principles of Green Health are widely spread, but there is a need to inculcate them into all stakeholders' daily lives. Falcon and Lueck (2009), provide the following framework within which, these lenses should be viewed:

Figure 2. Lenses of the future Green Health



These lenses are used to analyze the key shifts and to predict future greening of health, well-being and health care.

FORECAST LENS 1: HEALTH

The context within which people have to understand the concept of health is multifaceted:

- WHO Constitution states that personal health will be tied to environmental well-being as people expand their personal values and practices regarding sustainability to many other domains in order to protect their bodies, their homes, their communities and their planet.
- Moreover, people will try to live sustainably, while organizations and communities will try to act in the same manner, but not everybody will follow.
- There will be an increased emphasis in emotional and spiritual health
- There will be an increased demand in information about the places, especially those that affect health for better or worse

- People will develop new practices that make a difference between places and aspects of place that affect their health.

Given the above context, the forecast on the future on the lens of health would be:

- Expansion of demand for innovative alternative products and diagnostics that mitigate risks in the households, communities and the global environment to deal with health-driven green values.
- More demand for new kinds of product categories and metrics that show the products align with the consumers' increasing demand for green values.

FORECAST LENS 2: PLACE AND SPACE

This lens has to be understood in the context of where we live, work and play. By evoking this context, means that people have to be sensitized about the risks associated with it and implore them to use their experiences and decide on the types of interventions to take for their better health. The greening of public spaces and workplaces will create demands on other areas where we live, and establish connections between our personal health and the environment in general.

The forecast is on the emergence of new tools to assess risk in place. In the view of Falcon and Lueck (2009), we observe the emergence of social platforms, devices and sensors to collect data and reveal new patterns in the places. Alameda County Department of Public Health (2008) supports this view and provides an example of Whoisick.com website that invites people to load information about the symptoms of their health (e.g. sore throat, vomiting) and compare this information against that of other localities. Through the information loaded on this website, patterns of risk and diseases in the environment are revealed. Additionally, a study by "Life and Death from Unnatural Causes" from one county, revealed that place matters to our health. Furthermore, the study concludes that health protective resources such as clean air, healthy food and recreational spaces, opportunities for high quality education, living wage employment and decent housing are highly dependent on the neighborhood we live in.

FORECAST LENS 3: RISK

The risk here is defined as the perceived or experienced dangers or susceptibilities. Our environment continues to produce new different forms of risks while the old ones reemerge in different format. A good example is the climate change whose effects are more and more visible, immediate and threatening our lives. To be able to cope with the risks and their consequences, there is a need to understand the relationship between risk and risk management including financial risk given the financial burden to deal with matters affecting our health.

The forecast for this risk is that toxic body burdens bring new scrutiny to everyday items. We were made to be concerned with the risk associated with everyday products in our communities. In fact, our daily products such as washing powders and laundry detergents, cosmetics and food, all contribute to our worries. Shapiro (2007) as well as Commonwealth Biomonitoring Resource Center (2005), have both raised their voices for more powerful regulatory frameworks and fuel the development of cleaner, greener products and reformulations.

FORECAST LENS 4: BODY

The body is defined as the interconnected physical, emotional and spiritual self. The context here is people should be at the center of any discussion about health matter, because our surroundings impacts on our physical, emotional and spiritual selves and connects us to the sense of planetary and collective well-being. An example that reflects this connection between our bodies and environment is research and interventions around asthma and cardiovascular diseases, where risks in the places we live in and the pollution we breathe are identified.

The forecast is on children's health, which makes schools a key site of change. Schools are to become centers where children learn how our personal and collective choices are dependent on and affect the ecological systems around ourselves. Furthermore, teachers, parents and public health advocates escalating the level of citizen where children themselves can request food that are conducive to their future health. Consequently, future generations might shift their behaviors when these kids being educated about connections between food systems and their own health, come of age.

Further forecast is the productivity to drive eco-health in workers' health and energy. Currently, companies' policies and daily practices of employees reflect a growing awareness in the workplace of the convergence of immediate environmental sustainability and human health. Schiller (2008) provides example of Wal-Mart's Personal Sustainability Project (PSP) that advocates for good health and wellness among its vast pool of employees, and it makes the connection between personal health and environment more explicit.

FORECAST LENS 5: CAUSALITY

The causality refers to explanations of illness, infirmity, health and well-being. The context of this lens is that the expansion of awareness of how health is related to the environment will stimulate more insights on the causes of the diseases and how they can be treated. From here, more explanations will emerge to take us from our simplistic understanding of the causes of the diseases (cause and effect), towards a better understanding in the context of a range of complex interactions.

The forecast will be on ecological causality, which will become more central to understanding of health. Kreiger (1994) ascertained that green health was expanding the concept of causality to include ecological causality. Kreiger observe that debates about the relationship between obesity and diabetes have been unfolding since 1960s and 70s. However, today, public debates around obesity and diabetes occupy a center stage and they include environment, behavior and biological disposition.

FORECAST LENS 6: INTERVENTIONS

In this context, interventions are understood as the practices and policies for effecting changes in health. Therapeutic and preventive health interventions are not only directed to our bodies, but to our environment as well. Falcon and Lueck (2009) acknowledge the fact that people with diabetes live in a larger ecosystem of information, health and food systems. Therefore, interventions should reflect ecological causality of the disease and be included in policies and practices from local communities to the entire globe.

If interventions only focus on the individuals' behavioral change, and disregard changes in the environment, they will not achieve the intended results (Falcon and Lueck, 2009). Forecast: as far as the interventions are concerned, there is a number of forecasted actions to deal with health issues.

- Ecological health to drive the proliferation of gardens for food, community and therapy.
- Rebranding alternatives and preventive medicine as green
- A new Miasma theory will emerge, leading to self-quarantining
- Successful interventions will build on synergies between health and sustainably

IMPLICATIONS FOR STAKEHOLDERS

In light with the ideas developed above, there is a room to argue that Green Health will take different formats in many domains of our lives, creating threats and opportunities at the same time. The following stakeholders remain the main target of the consequences of Green Health:

- People on the ground (citizens, consumers, workers and grassroots organizations)
- Global health economy companies, such as traditional health industry players (hospitals, payer and providers, independent medical practices and bio-pharmaceutical companies)
- More recently health-economy entrants (food and consumer goods companies: medical and environmental technology, retailers and entrepreneurs and small businesses.

ITF (2008) posits foresee a range of implications to the stakeholders in the global health economy and suggests the following six broad implications of Green Health:

- ***Eco-health literacy focusing on external brand images and internal competencies – keep it uniform:*** The Center for Eco-Health Literacy (2006) observes that the high level of emphasis on place and space, consumers will seek solutions to deal and maintain their environments, including their homes, workplaces, communities and their regions. This task has far-reaching implications on economic global players and appeal to them to have a look on their core competencies and enhance those that have a huge impact on eco-health.
- ***Ecological health drives rethinking and creation of research, products and services – keep it uniform:*** It will be imperative for various health stakeholders around the globe, to acquire new knowledge and to think ecologically to find opportunities in order to identify potential partners, as cooperation will be crucial in order to address health-pressing issues. Researchers and medical practitioners will have to identify the factors for correlations and causation, as well as challenge the previous results on food and consumer products goods in order to introduce new products and reformulations, which take into consideration the personal health, environmental health and concerns of sourcing the materials.
- ***The greening of health fosters employees' safety, well-being and loyalty:*** Focusing on employees' well-being is crucial and many corporates are responding positively to this initiative. In green building, renovation and re-purpose facilities, there is synergy with safety and personal health impacts rather than focusing on resource efficiency and keeping costs low. At green health, strategies to promote active and environmental low-impact living among employees are getting momentum.

Green Health and Safety Management System

Furthermore, there is the use of persuasive and informational messaging that go with more concrete promotions of active living and green working and transportation habits. It is the responsibility of each employer to promote safety and well-being of the employees, and failure to do so, insurance companies will find ways to connect ecological thinking with opportunities to leverage and promote self-care practices.

- **Green health opens possibilities for new alliances and collaborations – keep it uniform:** While the world is mobilized to act for green health and environment, alliances and cooperation are forming to decide on how best to promote best practices in Green Health that can benefit all. Falcon and Lueck (2009) give example of the HealthCare Without Harm, organization found in 1998, currently including 437 organizations and operating in more than 50 countries, which was one of the earliest organizations to initiate cooperation in an attempt to improve health and environment.
- **The greening of health will shape participation in local and regional health commons:** Green Health commons will have to review their operations around the globe, as they must be prepared to face the challenges of consumers who begin to focus attention on food supply chain and the health care delivery systems, as well as other important issues that affect their health and that of their environment. IFTF (2008) observes that some corporate will proactively respond in the favor of the community and will try to adjust their operations in supply, logistics and communications.
- **Risk mapping will drive new forms of citizen engagement – formatting should be uniform:** It is envisaged that a new era of participatory health could emerge as social media and other tools make things easy for people to easily participate collectively in gathering data and eco-health monitoring and to engage in surveillance on the behalf of all the citizens of a particular region. There will be opportunities in abundance due to these technological and social efforts, while challenges of ecological risk mapping would affect stakeholders in the global health economy. More importantly, players across the globe in fields of retail and health providers, will have opportunities to expand their operations and branches due to the type of information they provide to the consumers and the public.

SAFETY MANAGEMENT

Safety management is considered as the process of managing business activities and applying principles, frameworks and processes to help prevent accidents and injuries and minimize overall risk. Etymologically, the word “safety” comes from old French word “*sauf*” which in turn comes from Latin word “*salvus*”. The word “*sauf*” means “uninjured” or “unharmful”, while “*salvus*” means “uninjured”, “healthy” or “safe” (Hollnagel, 2014). From the origin of the word, Hollnagel (2014) provides the following definition of safety: “*A system property or quality that is necessary and sufficient to ensure that the number of events that could be harmful to workers, the public, or environment is acceptably low*”.

Safety as a Dynamic Non-Event

In real sense, safety management puts more focus on preventing unwanted outcomes. In fact, this is correct. However, an alternative view is to focus on what does not happen or on what we normally do not pay attention to. Understanding safety in this context equals to considering it as the freedom from

unacceptable risk in the sense that a system is safe when nothing troublesome happens, when there is nothing that goes wrong (Hollnagel, 2014).

This definition of safety as non-event however, brings a small problem of how to count, notice or detect a non-event. By definition, a non-event is something, which does not happen or has not happened. Hollnagel (2014) provides example through questions he asks himself when he gets home after work. Questions such as; how many times was I not injured at work or did not cause harm at work? How many times didn't I say or do something wrong or make a mistake?

How do we measure safety? In order to measure that we are truly safe, stakeholders need to demonstrate the presence of safety, which means there should be ways of quantifying safety. Hollnagel (2014) elaborates further and affirm that it must be possible to confirm the presence of safety by means of *intersubjective verification*. Intersubjective verification refers to going beyond the lack of disagreement about a phenomenon or concept, and ensure that it actually means the same to two or more people.

Another way of measuring safety, must the way it is experienced and described by one individual, which should be similar to the way a group of individuals' experience and describe it. Furthermore, to measure safety, it must be possible for an individual to describe safety so that other people can confirm or verify whether their experiences of the issue is the same.

Mechanisms to Minimize Accidents at Workplace

When people leave their homes heading to workplaces, they have expectations that they will be able to complete their tasks come back home safe (no injuries or harm to their health). Unfortunately, this is not the case all the time, as incidents and accidents do happen, not only because the work environment is not safe, but also because employees did not pay attention to important safety measures. Andres (2015), provides six ways through which workplace accidents can be avoided:

- **Always be alert:** Being awake and alert is not only important for the completion for tasks, but it also contributes towards accidents avoidance. Julian Hall in "Character-Training.com" notes, "most of the people who become involved with accidents at work, are those who feel sleepy while working".
- **Do not rush your work:** as in many workplace environments, deadlines are a norm, and employees have to work in rush to meet those deadlines. In these conditions, safety can be compromised. On Arbill.com, it is noted that "it is natural to want to get job finished on schedule – or even ahead of time – but with a "get it done quick" attitude, accidents happen".
- **Wear required safety gear:** wearing safety equipment is important, especially that it goes with companies' dress codes. Working in a factory, exposes people to more accidents, hence these employees should be more vigilant about the wearing of proper uniforms and other protective garments as required. Employees should avoid to take safety to chance.
- **Follow instructions to a tee:** employees should avoid considering themselves as experts and disregard every instruction. It is rather important to pay attention to all the details, and avoid taking shortcuts, argue Arbill.com. People should work with diligence, respect of instructions and with awareness of their surroundings.
- **Pay attention to and follow emergency drills:** Hall points out that safety drills are conducted with the aim of teaching the employees what to do in the event of emergency so that accidents can be avoided. However, some employees tend to take safety drills for granted.

Green Health and Safety Management System

- **Insist upon proper training:** whenever people are in jobs that may produce accidents, they should undergo a proper training so that they are equipped with knowledge of how and what to do in case of emergency. Doing a job one is not trained for, might not only expose him, but also can expose other people around him.

Six Elements of an Effective Safety Management System

A safety management system brings together different elements in the workplace and need attention to ensure a safe work environment for all employees. To truly and succeed in this, it is imperative to develop and implement an effective safety management system. Employers need to understand that safety management, health and safety of their employees make an integral part of their core operations and design, develop and implement effective safety management systems accordingly (Weekes, 2017). According to Weekes (2017), safety management systems have six steps:

A Safety Plan

Safety plan is a strategic action plan that forms part of the business plan. It analyses the current and prospective risk for a company and charts how the risks will be eradicated and controlled over a calendar period (the safety plan must have a budget).

The role of this plan is to ensure there is a governance structure in the organization, where each employee must know his obligations, takes responsibilities to carry out those obligations and be held accountable for them.

Policies, Procedures and Processes

They include all paper infrastructures within an organization. This paper will clearly describe;

- Safety behavior
- Expectations
- Record-keeping
- Incident reporting and
- Incident notification documentation

Training and Induction

It does not matter which kind of workplace and nature of the work. Everybody who starts an employment should receive training on:

- The rules of the company
- The rules of the site
- The rules of the location they are visiting

The content of training is subject to the level of risk an employee is exposed to.

Monitoring

Monitoring should be a necessity, especially when the level of risk is high and whenever the circumstances require things to be so. Outside this framework, monitoring is done:

- To ensure that all risks have been covered by a new risk assessment that has been carried out due to a change in process
- When an investigation takes place following an incident

Supervision

Supervision allows management to ensure that things are carried out according to plans. In this context, supervision will ensure that employees are carrying their safety obligations. It is a common practice that the lower level of safety control in the company, will drive/ lead to a higher level of supervision.

Reporting

In an organization, employees need to know the state of safety. Precisely, they need to know what is right and what is wrong, and the only way through which this is possible, is to receive regular reports from management. Actions such as:

- How many hazards were identified
- The risks levels associated
- Control measures implemented, are important in the reporting process.

The figure shows that the employee is at the center of the safety management practices. A safety management system consists of programs, processes, policies and procedures and the function to oversee their development, implementation and ongoing administration. A system such as the above figure 3 illustrates that safety systems are developed and implemented to identify, evaluate, control and ultimately reduce safety risk and generate a number of layers of defenses that prevent accidents from happening. Unfortunately, accidents still occur due to the fact that a system can be flawed during the development or implementation, as well as the existence of a human being who is capable of error.

RECOMMENDATIONS FOR FUTURE RESEARCH

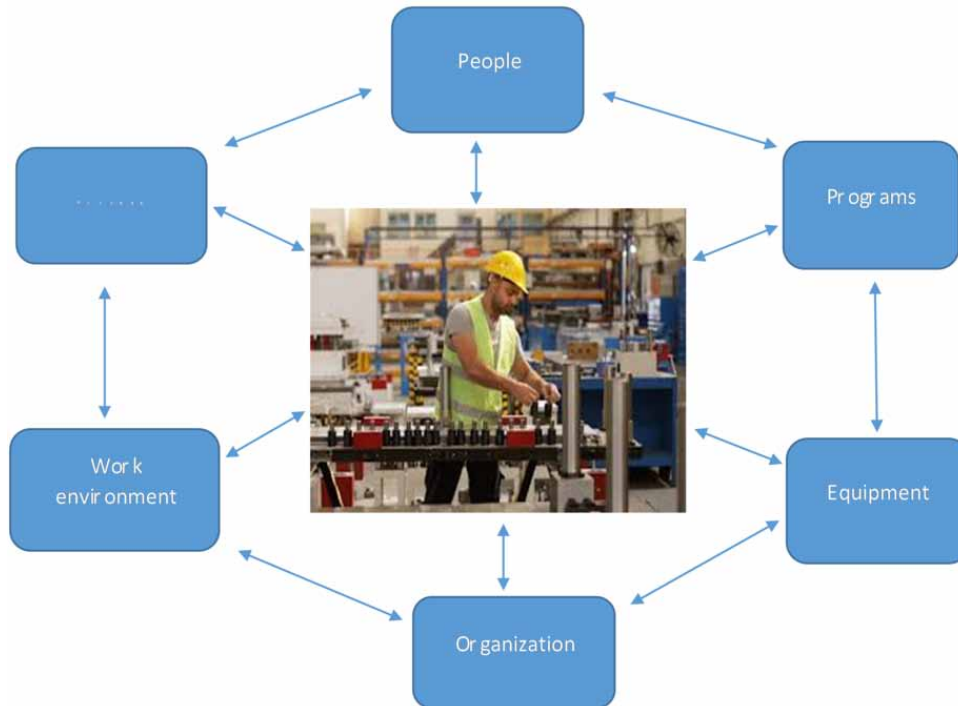
The topic of green environment is broad. However, environment dynamics as well as green health drivers differ from location to location. Studies focusing on specific environments are to encourage so that specific measures can be adopted.

Barriers to green environment are also be identified. This would allow relevant stakeholders to adopt measures and strategies to counter them before they become harmful to the environment and its occupants. Furthermore, the understanding of these barriers would enable them to tailor their resources an encourage adequate behavior.

Green Health and Safety Management System

Figure 3. An example of a system safety management practices

Source: Wachter and Yorio (2014).



Future researches should also focus on adequate frameworks and models that are capable of driving stakeholders to the adoption of strategies and policies of better protecting environment, especially in the industry of mining and manufacturing, as well as the adoption of more safety measures at workplace.

CONCLUSION

Mechanisms of green health and safety management are required today than ever before. The current chapter discussed the origins of the concept of green health since its inception in early 1800s until today. It was proven that there is a convergence between health and sustainability in many different ways; hence, a call has been made for more involvement from individual, organizations, communities and business global players to play a more significant role to improve sustainability.

Drivers of green health have been discussed, while the lenses through which green health have been proposed. The chapter has also set forward, the various roles; different stakeholders have to play if we are to win the battle of green health and sustainability. Construction industry has been taken as an example to illustrate the process and importance of green health and green buildings.

The second part of the chapter was safety management. After the concept has been defined, mechanisms for minimizing accidents at workplace have been suggested, while elements of effective safety management system have been formulated. The chapter ends with a system of safety management process.

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Chapter 11

Promoting Circularity Through Sustainable Leadership

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ABSTRACT

This chapter looks at leadership in the transition to, the adoption, the implementation, and ultimate success of the organisation in the sustainable economy. The chapter reflects on the differences between the linear and the circular economy and advances that the leadership requirements for the sustainable economy may be different from the leadership requirements of the linear economy. It further posits that effective leaders in this new economy may require different approaches to ensure a successful transition from the linear to the sustainable economy or when starting a new venture in the circular economy. From the vast and expansive field of leadership, the chapter explored the current leadership discourse and then zoomed in on transformational and eco-leadership. The chapter further looked at leadership and organisational culture with the view to unpack the role of leadership and organisational culture as a potential barrier to the transition to and adoption of a sustainable and circular business model.

INTRODUCTION

The interest in sustainable economies have grown in recent years and the concept has captured the interest of many thought leaders, academics and entrepreneurs. For many, the idea of a sustainable economy stands in contrast to, as well as, a viable alternative to the existing linear economy. The notion of a sustainable economy is considered as a branch of sustainability science and cleaner production research themes. According to Kates (2011) Sustainability science is an emerging field of research and practice that deals with the interactions between natural and social systems, and with how those interactions affect the challenge of sustainability.

Smart, Hemel, Lettice, Adams, and Evans (2017), states that industrial sustainability is a field of study concerned with creating a generative, restorative and net positive economy. They further argue that this field of study is yet to achieve a paradigmatic consensus, or “normal science” status. According to Paramanathan, Farrukh, Phaal and Probert (2004), industrial sustainability is the “conceptualisation,

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design and manufacture of goods and services that meet the needs of the present generation while not diminishing economic, social and environmental opportunity in the long term” (p. 528). This definition aligns with the three pillars of sustainability, which are economic sustainability, social sustainability and environmental sustainability. A sustainable economic model is one that protects the environment and resources, and achieve sustainable development (PuCha, Fei Che, ShanShan, & Chen, 2014). PuCha Wang, et al (2014) further advance that such sustainable economy can transform a traditional linear growing economy, which largely depends on resource consumption, into an economy which relies on the development of ecological resources circulation.

The concept of a sustainable economy is not new. Since the term Circular Economy (CE) was coined by Kenneth Boulding in 1966 Herman, Kenneth, and Ma (2001), the implementation of a sustainable economy has not been successful globally thereafter. In recent years the interest in the sustainable economy have escalated but the broader adoption and implementation is in its early stages (Atiku, 2020; Ghisellini, Cialan, & Ulgiati, 2016). Lieder and Rashid (2016) report that the Republic of China is an example of the implementation of a sustainable economy approach, directed by the adoption of “‘Circular Economy Promotion Law of the People’s Republic of China’ in 2009. A strong drive is also witnessed coming from the European Union through the adoption of the European Union Circular Economy Action Plan in December 2015. However, according to Ageyemang, Kusi-Sarpong, Khan, Mani, Rehman and Kusi-Sarpong (2018), the efforts to implement a sustainable economy in developing economies, except for China, have been limited.

According to Georgeson, Maslin and Poessinouw (2017) the sustainable economy presents an attractive framework to deliver more resource-efficient, lower carbon, less environmentally damaging, more socially inclusive societies (Atiku, 2020; 2019; Fields & Atiku, 2017). Further, the sustainable economy can contribute to tackling the effects of climate change, pollution and other environmental factors that can harm people’s health, livelihoods and lives. If the sustainable economy offers such positive returns when compared to the linear economy, what is retarding transition to, the adoption of, and implementation of Management and Leadership practices for promoting sustainability? The answer to this question is multidimensional. This chapter focus specifically on the subject of leadership, in the organisational context, in promoting sustainability. This chapter explores if any adjustments are required for leadership to transition to, and successfully promote sustainability, given its unique characteristics. This exploration of leadership is juxtaposed to leadership in the linear economy. The chapter explores the role of leadership in cultivating an organisational culture that befits the sustainable economy where employees are mindful of the sustainability roles and goals of the organisation. The chapter concludes by offering a research agenda for leadership in the sustainable economy.

This chapter is structured as follows: First, it reflects broadly on elements of Sustainable Economy Business models, in comparison to the linear economy business models. Second, the chapter delves into changes that are required from leadership in promoting the sustainable economy in contrast to leadership in the linear economy. Third, the chapter explores the role of leadership in cultivating an organisational culture that befits and promotes the sustainable economy where employees are mindful of the sustainability roles and goals of the organisation and finally, the chapter offers a future research agenda for leadership in a sustainable economy. This chapter is conceptual and exploratory in scope.

BACKGROUND

Advancing a sustainable economy may encourage organisations to work towards more sustainable behaviour and guide policymakers to develop policy and regulations that will address the principles of sustainability (Atiku, 2020; Unal, Urbinati, & Chiaroni 2019). For the business community and entrepreneurs in general, the sustainable economy is an opportunity for value creation, cost reduction, and revenue generation. At the same time, the sustainable economy drive is increasing resiliency and the legitimacy for companies (Schaltegger, Lüdeke-Freund & Hansen, 2016). However, despite these noble intentions, the implementation of a sustainable economy appears to be in its infant stages (Ghisellini, Cialani, & Ulgiati, 2016). This focus on sustainability has led to the conceptualisation of new sustainable economy business models. As these new sustainable economy business models evolve, there appears to be paucity in the focus on leadership and management practices and approaches in this new industrial paradigm. Investigations into the sustainable economy focus, among others, on the value network, the customer value proposition and managerial commitment (Unal et al, 2019), multi-stakeholder collaboration (Mishra, Chiwenga, & Khaoula, 2019), cognitive biases of consumers (Singh & Giacosa, 2018) consumer awareness and interest (Kirchherr, Piscicelli, Bour, Kostense-Smit, Muller, Huibrechtse – Truijens, and Hekkert (2018).), and supply chain risk management (Andrea, Adolf, Alejandro, Koh, 2015), to name a few. These researchers tend to also look at gaining an understanding of the potential barriers that hinder the implementation and adoption of a sustainable economy. None of the mentioned studies focuses exclusively on organisational dynamics such as Human resource management practices, leadership and organisational culture, and its potential influence on organisational adoption of a sustainability model.

The sustainable economy is viewed as a new industrial paradigm. This brought about the evolution of new business models, which is purposely designed to facilitate successful operations in the sustainable economy (Atiku, 2020). The sustainable economy is also viewed as standing in contrast to, and a valuable alternative to, the linear economy. In light of this new paradigm and the proclaimed benefits that the sustainable economy offers and, given that most of the research efforts into the sustainable economy did not focus on organisational behaviour and human resource dynamics, one should question if the sustainable economy requires a different leadership approach and human resource practices when compared to the linear economy.

The sustainable economy requires different business models and different Human Resource Management and Leadership practices to be successful (Mishra, et al 2019). For example, companies in the sustainable economy, as opposed to the linear economy, will change the way they use resources, they will change the way they use production materials and the way they use energy, for example. These considerations are to ensure efficiency and, could lead to a reduction in the environmental impact of the business. This drive implies that the human resources of a business in the sustainable economy, the leadership approaches and the overall organisational culture, warrants discussion and investigation. According to Mishra., et al, (2019), the human sphere in the sustainable economy is under-researched.

COMPLEXITIES OF CIRCULAR BUSINESS MODELS FOR SUSTAINABILITY

Shao, Huang, Lemus-Aguilar and Unal (2019) state that academics and industry leaders have shown interest in the sustainable and circular economy as a replacement for the prevailing linear economic system of “take, make and dispose.” Thus, in the linear economy (LE), raw materials are collected, these

materials are then transformed through production and other processes into a product that is consumed until such product is discarded and finds its way to a landfill or dumped irresponsibly. Shao, et al (2019) put forth that the application of the 3Rs, “Reduce, Reuse and Recycle,” to production, distribution and consumption processes, as advocated by the sustainable economy, would fundamentally change the business growth cycle.

The perspective on sustainability is different in a sustainable economy as when compared to the linear economy. Where the linear economy actors are conscious of sustainability they tend to focus on eco-efficiency. Eco-efficiency aims to minimise the ecological impact for the same output. Within the sustainable economy, sustainability is sought to increase the ecological effects of the entire system. This means that the ecological impact is minimised, and that the ecological, economic and social impact is positive (Kjaer, Pigosso, Niero, Bech, and McAloone, 2019).

It is evident that the two economies, the sustainable and the linear, are grounded in different philosophies and that, respectively, each economy require different and unique organisational cultures, organisational knowledge or organisational leadership to succeed.

Zwiers, Jaeger-Erben, and Hofmann, (2020) posit that to transition from the linear to the sustainable economy, actors in these respective economies must possess ‘circular or sustainability literacy’. Sustainability literacy is the emerging term describing the combination of knowledge, skill and value set an individual requires to live and work sustainably and serves as an analytical framework that differentiates between different types of knowledge relevant for a sustainable economy (Zwiers et al.,2020).

The system knowledge draws on systems thinking and highlights a system perspective that considers the complex ways in which nature, society and technologies are interdependently interacting on a local, regional and global level (Pearce and Turner 1990; Webster 2015). According to Zwiers, et al (2020) the main emphasis is on identifying knowledge-related prerequisites that prevent or stimulate the transformative potential of sustainability thinking and practices for sustainable development. This means that organisational actors must shift from the narrow economic vision of the sustainable economy and be more reflective of political and socio-cultural aspects of the sustainable economy (Zwiers, et al, 2020).

Circular Business Models for Sustainability

While the exact meaning of a business model remains debatable, there seems to be a consensus that “value” is at the heart of the business model construct (Chesbrough, 2007). This chapter adopts the definition by Osterwalder and Pigneur, (2010) who state that a business model is defined broadly as “the rationale of how an organization creates, delivers, and captures value” (p. 14).

Pedersen (2019) advance that business models for sustainability extend conventional business model thinking by adopting a broader and more holistic perspective of value and stakeholders. These business models on sustainability have evolved in tandem with the increased discussion of the circular economy awareness campaigns. Discussions were mostly spearheaded by the work done by the Ellen MacArthur Foundation, The World Economic Forum and other similarly focused global organisations. Pedersen (2019) puts forth that organisational complexities influence the design of sustainable and circular business models. Moreover, they state that the design step of the circular business model is crucial and, as they argue, if circularity is not considered as part of that planning stage, it leaves little opportunity for the transition from the linear to the sustainable and circular economy (Pedersen, 2019). This means that the current incompatibilities witnessed between the sustainable economy actor and the ideals of the sustainable economy cannot be realised. This state may explain the retarded adoption of circular busi-

Promoting Circularity Through Sustainable Leadership

ness models despite the claimed benefits of these models. According to Linder and Williander (2017), sustainable, circular business models are “a business model(s) in which the conceptual logic for value creation is based on utilizing economic value retained in products after use in the production of new offerings” (p. 183).

Barriers to Circularity and the Transition to the Sustainable Economy

The increased interest and attention in the sustainable economy is not matched with the same eagerness and attention in the adoption and implementation of the sustainability and the circular economy. Kircherr, et al (2018) investigated barriers to the adoption of the circular economy. They identified the following elements that serve as barriers to transitioning from the linear to the sustainable economy.

Cultural- lacking awareness and/or willingness to engage with a sustainable economy. For example, an organisation may have a hesitant or resistant organisational culture to adopt the modes of operation of a sustainable economy. So too can consumers have a limited interest in a product or service that originate from the circular and sustainable economy. Singh and Giacosa (2019) identified the cognitive biases of the consumer and explain how these biases create barriers in the transition to the sustainable economy. They found that circular and sustainable business models are not fulfilling the psychological, social and cultural needs of the consumers and that in turn lead to barriers in the diffusion of the sustainable economy. Consumers have a negative connotation with the different circular business models due to their cognitive biases (Singh and Giacosa, 2019).

Regulatory- The regulatory framework and appropriate policies in support of a transition to sustainable models are lacking. Rizos, Behrens, Kafyeke, Hirschnitz-Garbers and Ioannou (2015) confirms that a lack of supportive policy frameworks exists. For example, two companies may be prevented from collaboration in a cross-border setting because what may be reused in one country as part of the production inputs may be prevented as part of a final product in another This situation impacts the trade between two countries.

Market- Lacking the economic viability of circular and sustainable business models. Preston (2012) states that the low cost of virgin materials could prevent the sustainable economy products to outcompete their linear economy equivalents. He further advances that the recycling of many materials does not occur because it is uneconomical relative to the production of the virgin material, and finally,

Technological- Lacking (proven) technologies to implement a sustainable economy. Relevant technologies are a prerequisite for the transition to the and the adoption of the sustainable economy. According to Preston (2012), the opportunities for the sustainable economy is huge if the technological barriers could be overcome.

The human-sphere in the sustainable economy is currently under-researched (Mishra, et al 2019). de Jesus and Mendonça (2018) support the assertion of Mishra, et al (2019) in stating that cultural barriers are the least mentioned category of barriers in the relevant literature that cover potential barriers to the sustainable economy. This chapter looks specifically at leadership and its role in the sustainable economy.

LEADERSHIP AND SUSTAINABILITY

Mitchell (2013) argue that sustainability and leadership have much in common. According to Mitchell (2013), both words are overused; both are states that many people and organisations aspire to and often

fall short of, and both are concepts that we struggle to define succinctly. He concludes that when these terms are combined, the concepts are not only powerful but are essential for our continuing prosperity and the ability of future generations to be able to live better than we do today (Mitchell 2013, p. xxi).

The field of sustainability, with the sustainable economy as a new economic paradigm, has evolved away from a focus on the product, towards systems and social equity. Further, sustainability also advances a higher level of consciousness about the eco-impact of the firm and the depletion of resources. With this shift, leadership scholars have also started looking into the leadership approaches for this new sustainable economy (Atiku, 2019; Green and McCann, 2011). While the elements of goal achievement, smooth internal processes and external adaptability cannot be ignored in the sustainable economy, the sustainable economy has added requirements for leadership.

The sustainable economy requires leaders who are driven by environmentally friendly and socially conscious values (Fields & Atiku, 2017; Atiku & Fields, 2019). It requires leaders with an acute responsibility to reduce wastage and lessen the negative impact on the environment (Atiku, 2020). This view is confirmed by Green and McCann (2011) who state that the new economy will be driven by more environmentally friendly and socially conscious leaders. Leaders with ecological literacy. To be eco literate means understanding the principles of organization and ecological communities and using those principles for creating sustainable human communities.

If the new economy requires environmentally friendly and socially conscious leaders, then it is safe to assume that employees or followers in the sustainable economy must also be encouraged to be environmentally friendly and socially conscious. To transition from the linear to the sustainable economy will require of the organisational leader to influence followers in the direction for followers to subscribe to the elements that make up the sustainable economy. This means leaders must encourage and influence employees to think green.

Leading Towards a Green Organisational Culture

Organizational or corporate culture is the pattern of values, norms, beliefs, attitudes and assumptions that may not have been articulated but shapes how people in organizations behave and things get done (Robbins & Judge, 2017). The ‘Values’ refer to what is believed to be important about how people and organizations behave. ‘Norms’ are the unwritten rules of behaviour. When considering the “take-make-dispose” approach of the linear economy, it is fair to accept that the values and norms of an organisation in such economy will be different from the 3R approach of the sustainable economy.

Green organizational culture thus refers to the beliefs, values and norms about sustainability that integrates the way the environment is managed (Margaretha & Saragih, 2013). When compared to the linear economy, the sustainable economy calls for a shift in organizational culture. Under the banner of the linear economy, there is a conflict between environmental protection activities and corporate performance (Harris & Crane, 2001).

Kircherr, et al (2019) states that cultural barriers, particularly barriers regarding consumer culture and organisation culture, are discussed in various contributions on barriers to the transition to and adoption of a sustainable economy. Concerning organisation culture, Pheifer (2017) is of the view that where sustainability is not integrated into the strategy, mission, vision, goals and key performance indicators of the organisation, it suggests that organisations have not mainstreamed sustainability yet. Kircherr, et al, (2019) identified three pressing cultural barriers to sustainability, namely, the lack of consumer interest and awareness, hesitant and resistant organisation culture and operating in a linear system.

Promoting Circularity Through Sustainable Leadership

Kircherr, et al (2019) suggests that discussions about the sustainable economy may often be restricted to the corporate social responsibility (CSR) and/or environmental departments of an organisation and have much less appeal in more influential departments such as operations or finance. The sustainable economy thus appears to be a niche discussion among sustainable development professionals in many companies (Kircherr, et al. 2019).

In line with Pfeifer's (2017) thoughts, if sustainability is not part of the "DNA" of the organisation then it can serve as a barrier to implementation and adoption of the sustainable economy. Harris and Crane (2001) put forth that organisational culture has been reflected upon superficially in models and theories of organisational greening. Stead and Stead (1992) argues that to advance the environmental agenda, organisations must engage in a dramatic culture change. This is where leadership for the new economy plays a role. Followers or employees must adopt an environmentally aware and socially conscious culture. As Harris and Crane (2001) put it, we must not assume that the strongly held management values and culture for a green approach are necessarily held equally strongly by all organisational members. This vision must be articulated and inculcated by the leader in the organisation operating under the sustainability banner. Where these green values are incongruent with those of the individual organisational member's values, it can lead to a drop in employee satisfaction and lead to problematic human resource management and organisational inefficiency (Harris & Crane, 2001).

Leadership Practices for a Sustainable Economy

Like with many constructs in social science the definition of leadership remains subjective. Some definitions are more attractive to certain scholars and practitioners, and some definitions are also more appropriate for the economic paradigm within which the leadership actor finds him/herself. In interpreting leadership in the sustainable economy, this section draws on the work of Western (2010) who highlights that over the past century, four key discourses on leadership emerged that dominated leadership thinking.

The first discourse, referred to the leader as the controller, is embedded in and underscored by Frederick Taylor's scientific management principles (Western, 2010). The assumption here is that leadership focusses on maximising efficiency and control to increase output and, employees are treated functionally as replaceable as 'cogs in a wheel' of the efficient organisation. From the controller discourse premise, the leader must ensure that the followers achieve their respective goals and then, in turn, the goals of the organisation. This then means "take" the raw materials; "make" the product, and the "dispose of" the product to the consumer is the way of doing business. A little further consideration for what happens to the product at end-of-life is considered under this discourse.

Traditional industry leadership approaches, place importance on position and productivity above people (Maxwell, 2011). Traditional views of leadership are concerned with effectiveness under the "take – make – dispose" banner. Transactional leadership can be placed under this banner. Transactional leadership refers to the bulk of leadership models which focus on the exchanges that occur between leaders and followers. (Northhouse, 2019). As Lai (2011) puts it: Transactional leadership behaviours describes 'give and take' working relationship – the rapport between leader and follower is established through an exchange, such as a rewards system for meeting particular objectives" (p. 1).

Transactional leadership (Bass, 1985; Burns, 1978) refers to a dynamic exchange between leaders and their subordinates. Leaders tend to set objectives for their workers and the rewards that can be earned based on their achievements. The dimensions of transactional leadership can be categorised into contingent rewards, management by exception (active) and management by exception (passive) or and

laissez-faire, or non-leadership behaviour (Bass, 1990). With the contingent reward, the leaders engage in transactional relationship or exchanges with their employees or subordinates (Bass, 1985). Management-by exception generally refers to the extent to which leaders take corrective measures as a result of the transactional relationship between them and their subordinates (Judge and Piccolo, 2004). Consequently, the management-by exception is classified into two main types. The first categorisation is management-by exception passive. Management-by exception passive indicates that leaders tend to wait passively for the employees to commit mistakes in the course of the performance of their job. Afterwards, they find it necessary to take remedial actions (Bass, 1990). On the other hand, management-by exception active is a form of transactional leadership behaviour that puts a premium on ensuring safety in management. These kinds of leaders actively and effectively monitor and look out for possible deviations from rules and standards and expected performance goals to quickly take remedial measures to ensure that the right performance goals or objectives are met (Bass, 1990). As Northhouse (2019) states, the transactional leadership approach reflects the bulk of the traditional leadership models.

Transactional leadership also seems to align with the linear economy approach of “take-make-dispose”. In the linear economy, the consumer is left with the responsibility to take action when the product reaches end-of-life. Further, if transactional leadership approaches are inspired by a give and take approach, where employees or followers will only do that they are expected to do. This poses a challenge for the sustainable economy, which requires critical and innovative thinking to ensure that all actors (employees and employers) work towards sustainability. Nahavandi (2015) states that “leaders are effective when their followers achieve their goals, can function well together, and can adapt to changing demands from external forces” p27. The three key elements from this definition are:

- Goal achievement – meeting financial goals, producing quality products or services and addressing the needs of customers
- Smooth internal processes – group cohesion, follower satisfaction and effective operations and,
- External adaptability – the group’s ability to change and evolve successfully (Nahavandi, 2015).

The above discussion on transactional leadership shows better alignment to leadership for the linear economy than for the sustainable and circular economy, as it appears to fit better in a non-green organisational culture.

The second discourse on leadership according to Western (2010) is the leader as Therapist. The basic assumption is that the leadership task is to work on human relations. The assumption here is that happy workers are workers that are more productive. This discourse embraces ‘therapeutic culture’ and focuses on engaging workers to increase motivation and commitment.

This discourse emerged from the post-war culture and the ideals of personal growth and the rise in individualism (Western, 2010). This discourse remains popular and is woven into much of the current leadership and management education offerings. This approach is often focusing on developing the individual and high-potential leaders by attempting to modify their behaviour to fit the organisation’s desired universal leadership competency framework (Western, 2010). While the therapeutic leader approach has made significant contributions to the body of work on leadership, it also has its shortcomings. Western (2010) advances that this approach focusses on individuals and not the collective culture. He further posits that this approach has at its core a manipulative agenda, using psychological to shape individuals to fit organisation norms (Western, 2010).

Promoting Circularity Through Sustainable Leadership

The Messiah discourse is the third in the leadership discourses. The aim was to create strong and dynamic cultures under the vision of the transformational leader (Western, 2010). Western (2010) advances that this discourse on leadership establishes loyalty and commitment in teams, with the control achieved through peer and self-surveillance rather than hierarchical power and coercion.

Transformational leadership style is considered as one of the important leadership styles for managers of modern organisations. According to Bass (1990), transformational leadership occurs when leaders broaden and “elevate the interests of their employees when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their self-interest for the good of the group” (p. 21). Transformational leadership style is characterised by four main behaviours (Bass, 1990, 1985). These behaviours of transformational leaders are idealised influence, inspirational motivation, intellectual stimulation, and individual consideration. Rafferty and Griffin (2006) re-examined the Bass (1985) theoretical model to identify five dimensions (instead of four) of transformational leadership: vision, inspirational communication, supportive leadership, intellectual stimulation and personal recognition. According to Rafferty and Griffin (2006), vision is the charismatic expression of a positive direction for the future through inspirational communication and confidence building. In line with transformational leaders view the future as positive and communicate, inspire and motivate followers to adopt the vision. (Den Hartog et al., 1997). Inspiration refers to “the extent to which a leader stimulates enthusiasm among subordinates and inspires them by building confidence to perform work activity and thereby achieve the work team’s objectives (Yukl, 1981). Leaders who are intellectually stimulated give meaning to their organisation and their followers’ work (Shamir et al., 1993). These leaders also show individual consideration by acknowledging followers’ feelings, emotions, and their need to grow and develop themselves (Den Hartog et al., 1997). They inspire followers to become active and critical thinkers within the organisation. This leads in most cases to higher levels of employee involvement, higher levels of commitment, more cohesion and a higher level of performance (Bass & Ovolio, 1995).

Moreover, transformational leaders are charismatic and can motivate followers and appeal to their ideals and moral values by creating and representing an inspiring vision of the future. Block (2003) reports that transformational leadership was more likely to followers perceiving an organisational culture that is involving, integrating, and adaptive and mission oriented. Jung, et al, (2003) and Elenkov and Manev (2005) report that transformational leadership enhances innovation in the organisation. The coverage in this section on transformational leadership aligns with the view held by Pheifer (2017) who advances the importance of a sustainable economy mandate as integrated into the strategy, mission, vision, goals and key performance indicators of an organisation as crucial for the organisation to transition to the sustainable economy as well as to make a success of its operation in the sustainable economy.

An employee who receives support, inspiration and quality coaching from the supervisor is likely to experience work as more challenging, involving and satisfying. Hence, a transformational leader could encourage the above-mentioned mental states and improve the performance of employees. The transformational leader will also have a better chance, better than a transactional leader, to encourage employees to think green in achieving the organisational goals.

The fourth and final discourse on leadership as advanced by Western (2010), is the Eco-leadership discourse. The Eco-leadership discourse focuses on connectivity, inter-dependence, ethics and leadership spirit (Western, 2010). The underlying premise of the eco-leadership approach is centred on sustainability. Historically, it has been easy for leaders in positions of authority to reject or ignore the need to focus on sustainability. This situation existed given that traditional theories based mainly upon the industrial

paradigm, which emphasize the pre-eminence of positional leaders and the machinelike qualities of organisations (Zaccaro, 2001). According to Wilekiewicz and Stelzner (2010), eco-leadership aims to create distributed leadership. A leadership that is not top-down but leadership at local levels. Here, the aim is to encourage leadership from the edge and building networks that are responsive and adaptive to change. Eco-leaders recognize that the workplace as interconnected eco-systems and central control is obsolete (Wielkiewicz & Stelzner, 2010).

They further advance that the eco-leader needs to sustain strong networks and build coalitions and collaborative relationships. New business models, such as the new sustainable economy business models, new organizational forms and new leadership are essential to work within the global, political, advanced technical and turbulent, yet fragile environment. Eco Leaders are not only concerned about the environment but also the internal ecology of an organization. For example, concerning the external environment, eco leaders will be mindful of the environmental and political trends and realise the interdependence between the organisational ecosystem and the broader ecosystem. Concerning the internal ecology of the organisation, the eco leader encourages creative thinking, will aim to break silo cultures and create organisational architecture that enables distributed leadership for an adaptive organisation.

Leadership and Change

The transition from the linear economy to a sustainable economy is an act of change. If the organisation starts under the sustainable economic paradigm, it is in essence also a change approach given the dominance of the linear economy and the contradictions of the underlying principles of the two respective economies, i.e., linear and sustainable and circular. Leadership is required to create and sustain the required change in the organisation. Organizational change is defined as alterations of existing work routines and strategies that affect a whole organization (Herold and Fedor, 2008). Quinn (1988) states that different organisational life cycles require different leadership styles to take the organisation forward. The organisational change process is aimed at enhancing an organization's innovative capability and thus improve efficiency by introducing new technology, altering strategies, or recalibrating workflows (Herold and Fedor, 2008). According to Senior and Swailes (2016), and in line with Quinn (1988), the formative period of an organisation requires a creative and entrepreneurial leadership style as the markets and structures are evolving quickly. In a different organisational life cycle and as the organisation grows and matures, a different leadership style is required. While it appears to be a simplistic reflection it drives home the importance of different leadership styles for different stages and phases of organisation.

A common discussion of leadership and change centres around the leadership style during the period of change, whether different leadership styles are required for different change conditions (Senior & Swailes, 2016) Intuitively it appears as if the transformational leadership approaches may fit better to direct the transition from the linear economy to a sustainable economy. Transformational leadership also seem to better fit the sustainable economic paradigm. However, the eco-leadership paradigm calls for a broader consideration and understanding of the internal and external ecology of the organisation.

The question then begs: Is there a preferred leadership style best suited to facilitate this change from the linear to the sustainable and circular economy? According to Green and McCann (2011), the new economy will be driven by more environmentally friendly and socially conscious leaders. While transformational leadership seem to address most of the considerations as an appropriate leadership style for the sustainable economy, the style lacks the elements of eco-awareness, which is required for the new economy. The sustainable economy, however, requires a different mindset and approach from leaders.

Promoting Circularity Through Sustainable Leadership

To transition to a sustainable economy or to start up with a sustainable economy business model requires a change from the linear economy mindset.

RECOMMENDATIONS

Organisations that aim to transition to the sustainable and circular economy, as well as organisations that start business operations under the sustainability banner, must be mindful of the potential barriers that can impede organisational efficiency in the new, sustainable and circular economy.

While organisational leaders can introduce technical fixes to facilitate such transition, the emphasis on environmentally responsible values, beliefs and norms, i.e., a green organisational culture, is imperative. Such a culture can be facilitated by leaders that have a forward-looking and environmentally aware mindset.

Organisations that set the path to adopting sustainability as their compass must ensure that they deploy the right leaders to drive sustainability. What then is the characteristics of the right leader for this new economy? What is the appropriate organisational cultural mix best suited for the sustainable and new economy and, how can leaders facilitate and promote the adoption and transition of sustainability in the organisation? This chapter recommends that further studies be conducted to answer these questions and map the required characteristics of an eco-leader for the new sustainable economy.

FUTURE AREAS OF RESEARCH

This chapter set out to explore leadership in the new sustainable economy. This bias towards leadership stems from the fact that the human-sphere in the sustainable economy is currently under-researched (Mishra, et al 2019). This is an exploratory piece and thus further empirical research is required to test some of the assumptions made in this chapter.

Areas of interest for future research should include group dynamics in the organisation in a sustainable economy. A detailed investigation of the organisational cultural dynamics of organisations in the sustainable economy. What may be of specific interest is whether there are significant cultural differences in organisations in the linear as compared to the sustainable economy. Such a study could also be conducted across national cultures for comparison at this level.

In the leadership realm, it will be of interest to test the assumption that Transformational leadership is an appropriate leadership style for the sustainable and circular economy. Further investigation will also be useful in assessing the appropriateness of eco-leadership in organisations in the sustainable and circular economy. Finally, an investigation into the elements of a green organisational culture and how such culture facilitates the transformation of an organisation from the linear economy to the sustainable or circular economy.

CONCLUSION

While barriers to the adoption and implementation of the sustainable economy have been well documented, a larger portion of existing research interest centred on supply chain risks, regulatory frameworks,

markets and consumer awareness, and technology to name a few. However, a paucity existed in seeking an understanding of internal aspects such as leadership, organisational culture, followership, group dynamics and how these elements of organisational life may serve as barriers to successfully adopt the sustainable economy. This chapter set out to explore the potential role of leadership in the sustainable economy and how leadership requirements are different for the two kinds of economies i.e., the linear and sustainable economies.

Given the paucity of empirical investigations into the human elements internal to the organisation, this chapter suggests a focus on the human element in the sustainable economy for organisations to succeed. For example, Singh and Giocosa (2019) showed how cognitive biases of consumers could serve as a barrier to the transition to a circular economy. Consumers according to them, have negative connotations with different circular business models due to their cognitive biases. In the same way, employees may also have negative cognitive biases towards the required social awareness and environmentally friendly business processes.

This chapter also attempted to highlight the role that the leader can play in ensuring successful adoption and implementation of the sustainable economy. In this regard, the chapter covered the transactional and transformational leadership models, which aimed to show how two leadership styles appear to be suited for the two distinct economic paradigms. The chapter assumes that transactional leadership style may be better suited for the linear economy and the transformational leadership style suited for the sustainable economy. While this alignment is intuitive, empirical evidence must be gathered to test these assumptions.

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Chapter 12

Flexible Work Arrangements for Green Manufacturing

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ABSTRACT

Scientists and environmental activists have constantly emphasized the need to take action against the devastating effect of greenhouse gas emission, which is resulting in immense damage to the environment. The role of flexible work arrangements in ensuring the greening of manufacturing processes globally has not been fully explored by researchers. Aligning employees' green workplace behaviour, technological innovation, and flexible work arrangement could help promote green manufacturing. This chapter employed a conceptual review of literature to examine flexible work arrangement for green manufacturing. Findings revealed that the adoption of flexible work arrangement for green manufacturing could enhance the greening of the production process and employees' ability to achieve a balance between work and family domain.

INTRODUCTION

There has been a global call for the manufacturing of eco-friendly products. The green initiative is resulting in an immense change in the market for manufactured products as consumers are becoming conscious of the benefit of 'green product' on environmental sustainability. Green manufacturing aims at reducing the carbon footprint on the environment by changing manufacturing practices and the mindset of the stakeholders to mitigate the industrial impact on climate change and other environmental concerns (Tricoire, 2019). In other words, the focus of green manufacturing is to conserve energy and prevent environmental pollution while benefitting from the opportunities that may arise from the greening of the production processes. Greening of the manufacturing processes is consistent with the 6Rs of manufacturing, which is to reduce, reuse, recycle, recover, redesign, and remanufacture (Rehman, Seth & Shrivastava, 2016).

Organisational strategy aimed at achieving "greening" of the manufacturing process must involve conscious efforts directed towards the reduction of natural resources, reduction in greenhouse gas, recycle and reuse of production materials. A flexible work arrangement could be an essential element in green

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Flexible Work Arrangements for Green Manufacturing

manufacturing. Kozica and Kaiser (2012 p. 240) refer to “flexibility as the ability of organisations to cope with the dynamics and uncertainty of their environments by rapidly changing their organisational routines or resource bases”. The main aim of green manufacturing is to reduce greenhouse gas emissions and conserve energy. Therefore, changing organisational routines in green manufacturing may involve the introduction of dynamics, which is flexible work arrangements. In other words, the adoption of flexibility into Human Resource (HR) practices such as flexible work arrangements could be a viable measure for manufacturing firms to engage with the environment through the conservation of human and material resources (Atiku, 2020; 2019; Fields & Atiku, 2017; Ganiyu, Derera, Atiku, & Fields, 2020; Kozica & Kaiser, 2012).

The greening of the manufacturing sector involves the renewal of production processes and the establishment of environmentally friendly operations (Atiku, 2020) within the manufacturing field. Essentially, it is the “greening” of manufacturing, in which workers employ fewer natural resources, reduce pollution and waste, recycle and reuse materials, thereby reducing carbon emissions in the process.

BACKGROUND

It is hard to pinpoint when and where the green manufacturing movement emerged. Researchers hold divergent views as to the origin of the concept. However, Rehman and Shrivastava (2013) traced the emergence of green manufacturing to the 1980s and 1990s in Germany. This period marks the beginning of eco-consciousness in the global manufacturing process. The 1980s and 1990s witnessed a deliberate effort made by the policymakers in Germany to ensure that manufacturing firms comply with the green regulation standard if they were to compete in the European market (Rehman & Shrivastava, 2013). White (2020) argues that environmentalists have long been advocating for an eco-conscious approach in every aspect of human life; however, the idea of “going green” became a global discourse many years ago. The author affirmed that the 1970s witnessed a small minority of people adopting “green behaviour” such as the use of solar water heaters and wind turbines. These minority people were referred to as early adopters of technology (White, 2020). The 21st century has seen a huge demand for eco-friendly products (Atiku, 2019; Fields & Atiku, 2017). This is associated with why global manufacturing firms have seen the need to adopt green manufacturing practices.

Tricoire (2019) suggests that “green” is not just a hollow word; but implies tangible measures to promote sustainable practices in manufacturing facilities, across the supply chain, and via the customer base. Sustainable manufacturing is also used to denote green manufacturing. As discussed in the next section of this chapter, sustainability is a broader concept than the simple act of analysing and changing the environmental performance of manufacturing processes and systems (Paul, Bhole & Chaudhari, 2014).

Taking a cue from Paul et al. (2014), green manufacturing refers to manufacturing practices that employ renewable production processes and an eco-friendly operation in the manufacturing of goods. The eco-friendly operation, in this case, stems from product development to the management of the entire product life cycle (Paul et al., 2014). Eco-conscious practices such as eco-design, clean production, recycling, and reuse to reduce expenses related to manufacturing, distribution, use, and disposal of products (Lai, Lun, Wong & Cheng, 2011; Lun, 2011; Paul et al., 2014). The 21st century has seen a shift in the manufacturing sector, especially in developed countries, as many manufacturing firms are beginning to embrace green initiatives in their manufacturing facilities.

SUSTAINABLE DEVELOPMENT AND GREEN MANUFACTURING

The concept of sustainable development has attracted the interest of scholars globally. Sustainable development was originally traced to the Brundtland Commission in a report titled “Our Common Future”; which was published by the World Commission on Environment and Development (WCED) in 1987 (Barkemeyer, Holt, Preuss, & Tsang, 2014; Garetti & Taisch, 2012). Since the publication by the WCED, attempts have been made by scholars to define the concepts taking a cue from the original work. However, most of the definitions put forward are arguably not as detailed as the original one because; they do not capture the comprehensive meaning of the concept, as propounded by the Brundtland Report (Barkemeyer et al., 2014). The seminal defined version is (Brundtland, 1987, p. 41).

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

the concept of ‘needs’, in particular, the essential needs of the world’s poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs”.

The concept of ‘needs’ as used in the definition referred to as the needs of the downtrodden, the wretched, or poverty-stricken populace to whom priority should be accorded. This definition of sustainable development is still very much relevant in the twenty-first century as scholars, organisations, and the government still refer to the two basic concepts. According to Garetti and Taisch (2012), several international organisations such as International Monetary Funds (IMF), European Unions (EU) and United Nations Organisations (UNO) have funded research on sustainability relating to green manufacturing.

As business entities, the manufacturing firms operate in the countries business environment. Hamilton and Webster (2018) defined the business environment as the totality of the conditions that affect the operations of a business in a country. These conditions include political, economic, policy, social, and climate. A study revealed a significant relationship between a business environment and the strategy adopted by manufacturing firms to carry out their operation (Prajogo, 2016). The environmental factors in the developing countries of Africa may vary from what is obtainable in Europe and developed countries of North America. Europe and North America are more industrialized and have robust policies for the sustainability of green manufacturing (Lee, 2009; Prajogo, 2016).

The manufacturing sector is the engine room for economic growth and the springboard of economic development globally (Kirkby, 2018; Sauvé, Bernard & Sloan, 2016; Yi, 2015). It is the dominant sector in developed countries of the West and the developing countries of Sub-Sahara Africa and Asia. For instance, empirical evidence revealed that the manufacturing sector in Europe is a major employer of labour with the creation of 34 million jobs representing 70% of all jobs and contributing 22% to the GDP (Bueno, Girot & Gutiérrez-Orrantia, 2017; Sautter, 2016). A study conducted by Sola et al. (2013) in Nigeria also revealed a positive correlation between manufacturing sector performance and capacity utilisation. This evidence stems from the view that manufacturing goes beyond the transformation of primary product to finished goods, but substantially contribute to the world economy (Garetti & Taisch, 2012).

The opportunities in the manufacturing sector are limitless, as more innovation will continue to emerge through groundbreaking inventions (Gebauer, Ren, Valtakoski, & Reynoso, 2012). The manufacturing sector is the productive sector of any economy. For the sector to achieve sustainable development, all

Flexible Work Arrangements for Green Manufacturing

hands must be on deck in providing business support to the manufacturing firms. According to Oginni and Adesanya (2013), manufacturing firms operate in complex environments where there is an interplay of networks of relationships, between human and material resources as well as other systems. As such, for an organisation to thrive and stay competitive, it needs the support of other institutions and factors.

Manufacturing activities are modern inventions that make life worth living (Harley, 2018; Yao & Lin, 2016). The various means of transportation, food production, the development in science and technology are linked to sustainable development, which is an offshoot of manufacturing. The impact of manufacturing on the environment, which is the second key concept of the Brundtland definition. Manufacturing firms have become conscious of their productive activities on environmental sustainability. In the words of Zirra (2015), as society continues to develop, environmental issues are increasingly given attention. The researcher explained that all productive and social activities irrespective of the sector must take cognisance of the impact they have on the environment thereby developing action plans to curtail the negative outcome and eliminate the source that gave rise to them. This realisation stimulated global efforts to curtail the unbearable level of environmental degradation (Eneh, 2011). Mangra, Cotoc, and Trăistaru (2014) suggest an appropriate application of the environmental management system as one of the viable ways of ensuring a sustainable manufacturing sector. Mangra et al. (2014) explained that the environmental management system could ensure sustainable manufacturing activity if it is implemented with concepts such as:

- The design of products for an environment that put into consideration, the products life circle;
- cost implication of the products to the environment;
- Complex systems of integrated management (environment-quality, environment-energy, security-environment); and
- Eco-marking of the products.

The manufacturing firms in many African Countries operate under an unfavorable business environment. For instance, the manufacturing sector in Nigeria operates under a harsh business atmosphere as virtually all firms are forced to generate electricity for their operation (Ganiyu et al., 2020). The poor infrastructure has taken its toll on the electricity supply in Nigeria. The finding of a study conducted by Oseni (2011) on the power sector in Nigeria revealed that the sector is underperforming, and there is an urgent need for a policy towards achieving quality and functional power supply that can meet the demands of the people. The manufacturing and other sectors of the economy rely on generating plants to power their business operation. The carbon monoxide flared from the generating plants is contributing to global warming and environmental degradation. Scientists have warned over time that global warming occurs because of human activities on the surface of the earth. The idea whereby manufacturing firms rely on generating plants to power their operation aggravate the negative effect on the environment. Bernard and Adenuga (2016) argued that the manufacturing sector in Nigeria cannot sustain economic development with the present reality, but the sector has potential as Nigeria has the largest market for manufactured goods in Sub-Sahara Africa with a population of over one hundred and sixty million people. Consistent with this argument, Oyedepo (2014), identified energy (electricity) as a critical factor in the realization of the Millennium Development Goals (MDGs). The MDGs include poverty eradication, universal basic education, gender equality, reduction in child and maternal mortality, eradication of diseases in all forms, and environmental sustainability.

Linking green manufacturing to the concept of sustainable development will help to address the second key concept of the Brundtland report. As an element of sustainable development, Garetti and Taisch (2012, p. 85), defined sustainable manufacturing;

“as the ability to smartly use natural resources for manufacturing, by creating products and solutions that, thanks to new technology, regulatory measures, and coherent social behaviours, can satisfy economic, environmental and social objectives, thus preserving the environment, while continuing to improve the quality of human life”.

Environmental issues are not just the concern of humanity but affect all living and non-living creatures. The debate over green manufacturing points to the fact that the technologies employed in the production process should be eco-friendly and should have no negative drawback on the environment (Fields & Atiku, 2017). One of the issues that pose a challenge to the manufacturing sector globally is how to curtail the adverse effect of the processes of production to safeguard the environment. According to Eneh (2011), the United Nations Conference of 1992 on environment and development (also known as Earth Summit) provided an action plan for sustainable development. This plan forms the nucleus of environmental policies in countries across the world. For the manufacturing firms to achieve sustainability, reduction in emission should be incorporated into the corporate objectives. In essence, as manufacturers aim at meeting the needs of the stakeholders through product quality and profitability, effort should be made at protecting the environment in the production processes. This is what Mangra et al. (2014, p. 3) referred to as “green product”.

As there has been much debate over sustainable development concerning the environment, the debate has been rife over sustainable human resource management (HRM) practices (Kossek, Valcour & Lirio, 2014; Rao, 2017). Sustainable HRM practices develop a positive social relationship at work and enhance performance, by promoting team spirit among the workforce towards the attainment of common purpose. Kossek et al. (2014, p. 298) refer to a sustainable workforce as “one where the work environment is caring and supports employee wellbeing”. Sustainable development can occur when employees can achieve a balance between work and family domains (Rao, 2017). Hence, organisational survival depends on the optimal functionality of its employees. Therefore, sustainable development could best be achieved through high performing manufacturing firms, which in turn rely on the commitment and productivity of the workforce (Rao, 2017).

Flexible Work Arrangements

The impact of manufacturing activities on the environment has compelled many manufacturing firms to innovate by adopting new production processes and flexible work arrangements. Čiarnienė, Vienažindienė, and Adamonienė (2018) argue that organisational adoption of flexible work arrangement enhances temporal and spatial flexibility in work processes, which is consistent with the changing environment. Allen, Johnson, Kiburz, and Shockley (2001), refer to flexible work arrangements as a work-life balance strategy adopted by organisations to help employees manage the demands from work and non-work aspects of their lives. Rau and Hyland (2002) cited in Allen et al. (2013, p. 345) defined flexible work arrangements “as work options that permit flexibility in terms of where work is completed (often referred to as telecommuting or flexplace) and/or when work is completed (often referred to as flexitime or scheduling flexibility)”. In essence, telecommuting or flexplace allows job functions to be performed during

Flexible Work Arrangements for Green Manufacturing

official working hours from a location (mostly from home) outside of an organisation suitable for the employee. Flexitime involves the adjustment of the commencement and closing of workdays such that an employee put in the same hours of work at less traditional times (Munsch, Ridgeway, & Williams, 2014). Bond, Thompson, Galinsky, and Prottas (2003) argue that the organisational adoption of flexible work arrangements could curtail work-family conflict and enhance performance.

The question on the appropriate working hours for an individual has become a thing of concern to HR practitioners, researchers, and governments globally (Bal & De Lange, 2015; Deery & Jago, 2015). While most countries of the world have legislation through various labour acts on appropriate numbers of hours individuals must work daily, the issue of overtime defeated the effectiveness of the act. In most developing countries such as Nigeria, an employee is statutorily allowed to work forty hours a week. However, the law is silent on the legality of overtime as it is regarded as optional. The workforce perceives overtime as an avenue to make extra income, as there is no minimum to the number of hours an employee can put in. Overtime defeats the whole essence of work-life balance. The reason is that too much work can result in physical and emotional stress (Lin, Wang & Wang, 2015; Zúñiga, et al., 2015). There have been many instances of reported death due to overwork. For instance, the term 'karoshi' (overwork death) emerged in Japan to explain suicide committed by an employee due to work overload. Overwork can be very inimical to the health and well-being of employees. Felstead, Jewson, Phizacklea, and Walters (2002, p. 54) put it more succinctly when they argue that, "the experience of long hours at work and intense working conditions can have detrimental consequences for workers' health, psychological wellbeing, and family life".

Flexible work arrangement is fundamental in addressing the challenges in managing work and non-work demands from employees (Allen et al., 2013). Many organisations are exploring flexible work options as viable HR strategies to meet global best practices and stay competitive as employers of choice. Flexible work arrangements are usually incorporated into the overall corporate objectives to demonstrate organisational sensitivity to work-life balance (Timms et al., 2015). Hayman (2009), argued that when flexible work arrangements impact on employee work-life balance, the apparent availability and usage of flexible work options becomes a fundamental factor in achieving a work-life balance. McNall, Masuda, and Nicklin (2009) examined the mediating role of work-family enrichment on flexible work arrangements, job satisfaction, and turnover intention. Their study found that the availability of flexible work arrangements as an HR strategy could influence employees' enrichment from the work domain with a spillover effect in the non-work activities. Flexibility invariably enhances satisfaction with work and a reduction in turnover intentions.

Many organisations in developing countries such as Nigeria perceive the implementation of flexible work arrangements as challenging. Due to the notion that flexible work arrangements as a work-life balance strategy, constitute costs, which only benefits the employees. However, empirical studies have linked flexible work options to positive employee outcomes such as reduced stress, enhancement of health and well-being, which impact on absenteeism and the amount spent on employees' health by organisations (Society for Human Resource Management (SHRM), 2014). The findings of a study conducted by Oludayo, Falola, Obianuju, and Demilade (2018) revealed that flexible work arrangement is a predictor of employee satisfaction with work. Shockley and Allen (2012), investigated the motive for the adoption of flexible work arrangements putting into consideration gender, marital status, and family responsibilities of employees. The findings of their study depict that employees are more inclined to use flexible work options for work-related motives at the expense of non-work activities. The researchers explained further that employees with marital and family responsibilities have the tendencies to subscribe

to non-work activities. Contrary to this view, a society like Nigeria where the cultural practices favour the extended family system; it is commonplace for a gainfully employed individual with marital and other family responsibilities such as childcare to receive a helping hand from family members to care for the children while parents work to sustain the family. So, the use of a flexible work arrangement for non-work motives such as childcare may not hold in Nigeria.

Sok, Blomme, and Tromp (2014) argue that organisational adoption of flexible work arrangements can help to guide against the depletion of resources such as time and mental energy, which subsequently result in strain-based and time-based stressors from the domain of work and life. The essence of organisational adoption of flexibility is to enhance the flexible deployment of labour as well as to facilitate employees' flexible use of time (Mennino et al., 2005). However, the prevailing reality in the manufacturing sector in Nigeria is that of the "ideal workers" syndrome. As Munsch et al. (2014, p. 44) put it, the "ideal workers work full-time and long hours. They are committed to their work and employer, available for overtime on short notice, and have few commitments outside of work". Employees that fall into this category see life as work and work as life. Such employees perceive devotion to work as intrinsically rewarding as they are usually considered for promotion and other benefits at the expense of those that practice flexible work arrangements (Perlow & Kelly, 2014). However, flexible work arrangements are more effective when employers and their employees perceive job flexibility as a mutually beneficial business process for determining the most appropriate approach on how, where, and when work is done (SHRM, 2014).

Types of Flexible Work Arrangements

Green manufacturing incorporates environmental initiatives to create a plausible use of human and material resources in the production of eco-friendly products. A flexible work arrangement may be adopted to enhance organisational green initiatives in the manufacturing processes and help to promote sustainable development. Although the flexible work arrangement varies from one organisation to another, the following are the various types identified in the literature:

Flexitime

Flexitime occurs when flexible work arrangements are promoted in which workers are afforded the options on when to start and end work. Flexitime does not mean a reduction in the required daily hours of work, but rather, it offers workers alternatives on when to resume and close for work. The adoption of flexitime by manufacturing firms could help promote sustainable practices such as the reduction in air pollution as fewer cars will be on the road thereby reducing greenhouse gas emission and enhance the people's quality of life.

Telecommuting or Flexplace

This refers to a situation whereby an employee is allowed to work in another location (mostly from home) outside of an organisation. Evidence presented by the International Data Corporation (IDC) depicts that the global mobile workforce is on the rise from over one billion in 2010 to over 1.3 billion by 2018 (Cousins & Robey, 2015). The development and pervasiveness of mobile communication gadgets, as well as internet connections, provide telecommuting opportunities. The advances in mobile telecommunication allow job functions to be performed productively outside a location from organisational settings (Abe,

Flexible Work Arrangements for Green Manufacturing

Abe, Fields & Idris, 2018; Ganiyu, Fields & Atiku, 2017). Organisations, which adopt telecommuting as a work-life balance strategy, stand to benefit from employees' productivity and reduction in cost from the use of the organisation facilities such as stationery and energy consumption, which contribute immensely to environmental pollution (Cousins & Robey, 2015). Therefore, to ensure the greening of the manufacturing process, employees should be encouraged to work remotely for job functions that could be carried out of the manufacturing plant.

Compressed Workweek

A compressed workweek occurs when an employee chooses to work fewer days in a week by working longer hours per day (Mas & Pallais, 2017; Munsch, 2016). In essence, the employee completes the traditional 40-hour (and 5 days) workweek to fewer days by spending long hours on the job daily. For instance, an employee can choose to put in a 10-hour payday at the expense of the traditional 8-hour. When such occur, the employee would have taken four days to complete a week job. Compress workweek can help guide against work monotony, reduce stress and pressure on the roads, and enhance productivity (Noback, Broersma & Dijk, 2016; Schooreel & Verbruggen, 2016).

Job Sharing

Job sharing involves the splitting of job responsibilities where an individual employee works only part of the week. A job share is a form of part-time work whereby two or more employees share the responsibilities of one regular job and share the benefits accruable for a specific job. Job sharing is usually adopted as a response to WLB and to solve the problem of the high unemployment rate (Gunnigle, Turner, & Morley, 1998). The outcome of the study conducted by Brocklebank and Whitehouse (2003) revealed that over 90 percent of employees that use the job share option are women.

Alternative Work Schedule

This refers to an arrangement in which an employee is allowed variation in the time to resume and close for work (Mas & Pallais, 2017). Such an arrangement does not alter the normal hours of work the employee is expected to put in daily. Some organisations make these arrangements for employees that have family or personal commitment to be able to meet up with such commitment.

Result Oriented Work Environment (ROWE)

This refers to a process whereby the employers do not take cognisance of the hours put into performing a job responsibility but rather focus on the productivity (Kossek, Hammer, Kelly, & Moen, 2014). The traditional daily work hours do not hold in a result-oriented work environment due to the importance of productivity, rather than the actual hours on the job. In this instance, if an employee fails to perform a job task or responsibility, the employer will issue the traditional work performance warning.

Split Shift

A split shift occurs when employees split work hours throughout the day (Bae et al., 2017; Yu et al., 2017). For instance, an employee that has an 8-hour workday can choose to work 4 hours in the morning (i.e., 8a to noon) and do another 4 hours in the afternoon (4 pm to 8 pm). This essence of the split may be to allow for employees to meet up with other personal responsibilities. The split shift is synonymous to organisations that have peak hours of work.

BENEFITS OF FLEXIBLE WORK ARRANGEMENTS IN GREEN MANUFACTURING

Flexible work arrangements in green manufacturing offer a revolutionary development in employees' productivity without the adverse effect of environmental pollution. Various empirical studies have shown the relationship between flexible work arrangements and positive outcomes for organisations and the workforce (Ganiyu, et al., 2020; Mas & Pallais, 2017; Thompson, Payne & Taylor, 2015). For instance, Lake (2013) suggests nine trends which provided perspective for the adoption of flexible work arrangement in green manufacturing:

- **Lean organisations, re-engineering, and outsourcing:** The lean technique is employed in green manufacturing to eliminate waste and reduce environmental pollution (Nguyen & Do, 2016; Wanitwattanakosol & Sopadang, 2012). Re-engineering focuses on workplace redesigning to reduce waste and environmental pollution (Nguyen & Do, 2016). In the re-engineering process, sections that are outsourced should be carefully planned to take into consideration, the sustainability trade-offs (Garetti & Taisch, 2012).
- **Growing percentage of women in the workplace:** The growing percentage of women in the world of work makes the adoption of flexible work arrangement plausible to attract and retain women, and help them rise to the peak of their career what meeting other family responsibilities outside of the workplace (Ganiyu et al., 2017; Lavanya & Thangavel, 2014).
- **Demographic shift in the workplace:** Globalisation has brought about demographic shifts in the labour market. The changing demographics mean that employees are saddled with more responsibilities from the family domain, in addition to the concern to achieve success in the work domain (Ko & Hur, 2014). The demographic shift is a major rationale for the adoption of a sustainable flexible work arrangement.
- **Job autonomy:** Flexible work arrangement promotes job autonomy. Job autonomy as used here refers to the freedom employees enjoy deciding when, where, and how they perform job functions to enhance organisational outcomes. Various empirical studies have established a link between job autonomy and employees' motivation, creativity, organisational commitment and job satisfaction (ter Hoeven & van Zoonen, 2015; Volmer, Spurk & Niessen, 2012; Weideman & Hofmeyr, 2020).
- **Blurred boundaries between work and home:** An empirical study suggests that a blurred boundary between work and family life could have an adverse effect on an individual sense of well-being which may result in burnout and exhaustion (Wepfer, Allen, Brauchli, Jenny & Bauer, 2018). Flexible work arrangement could be adopted to cushion the effect of the blurred boundary between work and family domains thereby enhancing job satisfaction (Ganiyu, et al. 2017).

Flexible Work Arrangements for Green Manufacturing

- **Globalisation:** globalization has presented manufacturing firms with opportunities to into various green initiatives globally. Economic globalization has also increase workforce flexibility, particularly in developed countries.
- **Decline of manufacturing, growth of service economy and the knowledge economy:** The adoption of flexibility may help stem the tide of declining manufacturing activities as it promotes employee's productivity and job commitment
- **Spread of Information and Communication Technology (ICT) in work practices and personal life:** Work Flexibility promotes the use of ICT in work and personal life of the workforce. The spread of ICT in work practices enhance job productivity.
- **Environmental awareness:** Flexible work arrangement promotes environmental eco-consciousness by the workforce. Evidence suggests that flexible work arrangement could result in benefits for the environment by encouraging people to imbibe more sustainable behaviours (Gray, 2014). Gray (2014) emphasised that employees are more likely to participate in environmentally friendly activities in the work and family domains if they have flexible work arrangements.

Organisational implementation of a flexible work arrangement strategy needs to align with the corporate “green” objective. Some of the benefits of adopting flexible work arrangement for green manufacturing as suggested by Čiarnienė et al. (2018) includes the following:

- **Efficient use of equipment and facilities:** Flexible work arrangement enhance efficient use of the office equipment. For instance, the adoption of flexitime, telecommuting, and compressed workweek as a corporate strategy can reduce the use of office resources such as stationery and energy. Employees that have the same schedule may also choose to engage in carpooling (a system whereby each employee that owns a car takes a turn to drive the other to and from work). Carpooling also helps to reduce greenhouse gases and pressure on the roads as a result of too many vehicular movements.
- **Cost saving through the efficient and reduced use of electricity:** Flexible work arrangement reduces electricity consumption as employees spend less time in the office.
- **Reduction in the use of water and office stationery:** The ability of employees to work remotely implies the reduction in the use of water and office stationery, thereby reducing manufacturing operating costs and promote sustainable business practices.
- **Increase productivity and profitability:** Flexible work arrangement promotes reciprocal gain system between employees and employers. Employees benefit through job autonomy and the ability to meet other personal responsibilities in the family domain. Employers benefit through employees' productivity and job commitment, which can enhance organisational profitability.
- **Reduction in fuel consumption:** Flexible work arrangement implies less travel to and from work, which reduces the fuel consumption by individual employee's car. Reduction in fuel consumption leads to a decrease in greenhouse gases emitted by vehicles.
- **Fewer disruptions of the office environment:** Flexible work arrangement reduces man-hour employees to spend at work. The reduction in man-hour can reduce the level of disruption to the office environment.
- **High level of employee satisfaction and job commitment:** Various empirical studies have established relationship between flexible work arrangement and employees' job satisfaction (Abe et al., 2018; Ganiyu et al., 2017; ter Hoeven & van Zoonen, 2015; Volmer, Spurk & Niessen, 2012;

Weideman & Hofmeyr, 2020). Invariably, employees' satisfaction with work has been suggested to enhance productivity and job commitment thereby reducing the rate of turnover (Ganiyu et al., 2017; Ganiyu et al., 2020)

- **Time management:** Flexible work arrangement enhances an individual's ability to manage time. Effective time management enhances employee's productivity and ability to meet deadlines with good quality of work. Kashyap (2019), suggests that effective time management also improves an individual's life outside of the workplace.
- **Reduction in air pollution:** Flexible work arrangement reduces air pollution through the reduction of energy used in the office and greenhouse gas emission as a result of carpooling.

RECOMMENDATIONS

As green manufacturing continues to attract the attention of scholars and policymakers globally, there is a need for manufacturing firms to adopt sustainable business practices in response to the challenges of environmental degradation resulting from manufacturing activities on the environment. The fundamental demand for green products is an indication of the shift in consumer awareness will culminate into a higher preference for products that have a less negative impact on the environment. Therefore flexible work arrangements should be adopted as part of corporate strategies to ensure the greening of the manufacturing processes.

FUTURE AREAS OF RESEARCH

This chapter has contributed to the body of literature on human resource management. The emergence of the Fourth Industrial Revolution with the various technological innovations has made it possible for many workers and organisations to adopt flexible work options. There is a need for an empirical study to be conducted on the association between flexible work arrangements and green manufacturing using a qualitative, quantitative, or a mixed-methods research design.

CONCLUSION

Greening of the manufacturing sector could help in the reduction of environmental pollution, depletion of natural resources, and global warming. The adoption of green manufacturing with green product design could open new markets and enhance profitability. Therefore, providing job opportunities in the manufacturing sector globally. The creation of new job opportunities may improve the quality of life and contribute to the Gross Domestic Product of an economy. Besides, flexible work arrangement enhances employee creativity with green technology in the production processes.

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Chapter 13

Employee Green Behaviour in Ghanaian Public Sector Organisations

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ABSTRACT

This chapter explores the role of employees' green behaviour in public sector organisations in Ghana. The enactment of the Renewable Energy Technologies Act by Ghana's legislative body in 2012 has drawn considerable attention to the essence of embarking on a sustainable energy policy agenda. Public sector employees have been tasked by the government to be prudent in conserving energy in all its organisations. A qualitative research approach was adopted. A semi-structured interview was employed to examine how employees' routine activities considered green behaviour in the performance of their tasks at the workplace. Purposeful sampling was adopted in choosing 16 employees within selected public sector organisations. The data analysis revealed two seminal themes, which resulted in three key conclusions. Organisational policies such as replacing old office equipment with new energy-saving equipment to conserve energy are essential. Second, annual training on employee green behaviour has a long-term impact on creating environmentally conscious employees.

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INTRODUCTION

Green employee behaviour or environmental sustainable behaviour by employees has become a common feature in the workplace over the past two decades (Ones & Dilchert, 2012). Going green has been a governmental effort in several countries around the world, primarily to protect the environment from human activities for energy resources. Specifically, advanced technology and globalization have created awareness about the importance of conserving the environment and making green behaviour a routine aspect in the workplace. Green behaviour refers to the promotion of energy conservation, recycling of waste materials, and effective use of technology devices at the workplace as well as in our homes. Green behaviour can also be defined as the work behaviour geared directly at the conservation and development of the natural environment, which may yield economic value for the organisation (Jackson & Seo, 2010).

Employee green behaviour involves key aspects of job performance, and it can be either required or discretionary, depending on the nature of the job (Atiku, 2019; Campbell & Wiernik, 2015). As such, employee green behaviour is a cardinal influence in fostering sustainable practices in the workplace. Environmental conscious initiatives made by employees specifically impact the greening of organisations (Atiku, 2020; Boiral & Paille, 2015).

BACKGROUND OF THE STUDY

The primary cause of environmental abuse has been influenced by economic thinking and activity in the form of rapid industrialisation. Industrialisation has often resulted in deforestation and wanton destruction of the natural environment (Barnett, 2001; Bonan, 2008) and hence, there is the need to move towards sustainability with a paradigm shift embodying scientific, technological, and behavioural changes (Gladwin, Kennelly & Krause, 1995).

Business activities in the 21st century globalised and competitive environment is marked by an increasing emphasis on the preservation and sustainability of the natural environment to make our planet safe both for the present and posterity (Fields & Atiku, 2017; Chen & Chai, 2010). Organisational environmental sustainability comes in the form of organisations operating in a manner that meets the needs of present employees, decision-makers, and other stakeholders without compromising the ability of future generations to meet their own needs (Mesmer-Magnus, Viswesvaran, & Wiernik, 2012; Nordlund, & Garville, 2002). In our 21st-century business world, therefore, individuals and organisations are recognising the severity of the environmental challenges and calling for creating a sustainable way of operating within our environment (Fields & Atiku, 2017; O'Donohue & Torugsa, 2015).

Green behaviour has drawn considerable attention to the need to promote the environment for socio-economic prosperity and minimize the crisis in climate change. Many scholars and practitioners have introduced several proposals, policy initiatives, and recommendations on ways to stem the tide of environmental degradation in both the environmental and economic fields of studies (Gilbert, 2010; Unsworth, Dmitrieva & Adriasola, 2013). Policy proposals such as climate tax and particular attention to the conservation of rainforests in African countries have been introduced in several European and African countries to minimise the impact of environmental degradation (Gilbert, 2010).

Governments are recognizing the benefits and opportunities of environmental sustainability with long-term environmental policies by ensuring that public sector organisations are more competitive with less cost-efficient use of energy resources. Likewise, some government institutions are leading

the way in sustainability practices by placing recycling waste bins for can drinks and papers. Similarly, the government is also encouraging employees to conserve energy by turning lights and computers off, creating awareness of efficient use of water in both bathrooms and kitchens in organisations. Training programs focused on sustainable employee behaviour at the workplace have been introduced during the orientation of new employees in several organisations (Unsworth, Dmitrieva & Adriasola, 2013).

This paper seeks to examine some of the policy initiatives undertaken by the government of Ghana and how these policies have influence employee green behaviour at public sector institutions. It does so by examining the role of government initiatives employed specifically at encouraging employee green behaviour in public sector organisations in Ghana. Although much has been written and discussed the value of environmental friendly activities in the sub-Saharan African region, little has been implemented by way of the practical aspect of sustainability in public sector organisations. Further, research has only scantily shed light on employee behaviour and their various roles in fostering environmental sustainability at the workplace. Furthermore, several scholars have also examined the key factors related to green behaviour in organisations and how organisations are steering employee behaviours in green initiatives (Andersson, Jackson, Russell, 2013; Andersson, Shivarajan, & Blau, 2005). However, limited research on green behaviour has been conducted in developing countries and especially in Ghana.

This study seeks to examine how the government of Ghana is leading the way for sustainable energy resources for economic development. The following research questions will guide the study;

- **Research question 1:** How has employee green behaviour affected the way sustainability issues are undertaken in the public sector organisation?
- **Research question 2:** What are some of the government policies that are guiding the public sector organisations in environmental sustainability?
- **Research question 3:** What are some of the key importance of environmental sustainability in public sector organisations in Ghana and the way forward?

This study would use a qualitative methodology, using a descriptive case study to investigate public sector organisations in each of the following areas, the security services, health, and safety organisations. These public sector organisations were purposively selected because they influenced the economic development of Ghana. Selected participants who had ten years of work experience were interviewed primarily to ascertain the green initiative behaviour adopted at their workplace. Particularly, employees with ten years of experience had much knowledge and the impact of environmental and economic policies enacted by the government in their organisations over the past decade.

Employee green behaviour, a type of pro-environmental action at the workplace (Ones & Dilchert, 2012), is very significant for any organisation to realise its goal of environmental sustainability. Globalization and advancement in technology have spurred organisational behaviour at promoting sustainable workplace devices and employees' attitudes towards sustainable development (Ones & Dilchert, 2012). The concept of employee green behaviour can be promoted in the business activities of organisations with the human resource departments leading the way. Since human resource departments lead with the training and introduction of organisational culture to new employees, their leadership on the concept of employee green behaviour would enhance its sustainability at the workplace.

“Consistent with the psychological climate literature, organisation’s green human resource management practices often lead to psychological green climate perceptions, which are in turn significantly related to individual workplace green behaviour” (Dumond, Shen, & Deng, 2017, p. 614). “Human resource

departments can measure and influence employee sustainability-related behaviour, attitudes, knowledge, and motivation. Hence, organisations can utilize human resource management to effectively deliver and implement environmental sustainable policies (Dumond, Shen, & Deng, 2017, p. 615). Similarly, the activities of management in any organisational environment significantly influences the behaviour of employees (Bass, 1985). Numerous studies have acknowledged the critical effects of green employee management, an approach to human resource management practice which is meant to inspire employees in the working environment to engage in pro-environmental behaviours (Robertson & Barling, 2013). For example, the green human resource manager could promote employees' green behaviour through green organisational identity (Mittal & Dhar, 2016), environmental concern (Kura, 2016), and environmental passion (Robertson & Barling, 2013).

HISTORICAL PERSPECTIVE OF GREEN ENERGY IN GHANA

Most countries have evolved over the past five decades because of the influence of globalisation and advancement in technology (Ajzen, 1991). Ghana has had similar periods of growth to include the discovery of oil reserves off its western coast, which gave the country hopes of becoming a preeminent African country in economic development. Ghana is geographically located on the western side of Africa, with a total population of about 29 million and a land size of 238,533 square kilometres (Harris, 1974). Ghana is a low-income developing country but endowed many natural resources such as gold, diamond, bauxite, cocoa, and crude oil forming the core of the country's economy. Although Ghana is bequeathed with ample natural resources, the country is much liable to setbacks that often emanate from interruptions in energy supply resulting from the socio-political crisis in the Middle East.

Although Ghana is bestowed with abundant renewable energy resources such as solar, wind, and bioenergy (biomass and biogas), hydropower has been the mainstay of energy source in its economic development since independence in 1957 (Attachie & Amuzuvi, 2013). With the annual consumption of energy growing significantly at 10% per annum, it is not able to provide enough power to support the thermal energy generation (Attachie & Amuzuvi, 2013). As such, the government has enacted national energy policies and goals to raise renewable energy significantly to 10% by the year 2020. Over the past two years, the government of Ghana has taken up a 155-MW solar plant project which is anticipated to raise the nation's electricity generating capacity by 6%. In 2015, the following energy-generating resources contributed to the electricity supply system in Ghana; oil (44.48%), biomass (37.87%), hydroelectricity (5.27%) and natural gas (12.38%). The total contribution of renewable energy capacity (electricity) at the close of 2015 was about 1,602 MW, providing approximately 43.8% of the total national fixed electricity out of which Hydropower yielded 43.2%. To boost the utilization of renewable energy resources and reduce the perennial power crisis, the Ghana Energy Commission has officially introduced a solar rooftop program directed at commercial offices, residential facilities, hospitality industries, and small businesses.

The historical background of Ghana not only demonstrates a country trying to become financially secure, but it also recognizes the need to participate in areas that are described as green. That includes areas of agriculture, oil, building infrastructure, mining, agriculture, tourism, telecommunication, and manufacturing. The cultural and economic platform is prepared for Ghana to benefit and elevate the financial opportunity and security of its citizens.

REVIEW OF THE LITERATURE

This section includes a review and analysis of the literature in employee green behaviour to locate the research gaps and establish the basis for this paper. This section is divided into two sections. The first examines the historical perspective of green energy use in Ghana and the government's effort in achieving a 10% green energy use by the end of 2020. The second section looks at attempts made by the government to step up its efforts towards green behaviour in public sector organisations.

Green HRM Practices in Developing Countries

Green human resource management affects employee workplace green behaviour for the following reasons. First, green HRM practices, such as spreading the information about the organisation's green effort and emphasizing individual green values in recruitment and selection and promoting green values through training are likely to increase employee green understanding (Renwick, 2013). Second, work and job design that meet environmental requirements and green training practices designed to improve employee knowledge, skills, and competence are key processes to motivate employees to undertake green activities (Pless et al. 2012). Third, the HRM attribution literature implies that employees' perception of why the organisation pursues certain HRM practices determines the effectiveness of HRM practices on employee work behaviour (Dumond, Shen, & Deng, 2017, p. 616).

The generation of electricity in developing countries tends to be the sole monopoly of the state governments and thus contributes to little power distribution to the rural areas. The study by Attachie and Amuzuvi (2013) addresses some of the issues that have hampered the growth of a sustainable market for Renewable Energy Technologies (RET) utilizing solar PV as a good example. The authors stated that issues with policy implementation on solar and problems with financing are noted to be the key impediments to be examined by the policymakers. They also asserted that the national government and stakeholders should consider the private sector as a viable option to help create a boost for renewable energy technologies. Likewise, the creation of an electrification fund is considered to be a backing of the grid extension to areas in the country that is high economic potential using renewable energy technologies.

Green Energy in Ghana

Sakah, Diawuo, Amankwah, and Gyamfi (2017) examine the Legislative Act of Parliament in Ghana entitled, Renewable Energy Act of 2011, which seeks to make renewable energy a key component of Ghana's energy generation, making about 10% of the total energy supply. The author explored the viability of solar energy as a renewable source of energy that can be of massive contribution to the economic development of Ghana. The authors state that Ghana has a potential of between 50-150 MW solar energy untapped and the development of this source of energy can be a huge boost to the economic development of the country.

Obeng-Darko (2019) examines the renewable energy situation in Ghana and asserts that the government-projected goal of attaining a 10% renewable energy as a policy goal by 2020 was unattainable. The author argues that because of the little progress made from 2017 to achieve that policy goal of achieving the 10% renewable energy penetration as prescribed. Significantly, the legal and regulatory bottlenecks such as the lack of legislative policies backing the regulatory agencies make it difficult for the regulatory agencies to achieve the renewable energy policy goal. Similarly, the non-existence of independent policy

institutions capable of making tough decisions and the lack of regulatory ability to examine legislative policies are some of the reasons for the delays in achieving the 10% penetration of electricity in the nation's energy use. The overall assessment is that the inability of the government to forge a cohesive policy on renewable energy prevents any investment from the private sector. Considering this, investors lose hope in the future of renewable energy investment in Ghana, and subsequently, the long-term effect would be the failure to achieve renewable energy goals for Ghana.

Asumadu-Sarkodie and Owusu (2017) reviewed the energy system in Ghana and stated that the pace of population growth, rapid urbanization, and economic development placed enormous pressure on the supply of electricity, and thus renewable energy should be the way forward for Ghana's economic agenda in the 21st century. The authors argued that the current level of the energy strategy of sourcing electricity from thermal and hydropower is unsustainable and the 'renewable energy act' of 2012 to invest 10% of renewable energy into economic development has not occurred. The authors seek to examine the opportunities, threats, strengths, and weaknesses concerning other developing countries' quest to promote renewable energy. The authors recommend that Ghana should foster renewable energy regulatory and fiscal policies with national electricity pricing standards. Further, the government should create congenial investment conditions for private investors to contribute to the growth of renewable energy in Ghana.

Ashong (2016) examines Ghana's quest to promote solar energy in the economic development of the country. The author argues that Ghana has enormous challenges in the areas of the unstable macro-economic environment, which deter private investors from investing in the renewable energy sector of Ghana. Although Ghana is one of the few countries implementing seven of the eleven most popular renewable energy policies, there is still more to do by the government to attract private investment to attain its target of 10% of renewable energy by 2020.

A critical analysis of green public procurement practices in Ghanaian public sector is conducted using six major practices such as acquisition and material specification planning, environmental requirements, green purchasing, strategic supplier partnership, green information & communication technology, and employee training (Boampong-Ohemeng, Kusi-Sarpong, Saani & Agyemang (2015). Five Polytechnics were selected using a hybrid of convenient and purposely sampling techniques. A multi-criteria decision-making (MCDM) tool was used to categorise the most influential main practice and vital sub-practice by way of the overall goal of attaining a green economy. The MCDM tool highlighted that "strategic Supplier Partnership" is the most influential practice while "review of material needs to include green procurement requirements" was found to be the key essential sub-practice. The authors conclude that public sector procurement professionals play a great role in green decision making through the purchases of green products and services. Ultimately, the purchases of green products have important implications for attaining sustainable development in society.

Boateng (2019) sheds light on the negative environmental impact of hotels across the world. She argues that hotels have a significant role in reducing their ecological footprint caused by their routine activities. The author presents the vital role hotels play in the tourism industry in Ghana by way of contributing to a healthy and sustainable environment. The hotel industry often creates a considerable impact on land-use and infrastructure development as well as the generation of waste and air pollution. Using a purposive sampling technique, some of the hotels in one of the regional capitals of Ghana were selected for this case study. Key participants included management of the hotels and relevant public sector professionals in the tourism industry were interviewed. The study indicated that hotels in this particular city were environmental aware of their activities on the environment and promoted an environmental friendly approach in their operations. The study also asserted that most of the hotels focused

on building an environmental sustainable culture such as green designs, energy efficiency and water conservation, compliance with green environmental regulations, renewable energy development, and effective way to dispose of liquid waste. In general, the author seeks to draw awareness to policymakers, hotel stakeholders to the importance of efficient environmental management with the sole objective of enhancing a healthy and sustainable economy.

A green report paper on Ghana presented by the United Nations Economic Commission on Africa (2016) examines the policy framework and enacted by the government of Ghana on green initiatives. It records major green practices, successful green initiatives, and key lessons learned in certain areas of Ghana's economy. This report contributes to the reports on green sustainable development reports on Africa, which was produced, with the focus on promoting sustainable development in Africa by way of green growth. By this report, many of the major successes, challenges, good initiatives, and lessons learned in Ghana are documented. This report seeks to enhance knowledge among regional and sub-regional international organisations. It also seeks to draw awareness of the benefits of future green initiatives in Africa.

POTENTIAL INFLUENCE ON GREEN BEHAVIOUR IN THE 21ST CENTURY

There are mounting concerns regarding sustainability and green behaviour in several organisations in Ghana. The Ghana government through its Environmental Protection Agency (EPA) controls the routine activities of organisations primarily to ensure environmental safety and create sustainable environmental activities. Braimah, Tweneboah-Koduah (2011) lists some of the concerns frequently associated with environmental issues by leading industries in Ghana.

Table 1. Lists some of the environmental concerns related to major industries in Ghana.

Major Industry	Environmental Concerns
Mining	Handling waste products and polluting water bodies.
Agriculture	Harvesting of natural sources to include the systematic watering of crops.
Tourism	Providing energy-efficient transportation
Energy	Harvesting energy through solar farms and wind turbines.
Manufacturing	Energy consumption and waste products

Source: Authors 'compilation

The authors state that, for Ghana to go green and the citizens of the country to benefit, the political environment will need to be aligned to the best interest of the citizens and not participate in behaviour that is only self-serving to certain political interests.

RESEARCH DESIGN

A qualitative research design was used to study employee green behaviour in public sector institutions in Ghana. A qualitative design was suitable for this study primarily because it allowed the researchers to examine the historical and socio-cultural development in public sector organisations and its influence on employee green behaviour. A qualitative research approach was utilized to examine the richness of employees' behaviour, experience, and its related meaning to answering the research questions (Patton, 2002). The public sector organisations in Ghana was selected because of the green energy policy initiative promoted by the legislative Act of 2012, Article 12. Most of the selected organisations were based in the capital city because it was the seat of the government. The organisations selected were primarily security and protective service agencies because of the huge number of people who were employed in these agencies.

A qualitative design in the form of a descriptive single case study with semi-structured interviews, document analysis, and observations was the primary approach to gathering the data. Employing a qualitative approach enabled the researcher to understand, critically analyze participants' perceptions and meanings from their own words (Ruona, 2005). Six public organisations from the security services and two service-providing agencies had 15 participants interviewed for this study. Purposeful was utilized primarily to explore, gain insight, and fully comprehend the information provided by participants. The interview involved six upper-level managers, four mid-level managers, and six lower-level employees.

The rationale for selecting the security agencies was to understand the concept of green employee behaviour from the largest public sector agencies with a diverse perspective from participants. The study also interviewed employees with ten years of experience in their various workplaces, primarily to gather green behaviour from employees who were informed about the culture of their organisation and could offer a rich source of information. Employees selected for interviews were asked seven questions regarding the culture of green behaviour in their workplace and the organisation's policies on sustainability. The interviews and data gathering process was done in four weeks. The interviews were audio-recorded and transcribed by the researchers verbatim.

Constant comparative method was utilized in analysing the data for this study. This method compared the data by examining critically for differences and similarities. The data gathered were organised in common patterns, grouped by names, and then analysed by the researchers to separate the themes in the data (Patton, 2002). By way of ascertaining triangulation during the study, the interview data was verified with the observation by the researcher mainly to ensure the reliability of the study.

FINDINGS

Findings for Research Question One

Several of the participants stated how they always make conscious effort to perform their roles in the organisation in an environmental sustainable way and preserve the natural environment by monitoring the use of electrical gadgets in the office. Most of them also emphasized the monthly meetings and the weekly reminders on being mindful about turning off the lights and air conditions when not in use. To this, one senior employee remarked:

Employee Green Behaviour in Ghanaian Public Sector Organisations

“Green employee behaviour is generally about the behaviour of an employee’s contribution to the workplace conservation of energy. It is about how employees execute their work schedules and use the equipment for work that ensures environmental friendliness, protects the environment, and more importantly ensures environmental sustainability” (Participant 5).

A senior manager defined employee green behaviour as:

“Practices that employee engages in which ultimately affect the environmental sustainability positively. Any behaviour that contributes to environmental conservation behaviour at the workplace. This same employee stated that employee green behaviour is how an employee can change his/her actions and behaviour primarily to make a positive impact on the conservation of energy in the workplace”

A lower-level employee also emphasized that the “business environment is dependent on the risk and initiatives associated with the positive impact on energy conservation at the workplace. Therefore, employee green behaviour is simply a strategy adopted by organisations to improve their environmental sustainability at the workplace and outside work. This employee also articulated that:

“Employee green behaviour is how employees relate to each other exhibiting a sustainability mindset in the way they do things in the workplace. In essence, employees are watchdogs in ensuring that all lights and air conditions are switched off when they are not in use. We are partners in sustainability at the workplace”. (Participant 11).

Similarly, another lower-level employee who had worked in one public security agency opined that:

“Sharing the concept of green employee behaviour in terms of energy conservation and judicious use of it in our routine activities in the workplace helps create a big platform to promote green behaviour and that has been the pattern at my workplace”. (Participant 12).

A lower-level employee in one of the public security agencies defined employee green behaviour as;

“the mutual understanding and coordination between the employer and employees, particularly on issues that relate strategically to environmental sustainability. It can also be viewed as the behaviours or activities that employers put up or display, that interlinked, contribute, or disturb environmental sustainability. In essence, it refers to a series of activities that promote environmental protection and reduces harm to the natural environment”. (Participant 14).

Another lower-level employee stated that,

“Employee green behaviour refers to actions and behaviours employees engage in, which contribute to environmental preservations. Examples of such behaviours include activities such as saving energy, using resources efficiently, avoiding waste, recycling, and conserving water. We use electricity wisely, every employee is taught to make sure that they turn off all computers, printers, photocopies, and other equipment that does not need to be left on at the close of work and turning them off until you need to use them again (Participant 15).

A mid-level employee in one of the law enforcement agencies also expressed the view that:

“sharing green concept of doing things at the workplace goes a long way to foster an enduring sustainability activity in the organisation. Simply because much of the nation’s culture has been dismissive of green concept ideals in the workplace over the past decades means that managers of public sector organisation have a singular responsibility to promoting sustainability concept at the workplace” (Participant 9). Another mid-level manager also asserted that “everyone in my workplace tries a little bit to carry the concept of environmental sustainability in the office. We try to remind each other what we can all do to achieve energy-saving and promote good environmental stewardship. Because we are all on this earth to leave it well for the next generation that comes after us” (Participant 8).

Further, a mid-level employee who has worked in an environmental government agency for the past 20 years proclaimed that:

“The organisation has tried over the past four years to bring all employees to understand the concept of green behaviour and environmental sustainability at the workplace. She stated that by bringing all employees on one social platform and treating them as one family; that helps by finding out each person’s weak point in the organisation and lifting them to the level that they want the person to be” (Participant 7).

A senior manager who has been in the law enforcement agencies for 25 years confirmed that,

“the past five years have seen changes in the way we deal with equipment in the office. We are now purchasing only equipment that is environmental sustainable and that all our desktop computers, printers, photocopiers, and even the lighting in the office have all been changed to bring in the energy-saving ones. We are fully cognizant of the impact of our lifestyle on the environment, and so we in government agencies are doing the best we can to ensure that level of sustainability for our future children and grandchildren (Participant 6).

Several of the respondents expressed the impact of employee green behaviour and environmental sustainability. The definitions of employee green behaviour by some of the employees speak to their full understanding of the sustainability issues in their workplace. The table below highlights some of the major statements from participants from research question one.

Finding for Research Question Two

The government of Ghana through the legislative branch has enacted laws meant to guide and ensure employee green behaviour in public sector organisations (Renewable Energy Act 2011, Act 832). Several participants mentioned some of the ways these laws have placed these government institutions in reducing the energy cost and produced environmental sustainability in the workplace.

The following are some of the comments of participants. One manager in the law enforcement agencies stated that in his branch, he could recount of behavioural change on the part of management at the workplace. The participant asserted that:

Employee Green Behaviour in Ghanaian Public Sector Organisations

Table 2. Major statements from participants on research question one.

Major Themes	Key Statements from Participants
Environmental sustainability	Any behaviour that contributes to or distracts the environment conservation behaviour in the workplace.
Employee green behaviour	Actions and behaviours employees engage in that contribute to environmental preservations.
Examples of green behaviours	Saving energy, using resources efficiently, avoiding waste, recycling, conserving water and using electricity wisely.

“There was proper disposal of waste and using environmental friendly equipment and machinery. Besides that, encouraging the planting of trees around our environment and the emails and text messages to cut down the use of papers are some of the ways that we currently are doing to reduce the carbon footprint from our routine activities” (Participant 2).

Another manager also specified that:

“Some of the public institutions are going solar because of the government policies to reduce the level of thermal and hydro generated energy sources of electricity in the country. And more to it, there is more consciousness about using eco-friendly equipment and recycling of plastics materials and other waste products” (Participant 3).

Senior managers also indicate that:

“There are more recycling bins and that employees’ behaviour conforms to ways that reduce energy consumption and demonstrated an environmental friendly atmosphere” (Participant 4).

“There are plans to create avenues for certain employees to work from home, in the form of remote working. And there are also proposals to encourage sustainable transportation where all employees use one bus when commuting to work” (Participants 5).

A mid-level manager also specified that:

“Their organisation uses some of their time during their monthly open forum to discuss issues related to government policies on environmental sustainability and creating green behaviour awareness among employees. There is also the servicing of office equipment regularly to ensure efficient energy consumption” (Participant 7).

By creating awareness about government policies to encourage environmental-friendly policies and energy conservation policies, most of the public sector organisations are ensuring an environmental sustainable workplace. These policy measures will go a long way to foster employee green behaviour. Table 3 below describes key statements from participants from research question two.

Findings for Research Question Three

Table 3. Major statement from participants on renewable energy policies

Major Themes	Key Statements from Participants
Going solar	Using renewable source of electricity instead of hydrothermal sources.
Environmental-friendly policies	Energy conservation policies such as energy-saving office equipment and recycling bins.
Environmental sustainable policies	Using emails, texts, proper disposal of waste materials, planting of trees and remote working.

Green employee behaviour promotes a sustainable environment in the workplace and reduces the cost of the electricity bill. The promotion of energy-conserving equipment and fostering environmental friendly leadership at the workplace is also vital to enhancing the concept of sustainable public sector organisations in 21st century Ghana. Respondents shared their perspective on the importance and way forward regarding environmental sustainability in the public sector organisations. For instance, senior-level managers in an environmental agency mentioned that:

“My organisation has the objective to provide leadership and governance to society and in doing that it uses the latest technologies to bring development to the society it serves. Also, we do have a servicing and maintenance plan for all our equipment and thus minimizing the level of breakdown of the machines” (Participant 3).

Another senior manager in the same environmental agency also stated that:

“We ensure that every employee turns off all computers, printers, photocopiers and other equipment that does not need to be on at the close of the working day. We also encourage sustainable transportation by way of supporting your team members in taking alternative modes of transportation to and from the office such as carpooling with colleagues during the workweek” (Participant 4).

A mid-level manager in a public health agency also opined that:

“We aim for paperless office and that has been our principle since the government policy was sustainable energy promotion in 2015. In light of this, we have cut down on printed materials when possible, read on screen, and only print documents when necessary. Use only ten percent of recycled content paper products in the office” (Participant 8).

Based on the responses from employees, this paper asserts that employee green behaviour is gradually taking root and making an impact in public sector organisations since 2011. Most employees appreciate the positive contributions environmental sustainable policies enacted in 2011 by the government is reducing the cost of electricity and the reliance on the traditional hydroelectric source of energy. The table below describes the major statements by participants on the research question three.

In general, participants’ perspectives on the impact of government environmental policy on environmental sustainability have generated the need among public sector employees to be more proactive on

Employee Green Behaviour in Ghanaian Public Sector Organisations

Table 4. Key statements from participants on the value of green behaviour and the way forward

Major Themes	Key Statements from Participants
Environmental friendly leadership	When management administer organisations with environment, society, and lasting sustainable development goals as the key focus.
Sustainable environment	Conscientious interaction with the environment to minimize the destruction of natural resources and permit for lasting environmental quality.
Sustainable energy promotion	The system of managing energy in a way that benefits the needs of the present without conceding the ability of posterity to meet their personal needs.

the conservation of energy in the office and their private life. The role of government in fostering environmental sustainability has changed the minds and attitudes of many citizens, which would ultimately transform the behaviour of public sector employees in Ghana.

RECOMMENDATIONS

This chapter provides four key recommendations for the government of Ghana in its quest to foster environmental sustainability and energy conservation in public sector organisations. First, the government should build more bicycle paths for in its road construction projects and subsidize the cost of bicycles to encourage more of its use as one of the major means of transportation. This green approach would significantly reduce the level of pollution of the environment and minimize the widespread respiratory problems in society. Organizing employee car-pools will go a long way to reduce the carbon footprint on the environment and cut off the pollution and its harmful impact on the health of citizens.

Second, the government should encourage environmental sustainable training to both managerial and non-managerial employees semi-annually. This can be done by creating environmental awareness seminars for their employees' families and stakeholders of key industries in Ghana. Likewise, the human resource management departments in public sector organisations can ensure that 'Green Incidents' are recorded, analysed and lessons learned documented to ensure the best environmental practices.

Third, there should be active monitoring of the actual use of all your environmental policies and set responsibilities with results and improvements turning into new communicated policies to all employees? Likewise, private organisations whose corporate social responsibility seeks to build on environmental sustainability should be publicly commended and rewarded by the government to encourage such corporate behaviour.

Fourth, start-up companies, especially in the manufacturing and services should be offered financial support in terms of tax rebates and green government loans to help them build on green energy initiatives and train their employees on environmental sustainability programs. Such national financial support of green initiatives by start-up companies would go a long way to foster environmental awareness in the country. Ultimately, national financial support for green initiatives would transform society to appreciate environmental issues and conservation.

LIMITATIONS AND FUTURE RESEARCH

While this study is quite comprehensive based on the number of participants interviewed, there are two limitations to point out. First, the subjective responses to some of the questions concerning the green behaviour of employees created a limitation for detailed responses. Second, the study was limited in scope by way of narrow capture of participants residing only in the southern region of Ghana. A broader approach to examining more participants in other public sector organisations in the northern, eastern, western, and northern sections of Ghana would have given a comprehensive perspective on the study. This limitation was primarily due to financial resources to undertake a nation-wide study.

Future research should embark on replicating the results attained in this paper to other regions of Ghana to generalize this study's outcome and develop a robust employee green behaviour theory. Further, since the government has instituted policy measures to encourage renewable energy in Ghana, this future study should conduct an exploratory qualitative study on private sector institutions to examine employee attitudes towards green behaviour in their workplace. Specifically, leaders in these private organisations should be interviewed to understand whether there are any workplace policies or procedures towards energy conservation or environmental sustainability. Future research should also study all the public tertiary institutions to find out their approach towards green behaviour, since tertiary institutions are the major educational place of the future leaders of every country. A critical analyse of these institutions will offer a deep insight into the trend of investment in sustainable energy and how future leaders are been trained to understand the importance of green energy in our 21st-century world.

Green behaviour by employees can ensure the sustainable use of scarce resources by the government and facilitate a mindful use of the environment thereby ensuring a future for posterity. Employee green behaviour allows human resource practitioners to understand the strategic growth and direction of the organisation and the government. It can also be employed by managers to decide which long-term plans and practices will enable the productive growth of the organisation. Above all, this chapter concludes that formulating renewable energy policy meant to reduce Ghana's reliance on traditional sources of energy will enhance the economic growth and development of the country. Most developed countries have devised cost-effective measures to reduce energy costs and enhance sustainable energy sources. African countries such as Rwanda, South Africa, Namibia, and Botswana have all embarked on such renewable energy projects with great results. The positive economic impact cannot be overemphasized and should be the platform to transform the Ghanaian economy in this twenty-first century.

CONCLUSION

Four major themes became obvious from the data in addressing the research questions: (i) government energy conservation policies are integral to national sustainable economic growth, (ii) public sector employees behaviour on energy conservation help foster a culture of environmental sustainability (iii) national leadership role in the green initiative has created environmental awareness among public sector employees and the citizens at large and (iv) employee green behaviour enhances national economic development. These four themes reinforce the government of Ghana's environmental perspective to create a sustainable society in our 21st-century world.

This chapter explains the immense role played by the government of Ghana in encouraging energy conservation and green behaviour at the public sector organisations. One vital reason for embracing

the path of employee green behaviour in public sector organisations is to create a national sense of environmental sustainability. Promoting a national identity of environmental sustainability and energy conservation helps generate a collaborative spirit of protecting the wanton destruction of the environment, which is often undertaken under the guise of economic development.

Employee green behaviour is always a positive contribution to the overall socio-economic development of any country. As such, there should be a conscious effort to empower employee green behaviour agenda in public sector organisations in Ghana. This study contributes to the employee green attitude literature by examining the realm of green behaviour by employees in the context of public sector organisations in Ghana. Analysis of this study underscores the ways to develop green behaviour by employees and provides an empirical perspective to manage organisation's environmental sustainability and employee's attitude against wastage of office resources. This research study also provides the rationale behind the activities of the government of Ghana to reduce the impact of climate change in the 21st century. It is an indicator of the readiness of the government to meet the challenges of advanced technology and globalisation, the key socio-economic variable in any development effort. Above all, the quest to make Ghana a sustainable economy is strongly underpinned by the government's ability to change citizen's behaviour to environmental issues.

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KEY TERMS AND DEFINITIONS

Employee Green Behaviour: Deliberate attitude to applying energy preserving approach to routine activities at the workplace.

Environmentally Friendly: The conscious attitude to preserve energy and harnessing green energy resources.

Public Sector Organisation: Government operated organisations which often provides services that are vital to the everyday needs of citizens.

Renewable Energy: Is a natural resource that grow to restore the areas diminished by continuous usage and consumption, either through natural reproduction or other recurring processes in a finite amount of time in a human time scale.

Sustainability: Prevention of the running down of the natural resources primarily to help ensure ecological balance.

Chapter 14

Workplace Green Behavior for Sustainable Competitive Advantage

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ABSTRACT

Enhancing sustainable competitive advantage in terms of quality service delivery is key for environmental sustainability. Most organizations are bedeviled with toxic behavior of the workforce which have unpredictable concerns for sustainable initiatives parameters such as decline in profits, environmental degradation, and health deterioration. This chapter utilized the ability, motivation and opportunity theory, and relevant literature to examine the influence of workplace green behavior on sustainable competitive advantage, and the implication for environmental sustainability. The conclusion revealed that workplace green behavior in form waste recycling, going paperless, and embracing renewable energy predicted sustainable competitive advantage in terms of producing green products and services. The study recommended initiation of green organizational culture and creativity as panacea for green behavioral responses and sustainable goals.

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INTRODUCTION

In contemporary times, workplace behaviors directed towards ecofriendly outcomes, climate change, corporate existence, and environmental sustainability have become prominent and blistering issues. Human and industrial activities are rapidly and adversely affecting the natural environment, with varying long-term concerns and consequences for ecological degradation such as habitat destruction, deforestation, and air, water, and soil pollution. Accordingly, there have been many activities by governments, and international, public and private organizations, geared towards embracing green practices at the workplace through system-wide influences at the organizational level and informal environmental management arrangements to improve environmental performance.

However, progression seems to be slow in reducing workplace emissions and workplace-related fatalities. This constrained challenge may largely be due to the supposition that going green at the workplace is highly predicated on the behavior of the workforce. Hence, the onus is to inspire intra-organizational processes, expedite a behavior modification process, engage the workforce, and link individual behavior towards green options to ensure sustainable competitive advantage.

This chapter explores the routine of attaining and sustaining competitive advantage through the initiation of green behaviors at the workplace while taking cognizance of environmental challenges. Workplace green behavior in the work perspective enhances or undermines environmental sustainability (Ones & Dilchert, 2012a). Accordingly, this indicates that there should be a deliberate green human resource initiation process towards stimulating and utilizing green behavior as a resource to acquire sustainable competitive advantage (Almada & Borges, 2018; Dumont, Shen, & Deng, 2016), and enhance organizational environmental performance (Boiral, Talbot, & Paillé, 2015). The inference is that there is a need for organizations to discard the conventional culture of operating without considering the consequences of their economic actions on the environment. The world is going green and for that reason, sustainable and ecologically motivated organizations are expected to evolve and align their work content towards green initiatives.

In addition, this chapter will discuss related salient issues such as green organizational development, eco-efficiency, and circular economy. Recommendations will be highlighted to enrich the concept of workplace green behavior, environmental sustainability, and organizational sustainable goals in existing and forthcoming organizations.

BACKGROUND

This chapter reviews the process of achieving sustainable competitive advantage through workplace green behavior in line with the dictates of the United Nations sustainable development goals. This evaluation has become expedient due to the increasing negative societal consciousness of the interactions between economic growth and the environment, which has put pressure on organizations towards environmental sustainability (Ramanathan, 2018). Increasing population rate and escalating construction of new towns and cities have exacted three-fold pressures on the environment (Iqbal, Hassan, Akhtar, & Khan, 2018). Aside from that, the human race is confronted with severe challenges due to human over-exploitation of resources, environmental degradation, and unsustainable standard of living (Fields & Atiku, 2017).

Furthermore, the calamitous situation of the environment in recent times is as a result of the unwarranted cutting of trees, burning of fossil fuel, and the discharge of carbon monoxide due to organizational

and human activities (Fawehinmi, Yusliza, Mohamad, Faezah, & Muhammad, 2019). For example, in the United States of America, commercial and industrial activities are estimated to account for three times the quantity of emissions than the domestic sector (Lulfs & Hahn, 2013). Consequently, the rising mass of human and industrial waste has severe consequences for the human race and businesses (Iqbal, Hassan, Akhtar, & Khan, 2018).

Challenges of ecological overshoot, financial predicaments, undue exploitation, population progression, and greater expectations from stakeholders, are driving the current craving for a change in business practices and environmental sustainability (Fields & Atiku, 2017). Also, researchers have affirmed that organizations diminishing resources, increase in sponsors expectation and fundamental transparency will drive significant change in business climate (Laszlo & Zhexembayeva, 2011). Accordingly, both academic scholars and environmental experts are advocating for the development of control measures in differentiated forms of pollution to enhance environmental sustainability (Iqbal, Hassan, Akhtar, & Khan, 2018). Similarly, organizations have the utmost responsibility for environmental pollution and this has increased the conscious acts of organizations on environmental sustainability issues (Aykan, 2017).

Governments and businesses are encouraging green products and services largely due to goodwill, cost reduction, and increased patronage (Leonidou, Leonidou, Fotiadis, & Aykol, 2015; Mittal & Dhar, 2016). Additionally, Nulkar (2012), noted that in order for an organization to restyle its products and services, there is a need for a sustainability approach to creating a competitive advantage. The author submitted that environmental policies should be established on the economic fundamentals of a business, and strategic approach militates against the risks linked with aggression from government, competitors actions, employees concerns, and public outrage.

The problem of environmental sustainability and sustainable competitive advantage could be achieved by changing workforce behavior within the organizational systems and procedures. Workplace green behavior literature is currently lacking a powerful voice in the area of sustainable competitive advantage and environmental sustainability. Sustainable business solutions can be incorporated into organizational routines and processes (Dubois & Dubois, 2012). To buttress this assertion, empirical confirmation posits that organizations can achieve green sustainable keys by inducing the workforce pro-environmental behaviors (Robertson & Barling, 2013). Also, workplace green behavior can be pointedly stimulated by the work environment, especially by green-oriented influences (Wu, Wu, & Yuan, 2019). Evidently, studies have found out that green human resource practices elicit workplace green behavior which has varying magnitudes for business sustainability (Dumont, Shen, & Deng, 2017). Workplace green behavior must be intentionally aligned with the sustainable standpoint of the business, which anticipates growth and development (Almada & Borges, 2017).

Workplace green behavior is regarded as an extension of organizational citizenship behavior (Kim, Kim, Han, Jackson, & Ployhart, 2014), which can be engaged by the workforce (Pham, Phan, Tučková, Vo, & Nguyen, 2018). More so, it is a measurable behavior that accentuates sustainable competitive advantage in the work setting and by extension environmental sustainability (Ones & Dilchert, 2012a). Organizational expenditure can be measured by reducing the worth of electricity, on-site fuel usage, and air travel (Kane, 2011). Green behavior at the workplace, habitually voluntary, and work-related is a resource that can create sustainable competitive advantage. However, creating the essential resource or behavior for the needed competitive advantage requires stimulating green organizational processes, creativity, culture, design, and eco-innovation. Also, cognizance should be taken of the type of individuals at the workplace who are more likely to participate in workplace green behavior, and when and why (Mo & Liu, 2019).

Workplace Green Behavior for Sustainable Competitive Advantage

This chapter deliberates the mutual benefits of implementing green human resource management policies and initiating workplace green behavior, and how it can be utilized to provide sustainable solutions for both the organization and global advancement. Various organizational scholars have examined the role of green human resource management (Saifulina, Carballo-Penela, & Ruzo-Sanmartín, 2020), employee empowerment and manager involvement (Zhang, Luo, Zhang, & Zhao, 2019), employee engagement (George & Jayakumar, 2017), and organizational citizenship behavior (Paillé & Boiral, 2013). However, this chapter will scrutinize the application of other green initiatives such as green culture, design, and creativity towards achieving sustainable competitive goals, as suggested by (Norton, Parker, Zacher, & Ashkanasy, 2015), for future research agenda. Also, an attempt will be made to reaffirm Atiku's (2019) suggestions on developing a practical model for workplace green behavior which can be demonstrated at all levels of the organization.

Theoretical Review on Green Behavior

Various theories have been proposed on the intricate link between behaviors at the workplace and business performance. However, this chapter adopts the Ability, Motivation, and Opportunity (AMO) theory that was propounded by Appelbaum, Bailey, Berg, and Kalleberg (2000), to illustrate the relationship between workplace behavior and sustainable competitive advantage. The AMO framework has been described as one of the most common conceptualizations, and foremost emerging paradigms for accomplishing sustainable advantage goals through the implementation of human resource practices (Karam, Gardner, Gullifor, Tribble, & Li, 2017; Rayner & Morgan, 2018). Initially, Bailey (1993) had submitted that in order to prompt employee's discretionary effort, three components need to be utilized by the employees which are, the required skills, the proper motivation, and essential opportunity as provided to partake in decision making (Appelbaum et al., 2000). Hence, the AMO model has been widely used in the human resource management literature to clarify the linkage between green human resource practices, and sustainable business and ecological goals (Marin-García & Tomas, 2016).

The theory submits that organizational sustainable goals can be attained by activating and utilizing employees' ability, motivation, and opportunity. In other words, how the workforce is managed through green human resource management policies and practices, determines the work behavior. The AMO framework provides business managers with a requisite managerial tool that is likely to positively impact on sustainable solutions. However, stimulating constructive workplace green behaviors is highly predicated on a subsisting decentralized decision-making system that takes cognizance of employees' ability, motivation, and opportunity (AMO). To reaffirm this assertion, research has shown that sustainable competitive advantage and environmental sustainability of organizations are influenced to a large magnitude by the workplace green behavior, envisioned to reduce pollution and add to eco-innovations (Paille, Chen, Boiral, Jiin, 2014; Roy, Boiral, & Paille, 2013).

Stimulating workplace green behavior through employees' abilities such as skills, experience, prior related knowledge, and attitudes, requires ability-enhancing practices namely training and developing, recruitment and selection and problem-solving skills (Atiku, 2020; Boon, Bolschak, Hartog, & Pijnenburg, 2014; Bos-Nehles, Van Riemsdijk, & Looise, 2013; Minbaeva, 2013; Schimansky, 2014). Also, motivation-enhancing practices like recognition, performance appraisal, job security, pay for performance, work-life balance, collaborative climate, and social capital foster workplace green behavior and by extension sustainable goals (Marin-García & Tomas, 2016). Likewise, opportunity-enhancing practices specifically employees' involvement in the decision-making process, job enrichment, employee voice,

knowledge sharing, and horizontal communication, encourage workplace green behavior (Demortier, Delobbe, & El Akremi, 2014; Schimansky, 2014).

What this connotes is that workplace green behavior, once implicitly pursued by an organization, is a resource that can be utilized to give an organization a sustainable competitive edge in providing green services and products intended to reduce waste and maximize resource efficiency. Thus, an organization should provide prospects for exchange of ideas across the chain of command, crafting systems for capturing and disseminating knowledge within the organization, and autonomy for employees to perform their tasks (Minbaeva, 2013; Sarikwal & Gupta, 2013; Senge, Ross, Smith, Roberts & Kleiner, 1995).

Contemporary studies (Ehrnrooth & Bjorkman, 2012; Marin-Garcia & Tomas, 2016; McCarthy & Milner, 2020; Trošt, Škerlavaj, & Anzengruber, 2016) have acknowledged the efficacy of the AMO framework in highlighting how tangible and intangible sustainable initiatives can be achieved through green human resource management practices. Accordingly, it can be deduced that AMO is effective in initiating green human resource management practices in the workplace, entrenching a green organizational culture, eliciting eco-friendly behaviors of the workforce, and influencing creativity and innovation to drive sustainable competitive advantage.

WORKPLACE GREEN BEHAVIOR

Workplace green behavior can be described as a succession of behaviors of the workforce, stimulated and directed towards accentuating a business profit margin, and at the same time reducing the negative impact of business activities on the environment. It is a viable resource that can be utilized by an organization to increase its sustainable competitive advantage. In addition, green behavior at the workplace is instigated by green human resource strategies which are inclusive of green organizational culture and green creativity.

Green Organizational Culture

Green organizational culture has different nomenclature namely eco-friendly culture, environmental culture, green consciousness, sustainability culture, pro-environmental culture, and corporate social responsibility (Atiku & Fields, 2018; Tahir, Athar, Faisal, Shahani, & Solangi, 2019). Harris and Crane (2002) view organizational culture as a set of values, symbols, assumptions, and organizational artifacts replicating the enthusiasm of inculcating environmental initiatives. More so, green organizational culture is viewed as the configuration of shared basic assumptions about environmental challenges and environmental management (Chen, 2011; Marshall, McCarthy, McGrath, & Claudy, 2015; Schein, 2010). Chang (2015) describe green organizational culture as inclusive of shared values, norms, beliefs, symbols, and social stereotype within an organization that determines the standard green behavior that is expected of the workforce. Therefore, encouraging a green organizational culture towards environmental sustainability and organizational sustainable goals requires influencing the workplace green behavior of the workforce.

Chen (2011) describes green organizational culture as an organizational culture that energizes employees to participate in environmentally mindful behaviors, it creates a climate that takes cognizance of the development of new ideas, attitudes, and behaviors that ameliorates negative environmental issues. A green organizational culture inspires an enabling atmosphere that can activate workplace green behavior (Küçükoğlu & Pınar, 2016). In the context of this study, a green organizational culture can

Workplace Green Behavior for Sustainable Competitive Advantage

facilitate an environment that will enthrone workplace green behaviors, which are needed as a resource for sustainable competitive advantage.

Green Creativity

Green creativity underlines eco-friendly disposition, green products, and services, which are prerequisites for sustainable competitive advantage and environmental sustainability. It plays a significant part in dealing with global ecological sustainable changes and aids in attaining sustainable competitive advantage (Chang, 2011; Chen, Chang, & Wu, 2012; Fields & Atiku, 2017). Green creativity is defined as the development of new concepts about green products, green services, and green processes that are viewed as original, unique, and beneficial (Amabile, 1988; Chen & Chang, 2013). Integrating green creativity into an organizational development process creates workplace green behavior that drives towards sustainable goals (Chen, 2010). Additionally, a high level of green creativity is a sine qua non for competitive advantage (Basheer, Siam, Awn, & Hassan, 2019; Fields & Atiku, 2017).

Workplace Behavior and Sustainable Competitive Advantage

Work and non-work undertakings have contradictory influences on the green behavior of the workforce (Muster & Schrader, 2011). Hence, individuals at the workplace exhibit diverse behaviors, which could be constructive or destructive with varying consequences for sustainable parameters (Uwem, 2019). It is not surprising that organizations are seeking to comprehend how workplace behaviors influence the natural environment, and the significances for sustainable advantages and environmental sustainability (Atiku, 2019). More so, the accomplishment of salient sustainable initiatives is predicated on the voluntary workforce behavior that may not be within the purview of formal compensation and performance evaluation systems (Daily, Bishop, & Govindarajulu, 2009). Contrarily, research has revealed that human economic activity is the key driver of environmental degradation (Ones & Dilchert, 2012a).

Accordingly, destructive behavior can be one of the influences militating against organizational sustainable competitive advantage. Workforce habitual behavior wastes substantial resources and earnestly harms the environment (Yun, Scupelli, Aziz, & Loftness, 2013). However, constructive behavior such as workplace green behavior in the form of information sharing, shared vision, and strategic proactivity facilitates green culture, creativity, innovation, responsibility, and sustainable solutions (Aragón-Correa, Martín-Tapia, & Hurtado-Torres, 2013; Atiku & Fields, 2019; Bashirun, Samudin, Zolkapli, & Badrolhisam, 2019; Torugsa, O'Donohue, & Hecker, 2013). Also, green or pro-environmental behaviors are crucial for confronting pollution complications and stimulating organizational sustainable expansion (De Groot & Steg, 2010).

Workplace green behavior is a germane activator for resourcefulness and tactical driver for sustainable competitive advantage and environmental sustainability. Likewise, workplace green behavior refers to flexible behaviors and deeds that profit any eco-friendly organization in a sustainable way (Kim, Kim, Han, Jackson, & Ployhart, 2014). Explicitly, green behavior has been defined as a factor that decreases damage to the environment or accentuates business and ecological initiatives (Steg & Vlek, 2009). Ones and Dilchert (2012a) view as surmountable activities and behaviors the workforce partakes in to bring about sustainable keys and environmental sustainability. Green behavior at the workplace is a pros-social in outlook (Chou, 2014), and extensively add to organizational sustainability through value conception (Dumont, Shen, & Deng, 2016). Workplace green behavior can be part of any measurement

of sustainable solutions that can be required or discretionary (Campbell & Wiernik, 2015). This in-role and extra-role behavior are often not rewarded, intricate, time-consuming, and undocumented, but contribute significantly to organizational sustainable goals (Boiral & Paillé, 2012; Ramus & Killmer, 2007).

Workplace green behavior instigates green activities in the workplace which increases sustainable enterprises (Chaudhary, 2020), and aims at assisting organizations in reducing environmental impacts of their actions. According to Norton, Zacher, and Ashkanasy (2014), the in-role and extra-role of workplace green behavior are expedient for achieving sustainable competitive advantage. Green activities are inclusive of utilizing tablet technology to moderate paper usage, conservation, work-based recycling arrangements, videoconferencing, remote working, and car-sharing. Activating workplace green behavior requires the active efforts of the entire workforce. This entails impelling employee engagement at the workplace, as sustainable creativities are predicated on the disposition of the workforce (Chanderjeet, 2017). Similarly, institutionalizing workplace green behavior must involve managers, employees, and specialists' unswerving participation (Atiku, 2019). As a result, the workforce must have sophisticated moral standards and pro-environmental behaviors (Devi, 2018; Jackson, Renwick, Jabbour, & Muller-Camen, 2011).

Benefits of Workplace Green Behavior

The benefits of workplace green behavior can be evaluated at different levels. Employees have varying levels of preference over when and how to display workplace green behavior (Hoffman & Dilchert, 2012; Williams & Anderson, 1991). At the individual level, activating green initiatives such as changing to real mugs as a substitute for Styrofoam cups, turning off computers at the end of the day and turning off lights when not in use, increases self-control, problem-solving skills, individual empowerment and other sustainable rewards (Paillé & Boiral, 2013; Renwick, Redman, & Maguire, 2013). Also, there are potentials of enhancing the workforce well-being, skills, and productivity (Kane, 2011), and improving employee involvement, self-recognition, and attracting high fliers to join the organization (Cherian & Jacob, 2012). Similarly, the workforce may participate and implement workplace green behaviors in various ways such as proposing developing and sharing new practices (Boiral & Paillé, 2012).

At the organizational level, there is need to develop innovative-focused environmental, culture, creativities and procedures, to drive sustainable competitive advantage, meet customers' demand for green merchandises and services, and enhance environmental sustainability (Atiku, 2019; Sudin, 2011; Young, et al., 2015). Such innovative activities are often activated by green human resource management practices, which influences voluntary and prearranged workplace green behavior, aimed at conserving organizational resources and accomplishing business and environmental sustainability (Saifulina, Carballo-Penela, & Ruzo-Sanmartín, 2020). Activating green behaviors at the workplace implies cost reduction, energy security, employer branding, goodwill, superior products, and services.

SUSTAINABLE COMPETITIVE ADVANTAGE

The sustainable competitive advantage consists of organization assets, attributes, or capacities that are problematic to imitate or surpass and have superior quality and large market share over competitors, over a long period of time. Also, competitive advantage denotes factors such as cost structure, branding, distribution network, and customer service that drives organizations to produce quality goods and

Workplace Green Behavior for Sustainable Competitive Advantage

services, make more sales than their market rivals (Twin & Anderson, 2020). By initiating workplace green behavior, an organization can become a market leader and build an invaluable powerful brand and great corporate reputation, which is a sustainable competitive advantage that can exist for a long time.

Sustainable competitive advantage has been abundantly studied and scrutinized since the 1980s (Porter 1980; 1985). Based on his work in 1985, the author mentioned that competitive world business strategies are hinged upon differentiation by unique specialization referring to product quality, technology implores in services, and in cost leadership. The author affirms that the undetached pursuit of excellence will yield be the bedrock of a winning side and ultimately leads to competitive advantage. To affirm this, Srivastava, Franklin, and Martinette (2013) submitted that to achieve a sustainable competitive advantage, organizations should persistently focus on building product and service strategies, core competencies, intellectual property, and new technologies that should be exploited for sustainable rewards in a highly competitive marketplace. In the context of this study, the “excellence” is workplace green behavior, and it manifests in the form of green quality service delivery and product offerings that are needed for achieving green sustainable initiatives.

On his viewpoint, Barney (1991) explains sustainable competitive advantage from the capabilities and resources that operates in four dimensions, namely; valuable, rare, imperfectly imitable, and not substitutable. Barney, Wright, and Ketchen (2001) submit that sustainable competitive advantage is a resource-based strategy, which is a very potent business tool that is effectively deployed in today’s work organizations. In the long run, organizations with a knack for green initiatives have capacities to control a large market share and outperform competitors. This is largely due to marketplace fluctuations and fierce competition facilitated by globalization and trade liberalization. Therefore, green insights, strategies, and perspectives should be initiated and sustained to grow profit margin and at the same time drive environmental sustainability. For example, the development of influences such as green human capital formation, collective green creativity, and eco-innovation is paramount for improving sustainable competitive advantage.

RECOMMENDATIONS

In view of the never-ending environmental challenges as a result of human and industrial activities, the organization can no longer operate in isolation while the global is being ravaged by ecological degradation. To tackle and promote environmental sustainability, organizations should strictly adhere to government-stipulated rules of engagement concerning the disposal of waste and other harmful outputs. Inculcating and implementing green human resource management policies and procedures have become expedient. A strong green organizational culture has the capacity to elicit employee green commitments and eco-innovation. Hence, organizations should inspire the development of social capital for the initiation of green behavior at the workplace through unhindered access to formal and informal peer feedback. In that way, flexible behaviors and deeds that profits in the organization and environment will seamlessly manifest.

Since there may not be a formal compensation and performance evaluation systems for workplace green behavior, organizations should provide motivational incentives to enthuse green behavior. For example, to encourage green behavior, deliberate recycling, and appropriate disposal of waste by employees can be included in the performance appraisal system. As a proactive measure, organizations should have access to real-time information which will aid collective green creativity and sustainable competitive advantage.

FUTURE AREAS OF RESEARCH

This contribution to knowledge has analyzed the internal mechanisms for workplace green behavior and sustainable competitive advantage on how key organizational levers namely green human resource practices can be more effectively built, and utilized to sustain green initiatives. However, the increasing diversity of today's organizations, multi-cultural outlook, and emerging economic influences may necessitate the usage of a qualitative model to analyze the variables in future research. Also, future research may utilize green organizational culture, green innovation, and green creativity, as sub-variables for workplace green behavior to test its impact on sustainable competitive advantage using multiple regression. Future research may delve into the obligatory attributes needed for an employee to acquire through training for the enhancement of green behavior at the workplace.

CONCLUSION

In summary, this work is developed based on relevant existing literature. This chapter utilizes a theoretical approach of the Ability, Motivation, and Opportunity framework to illustrate how workplace green behavior influences the achievement of sustainable competitive advantage. And moves into conceptual review in order to evaluate the efficacy of green human resource management on workplace green behavior, and concludes that green sustainable goals can only be accomplished through a deliberate and decisive action of the organization to embrace environmental management in the turbulent business eco-systems of the 21st Century. The role of organizations in initiating green human resource practices to activate workplace green behavior through horizontal communication is essential, for achieving green sustainable goals. This has become pragmatic as a sustainable competitive advantage can be achieved by producing, and distribution of green products and services that are ecofriendly and eco-efficient.

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KEY TERMS AND DEFINITIONS

Collective Green Creativity: A business entity consisting of highly skilled individuals whose drive is to inspire and to initiate new concepts and resolutions, and create value for sustainability through resourceful thinking.

Green Creativity: Emphasizes eco-friendly disposition, green products, and services, which are prerequisites for sustainable competitive advantage and environmental sustainability.

Green Human Resource: Outline of employees' attributes competencies, skills, knowledge, and commitments about green sustainable enterprises.

Green Organizational Culture: As a set of values, symbols, assumptions, and organizational artifacts replicating the enthusiasm of inculcating environmental initiatives.

Sustainable Competitive Advantage: Consist of organization assets, attributes, or capacities that are problematic to imitate or surpass and have superior quality and market share over competitors, over a long period.

Workplace Green Behavior: Describes a succession of behaviors of the workforce, stimulated and directed towards accentuating a business profit margin, and at the same time reducing the negative impact of business activities on the environment.

Chapter 15

Green Human Resources and Sustainable Business Solutions

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ABSTRACT

This chapter discusses green human resources (HR) and its impact on sustainable business solutions. It embraces work area research and writing audit way to discover the connection between green HR and sustainable business performance. This chapter examines the influence of human resources (HR) as a fundamental capacity in an organisation. The role of HR in the organisation has moved beyond focusing on realising organisational objective but into the integration of corporate strategy with environmental sustainability through environmentally friendly practice. The study explores instrumental theory, which focuses on both shareholder and stakeholders' interests of an organisation. Therefore, organisations need to align its operational objectives with environmental sustainability objectives through effective green HR practices to achieve sustainable business solutions.

INTRODUCTION

The global business environment is currently considering green human resources (green HR) as one of the strategic ways for business sustainability. This is because of the challenges faced by most organisational managers particularly HR professionals as a result of volatility in business operations (Ullah, 2017). Mehta and Chugan (2015) suggested that HR formed a significant part of the organisation executive's and are responsible for the management of employees to align with business objectives. The role of HR in the organisation has therefore moved beyond focusing on realising organisational objective into the integration of organisational objective with a conducive and sustainable business environment (Agarwal, Garg & Pareek, 2011). Adequate integration of human resources practices with environmental sustainability awareness is referred by Ullah (2017) as 'green' HR. Practicing green HR implies that Business

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managers, as well as HR professionals, are aware of the strategic planning and the alignment of HR functions with environmentally friendly standard practices to ensure sustainable business performance (Jabbour, 2011; Mandip, 2012; Kapil, 2015).

This chapter seeks to establish the relationship between green HR and sustainable business solutions by reviewing extant research areas to discover the connection between green HR and sustainable business performance. This chapter provides background information on green HR through an explanation of green methodologies such as green job design, green training and development, green recruitment, green employee relations, and green remuneration in a way that can provide sustainable business solutions. This chapter offers explanations on how organisation can gain a competitive advantage in a volatile business environment by promoting green consciousness among their employees. The culture of green consciousness could be achieved by effectively communicating and promoting green HR practices to newly recruited individuals through green job design. The relevance of green HR in sustaining the business environment is in relation to the challenges faced in achieving sustainable business solutions was also emphasized.

BACKGROUND

The emergence of green HR can be traced to organization and management fields (Mehta & Chugan, 2015; Mwita, 2019; Stojanoska, 2016). Green HR involves the use of technology initiatives through employee involvement to create a conducive environment to perform all HR functions which includes job design, recruitments, training, and compensation to prevent environmental pollution in other to achieve sustainable business solutions (Hosain, 2016; Uddin & Islam, 2015). Many scholars (Mandip, 2012; Mathapati, 2013; Prasad, 2013; Zoogah, 2010) suggested that organisation have recently and constantly informed, encouraging, and training their employees on strategic integration of green HR practices with environmentally friendly initiatives in a way to promote sustainable business solutions. The strategic integration of HR practices with environmental sustainability practices consists of formulations of organisation HR policies and practices towards green recruitment, green training, and development, green induction, green employee relations, green compensation for environmental sustainability (Mathapati, 2013). Therefore, green HR functions is prioritised with business activity to build and enjoy a sustainable business solution (Mtembu, 2017).

Organisations create a lasting impression in the minds of their customers, shareholders and all other stakeholders when they ensure their organisational policies and practices are in tandem with international business standards of operations (Cania, 2014; Coblentz, 2002; Ioannou & Serafine, 2011). Otherwise, the organisation may experience poor performance or find it difficult to achieve sustainable business solutions when their business environments are taken for granted (Ladipo, Awoniyi & Arebi, 2017). Many organisations are likely to enjoy a high sustainable business solution by engaging in green HR. Hence, an environmental sustainability research consideration in HR practices has resulted in the development of green HR (Chowdhury, Sanju & Asaduzzaman, 2017). Besides, sustainable business strategies can be successfully implemented and achieved if there are well-established processes and a strong leadership presence in an organization (Glavas, Senge, & Cooperrider, 2010). Therefore, the study relating to environmental sustainability is now a top priority in the business world as the HR professional are gaining consciousness of the alignment of “green HR” into the organisational strategy in other to realise business competitive advantages (Wirtenberg, Harmon, Russell, & Fairfield, 2007).

Green Human Resources

Green HR is referred to as the process of ensuring that the management system practicing in an organization is ecologically balanced and environmentally sustainable (Mehta & Chugan, 2015; Kapil, 2015). The focus of this concept is the reflection of 'green' as an environmental system in defining the practices of HR. For instance, Opatha and Arulrajah (2014) define green HR as the policies, practices, and systems that make employees of the organization green for the benefit of the individual, society, natural environment, and the business. Similarly, Rana and Jain (2014) perceived green HR from a model perspective, which is defined as an employment model designed to assist industry professionals in recruiting, retaining, and developing the talent needed to ensure future business initiatives and strategies are met. Accordingly, Prasad (2013), regarded green HR as the contribution of HR policies and practices towards the broader corporate environmental agenda of sustainable use of natural resources to achieve a sustainable business solution. Opatha (2013) and Renwick et al, (2008) put it that green HR is the integration of corporate environmental management into HR practices. It is the contribution of people management policies and activities towards the organization's goals (Chowdhury, Sanju & Asaduzzaman, 2017). According to Mandip (2012), green HR is the use of every employee touchpoint/interface to promote sustainable practices and increase employee awareness and commitments on the issues of sustainability.

Mehta and Mehta, (2017) claim that improved performance in an organisation would result into a reduction in employee carbon footprints by the mean of green HR practices such as flexible work scheduled, electronic filing, car-sharing, job-sharing, teleconferencing, virtual interviews, recycling, telecommuting, online training, and energy-efficient office space. Deepika and Karpagam (2016) emphasised that green HR is the use of HR policies to give confidence in the sustainable use of resources within business organizations and more generally promotes the source of environmental sustainability. This is why green HR is considered as the integration of HR policies and practices such as recruitment practices, training and development practices, compensation structure, and employee relations to the environmental system in a specific business location.

Green Recruitment Practices

Green recruitment refers to a paper-free recruitment process with a reduced negative impact on the environment (Deepika & Karpagam, 2016). Sustainable environment practice could be integrated into the recruitment process. Such that recruitment processed will encompasses monitoring of long-term organisation competency requirements and providing information about sustainable development policies to a potential employee. This is achievable through recruitment procedures that support the unbiased representation of applicants (Mandip, 2012).

Green recruitment emphasises environmental sustainability and making it a significant component within the organisation recruitment process (Holtom, Mitchell, Lee & Eberly, 2008; Deepika & Karpagam, 2016). Green recruitment makes sure that new employee knows about the green practices and environmental framework that will bolster the compelling environmentally friendly practice within the organisation (WeHReyer, 1996).

The emergence of technology and the adoption of green HR practices compared to conventional business practices has paved the way for the adoption of technology in the recruitment processes. Technology in this sense help facilitates communication between employers and applicants from different destinations with a social network such as teleconferencing, video-conferencing, online tests to mention

few for recruitment practices (Khurshid & Darzi, 2016). All the necessary documents for recruitment exercises such as resumes, cover letters, CVs, acceptance letters, and others can be submitted through online uploading into the company's website (Khurshid & Darzi, 2016). Hence, the conventional recruitment style has been outperformed by the computerized strategy, which tremendously reduces the cost of advertisement leading to increases in sustainable business solutions through green initiatives (Khurshid & Darzi, 2016).

Green Training and Development

The concept of green training and development involves equipping employees with working approaches that can guaranty optimal resource utilisation, waste reduction, energy conservation, and environmental degradation caused reduction (Ullah, 2017). The concept helps the management of organisation and HR professionals to provide an opportunity to engage employees in environmental problem-solving skills (Zoogah, 2011). This means that through green HR practices employees' skills are sharpened to manage environmental issues in other to increase the chances of achieving sustainable business solutions (Liebowitz, 2010). Green training and development assistance to connect management and employees effectively on critical environmental issues (Zoogah, 2011). Further, green human practices improve the aptitude of an employee to instruct with diverse environmental challenges (Liebowitz, 2010).

Organisation training and development identified programs with environmental consciousness (Atiku, 2019) provide employees with useful information to solve the environmental work-related problem (Atiku, 2020; Govindarajulu & Daily, 2004) in its multifaceted nature (Perron, Co[^]te', & Duffy, 2006), which impact on sustainable business solutions (Daily & Huang, 2001; Fields & Atiku, 2017). Many researchers have agreed that the green HR practices through training and development significantly affects improving environmentally related performance in an organisation (Cordo'n-Pozo, & Ferro'n-Vilchez, 2012; Guerci, Longoni & Luzzini, 2016; Longoni, Golini, & Cagliano, 2014; Vidal-Salazar). Recent technological advancement has made a remarkable impact in designing environmentally sustainable best-fit training and development programs in a virtual environment (Khurshid & Darzi, 2016). For instance, conferences, workshops, and seminars are now organised online for employees', and by this means, paper works during the training programs are eliminated and information can be shared online and thereby reduces stress and cost of traveling as well as environmental pollution reduction. Such training programs could also serve as awareness related programs towards vital environmental issues such as energy conservation, waste management, reducing carbon footprints among others in ensuring a sustainable business environment (Khurshid & Darzi, 2016).

Green Compensation Structure

Green compensation includes various workplace benefits such as prizes for waste and energy reduction rewards, carbon credit offset given to recognized employees involved in green HR, and environmental management practices that support sustainable business solutions (Milliman & Clair, 1996; Pillai & Sivathanu, 2014). This means that organisations' reward and compensation packages practicing green HR could be tailored towards rewarding employee green skills achievements (Deshwal, 2015). Khurshid and Darzi (2016) suggested two kinds of compensation structures that are commonly known. The first is money related prizes. Money related prizes involve pays allotments; pay increase, money premiums, rewards, extraordinary limits on the organisation's merchandise, and others. The non-financial prizes,

which incorporate a propensity for presenting uncommon acknowledgment grants to employees on their green accomplishment or uniquely sorted out gathering for Mr. Green of the year, exceptional occasion leave, advancements, and so on.

A green compensation system in an organisation could be embraced as a methodology to impact and alter employees' green conduct that best fit environmental sustainability (Guerci, Longoni & Luzzini, 2016; Khurshid & Darzi, 2016). The compensation structure has colossal advantages in impacting staff interests towards organisations objectives and destinations (Ahmad, 2015). While the money related motivators may be utilised to propel employees on green practices and such impetuses are not typically recorded in the corporate yearly performance review (Ooi, Amran, Goh & Nejati, 2017). In contrary, Lawal, & van der Westhuizen, & Awotunde, (2019) suggested that incentives offered to employees when they become aware and committed to organisation culture must not be restricted to monetary gains, but should also include recognition of their performance and suggestions of present opportunities to achieve individual goals and aspirations. In the Global setting, such green compensation is essentially applied to the employees' conduct and its change through motivations towards keeping up an environmentally friendly compensation structure (Adegbite, 2015; Ojiaku, Achi & Aghara, 2018). Lastly, the fulfillment of explicit sustainable activities may be added to the compensation system by offering an advantage bundle that rewards employees for evolving practices (Mandip, 2012; Milliman, 2013; Ooi, Amran, Goh & Nejati, 2017).

Green Employee Relations

Employees relate with one another for business objective attainment. The green HR in employee relation context assist to recover and determine workplace-related problem that may hamper the attainment of environmental sustainability goals (Deepika & Karpagam, 2016). Green employee relations determine and control the behaviours from supervisors toward employees' engagement by encouraging them to offer sustainable business solutions to identified environmental problems (Ramus, 2001; Ullah, 2017). The idealistic employee relations are incredible and proceeding with an advantage and a wellspring of forceful improvement for any organisation (Deepika & Karpagam, 2016). Meaning that the commitments of the employees to green activities would build the likelihood of unrivaled green administration as it adjusts employee's objectives, inspirations, and observations with green administration practices and systems. For example, some organisation employees presently comprehend the significance of green practices in their organisations, where some individual avoid potential risk to control their emotionless propensity against their condition, while some others chose to frame a group with comparable objectives towards keeping up an environmental enhancements sustainability past their typical work obligations (Milliman, 2013). Hence, green HR practice through green employees' engagement could increase the chances of the most organisation to enjoy sustainable business solutions.

Theoretical Explanation for Sustainable Business Solution

Friedman (1970) as cited in Deepika and Karpagam, (2016) built up an instrumental theory with the perspectives that "the just in a single duty of business towards society is the expansion of benefits to the investors inside the legal structure and the moral custom of the nation". The instrumental theory offers knowledge for additional comprehension of the connection between greening methodologies planning and sustainable business solutions. According to Khurshid and Darzi, (2016), integrative theory emphasised

on the need of the general public social interest during an organisation arrangement of green HR. The instrumental scholars bother around accomplishing economic targets through social exercises' (Adegbite, 2015). Therefore, the theory considers the procedure by which exercises or things become systematised or installed in organisations like standards and acknowledged practice and the job of establishments in the public arena (Scott, 2003). According to Deshwal (2015), political theory stressed the significance of corporate force and how this force can be utilized mindfully to impact both interior and outer choices while instrumental theory focuses on the effect of environmental weights that the organisation experiences. Organisations capitulate to these environmental powers and weights to pick up assets from the condition that can incorporate monetary assets just as clients, political force, and institutional authenticity.

Three principles guiding instrumental theory can be distinguished as contingent upon the economic goal. The first principle suggests that the goal is the amplification of investor esteem, estimated by the offer cost. This prompts the direction of a transient benefit. Nonetheless, a firm should not overlook the analysis of environmentally hurtful human asset practices that could influence society because of its emphasis on benefit. A case of Freeman (1994), a moral theory that emphasised the propensity for making the best decision as to the essential duty of an organisation towards accomplishing a superior society. The instrumental theory asserted that the enthusiasm of the public is that the significant plan of an organisation is to work in a business opportunity as long as possible.

The second assumption of this theory focuses on the vital objective of accomplishing upper hands, which would create long-lasting benefits. In the two cases, green HR distinguishably an issue of illuminated personal responsibility (Keim, 1978) since the practices are a minor instrument for benefits. The third is identified with cause-related organisation practices and is exceptionally near the second as the serious edge is estimated through components like a piece of the pie, gainfulness, efficiency, and ideal performance. In this way, every one of these variables is the objective of each firm captivating in human asset practices in the public arena towards increasing an upper hand.

Green Human Resources Management and Sustainable Business Solution: Empirical reviews

Ullah (2017) examines green HR and environmental supportability in HR. The investigation revealed that the usage of green HR in an organisation is probably going to result into efficiencies, practical use of assets, less wastage, improved job-related demand or, improved work/private life, lower costs, improved specialist execution, and support which help the organisation to guarantee conducive environment, asset productive and socially mindful work environment. Rashid, Wahid, and Saad (2006) documented that employee interest in environmental administration frameworks positively affects environmentally dependable perspectives and conduct in an employee's private life. Deepika and Karpagam (2016) revealed that HR professionals have a critical contribution to place into the organisation's green development and assume a huge job in enthusing, encouraging, and empowering employees for dazzling up green practices for greener business sustainability. Rana and Jain (2014) affirmed that numerous organisations all-inclusive are freely progressing in the direction of actualizing green practices. In the interim, the green HR practice encourages an organisation and its employees through the improvement pace of maintenance in employees, improved open picture, improvement in the sustainable utilization of assets, and expanded business openings (Bangwal & Tiwari, 2015).

Mehta and Mehta (2017) gave a more extensive view where the author confirmed that green HR could be utilised to effectively facilitate a comprehensive approach for sustainable utilization of assets.

This asset, in any case, helps in achieving at an ideal degree of efficiencies, less wastage, improved job-related disposition, improved work/private life, lower costs, improved employee performance, and maintenance. Ooi, Amran, Goh, and Nejati (2017) stressed on the significance of green HR as practiced in Malaysia. The study recognized six segments of green HR and found that green ability such as the executives, green performance, the board, green preparation and advancement, green employee commitment, green prize framework, and green employee participation are critical to the Malaysian budgetary administrations industry. Last, Guerci, Longoni, and Luzzini (2016) look at the impact of partner pressures on environmental performance while putting money on green HR as an interceding variable. The examination found that green preparation and contribution, just as green performance, the executives, and remuneration, all significantly affect environmental performance, while green recruitment was denied with no relationship with environmental performance.

RECOMMENDATIONS

Organisations suffers resource wastage, high operational cost, environmental pollution and public litigation in the absence of green HR practices due to inadequate employees' competences and commitment to drive sustainable business solutions amidst volatile business environment. This chapter recommends that organisation managers and HR professional should encourage green HR practices through policy formulations and implementation for sustainable business solutions. Business manager should also try to organized employee's commitment in green exercises as a method of estimating and assessing performance in the organisation.

Green awareness in these organisations should be remunerated on monthly, quarterly, or yearly bases. Grants and unique acknowledgment should also be remembered for such an award as a method of propelling employees to be green conscious. The HR supervisor should attempt to take part in the exploration of innovation that is appropriate to green HR practices in the organisation. Such innovation could assist with encouraging less deskwork exchanges on recruitment programs, in addition to preparing and planning training programs. Industry managers and HR specialists should then design better standards, policies, and compliances on green HR matters that could fill in as a guard dog to employees not applying green initiative and activities in the organisation. The administration of an organisation should desire to arrange workshop programs by instructing both the employees on green HR matters (Atiku, 2019) as a type of corporate social responsibility (CSR). An organisation should establish a tone of focus for themselves in turning out to be promoting green culture in a manner that suggests organisation participation in occasional exploration towards researching into its green practices from both employees and society's viewpoints.

FURTHER AREAS OF RESEARCH

This chapter embraces the reviews of extant research areas to explore the influence of green HR on a sustainable business solution. This chapter suggests that better performance can be traced to the organisation involved green HR initiatives and alignment of environmental management in other to realised sustainable business solutions. Still, prospective research could focus on empirical investigations on the

relationship between green HRM and Sustainable Solutions involving a large sample size. The research may also look at a mixed-methods approach in data gathering and analysis.

CONCLUSION

This chapter presents the gains of green HR practice on sustainable business solutions. It explains how an organisation could accomplish a sustainable edge in a volatile business environment and the need to design a work relations program towards restricting its employees, which would then encourage the coordination of new employees into a culture of green consciousness. This chapter provides explanations of how green recruitment practices can have a positive and critical impact on sustainable business solutions. Recruitment practices with environmental thought can assist an organisation with enhancing paperless exchanges to reduce environment related problems. Furthermore, when this propensity is effectively checked, at that point, the firm could utilize this impact to increase sustainable business performance in a volatile market environment.

This chapter concludes that green training and development practices have a positive and direct impact on sustainable business performance. This training design is normally connected with online correspondence, for example, audio-visuals, skype talk, and so on. It causes the administration to give a chance to draw in employees in environmentally critical thinking abilities both at work and off the job. All the paper works designed for the training and improvement program are converted into softcopies, which can be shared on the web, in this way decreases the paper utilizations, and accordingly diminish environmental contamination to accomplish the organisation objective. Lastly, in this chapter green remuneration structure is considered as a positive and critical impact on sustainable business performance. The pay structure, for example, prizes and compensations have huge advantages in affecting staff interests towards organisations objectives and goals. Therefore, it is pertinent for the organisation to embrace green HR practices to survive in a highly dynamic business environment.

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KEY TERMS AND DEFINITIONS

Green Compensation: the term green compensation can be described as reward and compensation packages utilised to influence employees' green practices.

Green Employee Relation: is defined as the HR practice concerned with establishing harmonious employer–employee interaction towards attaining environmental sustainability.

Green Human Resources: Green HR is the strategic integration of HR practice into environmental sustainability practices.

Green Job Design: is the process of incorporating environmental sustainability related, duties, tasks, responsibilities in each job arrangement.

Green Recruitment: Green recruitment simply refers to a paper-free recruitment process with a reduced negative impact on the environment.

Green Training and Development: Green training and development is defined as the process of equipping employees with working approaches that ensure adequate resource utilisation, reduce waste, energy conservation, and environmental degradation cause reduction.

Sustainable Business Solutions: The sustainable business solution is defined as the incorporation of environmental sustainability goals into business goals and decisions.

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Index

C

Circular Business Models 199-201, 208
 climate change 2, 5, 12-15, 21-23, 26, 30-33, 43, 73, 87, 119, 165, 170, 180-181, 186, 198, 212, 230, 243, 249
 Collective Green Creativity 255, 263
 Competences 270
 Competency Model 72
 Critical position 65, 68

E

Ecofriendly Systems 75-76, 86, 93
 Economic sustainability 4-5, 12, 15, 118, 198
 Emission 3, 5, 12, 15-16, 19, 117-118, 212, 216, 218
 Employee Green Behaviour 1-3, 6, 160, 229-231, 233, 236-240, 242-243, 247
 Environmental Degradation 10, 13, 20-23, 31, 33, 37, 98, 119, 215, 222, 230, 248-249, 253, 267, 277
 Environmental Management Systems 24, 75-77, 82, 93
 Environmental Sustainability 3-5, 8, 13-15, 20-25, 31-33, 37, 43-45, 76, 78, 81, 87, 95-97, 99, 104, 108-110, 117-118, 125, 129, 164-167, 169-171, 187, 198, 212, 215, 230-231, 237-243, 248-255, 263-266, 268, 277
 Environmentally Friendly 13-14, 25-26, 29-30, 41, 165, 168, 202, 206, 208, 213, 247, 264-266, 268

F

Flexible 8, 51, 159, 169, 212-213, 216-218, 220-222, 253, 255, 266
 Fourth Industrial Revolution 38-39, 55, 222

G

Green Agreeableness 75, 78, 86, 93, 96, 108-110, 115
 Green Awareness 31, 74-75, 77, 86, 93, 115, 160, 270
 Green Compensation 9-11, 15, 28, 157-158, 163-164, 168-171, 265, 267-268, 277

Green Compensation Practices 28, 168
 Green Conscientiousness 75, 78, 86, 93, 96, 108-110, 115
 Green Consciousness 74-75, 77-78, 86, 93-94, 96, 108-110, 115, 118, 125, 252, 265, 271
 Green Creativity 10, 15, 252-253, 255-256, 263
 Green Employee Relation 277
 Green Gas Emission 19
 Greenhealth 176-178, 180-182, 185, 187-188, 192-193
 Green Human Resource Management 1-2, 7, 9, 12, 16, 19-21, 23, 39, 55, 74, 158-160, 231, 233, 251-252, 254-256
 Green Human Resources 38, 46, 264, 266, 269, 277
 Green innovation 256
 Green Job Design 265, 277
 Green jobs 119, 125, 128
 Green Management 8, 10, 12, 15, 21, 26, 28-29, 31, 37, 158, 161, 164, 169-170
 green opportunities 116-117, 119, 129
 Green Organisational Culture 10, 15, 202, 207, 248, 252, 255-256, 263
 green places 116-117, 119-120, 129
 Green Recruitment 7-9, 15, 22-25, 29, 73-88, 93, 95, 108, 265-266, 270-271, 277
 Green Recruitment Practices 9, 15, 73-74, 78-84, 86-88, 93, 266, 271
 green savings 116-117, 119, 129
 Green Selection 74, 76, 94-97, 103, 107-110, 115
 Green Sustainability 46-48, 55
 green talent 74, 116-117, 119-120, 125, 128-129
 Green Training and Development 8-10, 15, 21-22, 25-26, 41, 265, 267, 271, 277
 Green Training and Development Practices 10, 26, 271

H

human capital development 38, 41, 43, 116-125, 127-129
 Human Resource Function 157-158
 Human resource management 1-3, 7, 9, 12-13, 16, 19-23, 31-32, 37-43, 55, 74, 95, 128, 157-162,

168, 177, 199, 203, 216-217, 222, 231-233, 241, 251-252, 254-256

Human Resource Management Practices 1-2, 7, 9, 12, 16, 19, 23, 37, 40, 177, 199, 231, 252, 254

I

Industrialisation 21, 23, 37, 101, 230

Instrumental theory 264, 268-269

K

Key Position 63, 66, 72

Knowledge Management 7, 41, 48-52, 55-56, 62, 72

Knowledge Transfer 41, 49, 57-58, 62, 72

L

Leadership Development 27, 63, 69, 72, 121-122

Leadership pipeline 56-57, 70

M

Manufacturing 14, 37, 73, 82, 102, 182, 193, 213-216, 218-222, 232, 241

Middle-level Managers 134, 136

N

Non-life 134-135

O

Organisational Change 206

Organisational Sustainability 1-7, 9-15, 19

P

performance 1-5, 7, 9, 11, 13, 15, 19-24, 26, 28-29, 39, 41-44, 46-48, 60, 66, 68, 70, 74, 77, 82-83, 86, 88, 95, 97, 104, 110, 121-123, 139, 143, 158, 160, 163-164, 166-170, 202, 204-205, 213-214, 216-217, 219, 229-230, 249, 251, 253, 255, 264-271

Premium 42, 136-138, 204

Process 6-7, 9, 19, 24, 28, 30, 37, 41, 48-52, 55, 57-58, 60-61, 63-67, 69-70, 72-77, 79-86, 93-96, 99, 102-105, 108, 110, 115, 118-119, 121, 125-126, 129, 136-137, 142-143, 157-161, 170, 189, 193, 206, 212-213, 216, 218-219, 236, 249, 251, 253, 266, 277

Public Sector Organisation 238, 247

R

recruitment 7-10, 15, 20, 22-25, 29, 32-33, 39, 68, 73-88, 93, 95-97, 105, 108, 152, 158, 160, 162, 233, 251, 265-267, 270-271, 277

Renewable Energy 42, 119, 128, 229, 232-235, 238, 242, 247-248

Reward 7-8, 10-11, 23, 28-29, 33, 50, 128, 143, 157-158, 161-170, 204, 267, 277

Risk 42, 50, 52, 63, 86, 98, 103, 177, 186, 190-192, 199, 237, 268

S

safety management 176-177, 189, 191-193

Selection 8-9, 22, 24, 39, 60, 62, 66, 74, 76, 79-80, 83, 85, 87, 94-97, 102-105, 107-110, 115, 160, 233, 251

Selection process 80, 94, 96, 102-105, 108, 110, 160

Skills 2, 4, 8, 10-11, 24-27, 30, 47, 57, 72-77, 79, 81-83, 85, 87-88, 95, 104, 107-109, 117, 122-123, 125, 134, 136, 138-139, 144, 146-147, 149, 151-152, 154, 158, 160-161, 164, 166, 170-171, 233, 251, 254, 263, 267

Succession Management 72

Succession Planning 56-65, 67-70, 72, 122

Sustainable Business Solutions 120, 124, 250, 264-265, 267-268, 270-271, 277

Sustainable Competitive Advantage 3, 6, 83, 110, 121, 123, 158, 248-256, 263

Sustainable Economy 116-120, 124-129, 197-208, 235, 243

sustainable environment 9, 38, 42, 75-76, 86-87, 234, 240, 266

Sustainable Process 9, 75-76, 93

T

training and development 2, 8-10, 12, 14-15, 20-22, 25-27, 32, 39, 41, 47, 87, 108-109, 158, 265-267, 271, 277

W

workplace accidents 190

Workplace Green Behavior 248-256, 263