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Employees' green behaviour initiatives and green human resource management implementation challenges

Samson Adewumi

Abstract

The green behaviour and green human resource management literature shows a sparsity of studies related to employee green behaviour initiatives and green human resource management implementation challenges, specifically in the context of Nigeria's manufacturing organisations. Hence, this study seeks to address this gap by interrogating employees' perception and understanding of green behaviour, green behaviour initiatives and green human resource management implementation challenges from the perspective of a manufacturing organization in Lagos, Nigeria. The case study research design was adopted with 15-unit managers purposively recruited from the human resource department and the semi-structured interview was employed to retrieve qualitative data from respondents. Themes and sub-themes were identified from the qualitative data with the aid of the NVivo (v.14) qualitative software. Findings include environmental sustainability, response to climate change and efficient use of raw materials as a perception and understanding of green behaviour. Managers understanding of green behaviour, awareness and campaigns, collectivism and consistent reviews and accountability of green project funds were revealed as green behaviour initiatives. Green human resource management implementation challenges include green evaluation and monitoring, socio-cultural constraints, personality and socialisation and education and training. The study concludes with a more strategic evaluation and monitoring of green behaviour policy and implementation. The policy implication is a call for the inclusion of green behaviour and personality tests in recruitment policy. This will help identify prospective employees with deviant to green behaviour compliance.

Keywords: green behaviour, green human resource management, employees, organisation, manufacturing

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About the author:

Researcher, University of Zululand, South Africa. Email: adewumis@unizulu.ac.za



1. Introduction

The continuous growth and expansion of industries, production and manufacturing are clear evidence for the widespread environmental problems and pollution globally (Al-Swidi, Gelaidan & Saleh, 2021), with a call for organisations to be more environmentally friendly and responsible in recent times than ever. Employees' green behaviour is a set of behavioural dispositions that explains the overall behaviour of employees required for the promotion and sustainability of green practices within the organisation and its immediate external environment (Carmeli et al, 2017). In recent times, the concept of employees' green behaviour has become a widely accepted practice for the advancement of environmental sustainability (Dahlmann et al., 2019). The human resource management literature has consistently construed employees as the main drivers of the organisation's environmental sustainability. For instance, employees are mandated to upturn the environmental brand and reputation of the organisation while assisting in gaining a competitive advantage as it were (Dal Maso et al., 2020). In terms of external relevance, employee green behaviour initiatives and practices are also instrumental for the promotion and sustenance of the environmental development of the broad society (Demirel et al., 2019).

The increasing significance of employees' green behaviour has continued to attract commentaries from public policy analysts and human resource practitioners on how green behaviours can be appropriately managed in the interest of organisational sustainability (Dilchert, 2018). The literature on human resource management identified green human resource management (GHRM) as one significant measure for the management of employees' green behaviour (Dumont et al., 2017). GHRM is comprised of several human resource practices including recruitment and selection, training and development, compensation and reward through which green behaviours are initiated and practised (Demirel et al., 2019). For instance, the recent green recruitment initiatives where interviews are now being conducted via Zoom or Teams leaving the old order of physical interviews.

The implementation of GHRM practices aids in improving environmental resourcefulness and has a significant impact on the viable competitiveness of the organisation (Fawehinmi et al., 2020). Thus, the implementation of GHRM is aimed at increasing employee environmental awareness and the development of technical support for the sustainability of the work environment (Likhitkar & Verma, 2017). However, the implementation of GHRM practices comes with enormous challenges. For instance, the cost and expenditure associated

with GHRM implementation remain one of the most significant barriers to its effective implementation (Likhitkar & Verma, 2017). Others are lack of appropriate support from organisational members, effective plan and execution of GHRM practices and a lack of understanding of the principle of GHRM (Kim et al., 2017).

Research evidence has shown that most studies conducted in GHRM have been explored through different GHRM practices with little attention given to the implementation challenges. Thus, the concept of employees' green behaviour initiatives must be extended to GHRM implementation challenges. The argument that this paper seeks to chase is the position that the majority of Nigeria's industrial sector is lacking the requisite employee green behaviour initiatives on the one hand, while those with these initiatives are struggling with implementation challenges on the other hand (Hasebrook et al., 2022).

The Nigeria manufacturing sector is carefully chosen as the context of this study with justification premised on its environmental pollution challenges and a clear-cut available policy on green behaviour initiatives. Nigeria, a country with rich natural resources and most populous black nation on earth is constrained in terms of her natural resources, with increasing carbon emission and environmental degradation resulting from the poor management of oil drilling. Nigeria is no doubt susceptible to the rising effect of climate change, with Lagos State close to rising sea levels. Nigeria's mainstay economy is primarily on oil and gas. The overwhelming of Nigeria's emissions is related to the activities of the oil and gas industries, and the bulk of these triggered the oil and gas manufacturing industries. The oil and gas manufacturing industries contribute to environmental degradation through gas flaring which releases carbon dioxide causing environmental pollution and degradation.

There are related studies conducted in the GHRM literature reflecting green practices and pro-environmental behaviours (Dumont et al., 2017; Hasebrook et al., 2022; Mi et al., 2020; Zhang et al., 2021). However, in the context of GHRM implementation challenges, hardly is there any study that has interrogated employee green behaviour initiatives and GHRM implementation challenges through the prism of Nigeria's manufacturing sector. One of such similar studies investigates the implementation of green human resource management practices in India (Gupta, 2021). This research gap shows the originality of the present study.

This study aims to understand employees' perception and understanding of green behaviour practices, highlight employees' green behaviour initiatives in the organisation, and identify and explain GHRM implementation challenges. The study hopes to contribute to existing GHRM literature by interrogating under-research GHRM implementation challenges in the context of Nigeria's manufacturing sector. By so doing, it is hoped that a nuanced perspective and understanding of employee green behaviour initiatives and GHRM implementation challenges will be provoked. In this regard, the paper argues that Nigeria's manufactory case is unique by presenting a distinctive narrative of understanding employee green behaviour initiatives and GHRM implementation challenges.

2. Literature Review

2.1. Green manufacturing practices

Green manufacturing can be explained as a type of manufacturing process that involves the minimization of waste and pollution for all organisations (Likhitkar & Verma, 2017). The green manufacturing process emphasizes the rationalization of materials and recycling of used products for building more efficient products in an environmentally friendly environment. The idea of green manufacturing essentially focuses on the prevention of pollution and an agenda towards minimal use of energy, through the application of green innovative technologies that reduce harmful substances in the manufacturing process (Jia et al., 2018). Green manufacturing encapsulates a process that incorporates products and design through manufacturing projection and control in a manner that recognises, evaluates and manages the drift of environmental waste to reduce the effect on the environment (Kim et al., 2017).

Green manufacturing embodies innovative green tactics, drivers and methods to become eco-friendlier and more efficient, such as the reduced use of materials and energy for an overall sustainable environment. It is a type of manufacturing process that involves the adaptation of eco-friendly use of raw materials, packaging, redistribution and recycling after use (Diana, 2016). The adoption of the green manufacturing process involves a continuous green initiative for environmental improvement in the production process and operations. Environmental pollution remains one of the problems confronting societies and organisations with consequential outlook on humans and business performance (Yuriev et al., 2020).

Recently, organisations have become more interested in green management practices by reducing raw material costs, optimizing production, and lowering environmental and safety expenditures for an improved corporate eco-friendly image (Katz et al., 2022). Green manufacturing practices are a commitment to using less environmental toxins and natural gas

resources. In other words, green production is tailored towards engendering less environmental waste and carbon emissions with a negative impact on the environment (Zhang et al., 2021).

2.2. Employees' green behavior

The conceptual understanding of employees' green behaviour (EGB) captures all employees' related behaviours that support environmental sustainability within an organisation (Yuriev et al., 2020). These behaviours are not only related to those that promote environmental sustainability but also capture behaviours that discourage any form of environmental degradation or pollution in the organisation (Masri & Jaaron, 2017; Diana, 2016). Thus, the conceptual definition of EGB explains all measurable intentions, actions and behaviours that promote environmental sustainability exhibited or championed by the employees in the interest of the environmental wellness and sustainability of the organisation. Employees green behaviour no doubt reflects some sort of positive organisational behaviours that ignite environmentally sustainable discourses including wastage reduction and the promotion of work routines that support environmentally friendly behaviours (Mi et al., 2017).

In contrast to the concept of individual green behaviour that explains taking action that reduces the harmful or positive impact of pollution and other forms of degradation on the environment, the conceptual clarification of EGB resonates with any eco-friendly or proenvironmental behaviours specific to advancing the environmental sustainability of the workplace (Masri & Jaaron, 2017). In other words, EGB is directly related to environmental protection and other positive actions in the daily routine of the organisation and helps the organisation and employees to assess their workplace green behaviour and actions (Mi et al., 2017). Yet, EGB assessment creates implementation outcomes of the organisation's relevant green behaviour measures and policies, and this no doubt remains a crucial key for the promotion and development of sustainable environmental goals of any organisation (Mishra, 2017). Environmental psychologists described EGB as a set of performance spheres that involves a meaningful attitude toward employees' behaviour that either supports or negates the combined organisational aim and objectives of promoting workplace environmental sustainability (Ojo et al., 2020).

Another conceptualisation of EGB described it as those actions that are consciously exhibited by employees towards minimizing the negative effect of their behaviours on the environment, by adjusting the use of papers, reduction in electricity use and wastage, and

effective utilization and reprocessing of materials in the organisation (Opatha & Arulrajah, 2014). EGB can be conceptualised from two distinct standpoints; task green behaviours that are within the job description and role behaviours of employees and proactive green work behaviours that are outside the job description of employees (Gupta, 2021). On the one hand, task-related green behaviours explain the main work tasks mandated by the organisation including employee's environmental protection duties. On the other hand, proactive green behaviours are flexible and environmental behaviours that are not stipulated in the performance evaluation system of the organisation including reminding co-workers to be energy efficient (Tang et al., 2018).

Employee proactive green behaviours are not only appropriate for the environmental sustainability and performance of the organisation but also assist in addressing any environmental gap that is not covered in the rules and regulations of the organisation (Jia et al., 2018). Thus, being environmentally proactive supports the idea of organisational citizenship behaviours on the part of employees (Gilal et al., 2019). For instance, many of the GHRM implementation challenges stem from the challenges of employees' voluntary commitment to the environmental sustainability goal of the organisation. Research evidence has shown that employees' organisational citizenship behaviour remains one of the key pathways to the actualisation of an environmental and sustainable workplace (Li et al., 2023).

2.3. Green human resource management implementation challenges

The integration of GHRM policies explains a practical approach by managers towards advancing their environmental performance. By adopting GHRM policies and strategies into human resource management culture, organisations aim to promote improved employees' attitude and performance required for the sustainability of green behaviours (Rehman et al., 2021; Sabokro et al., 2021). Existing studies on GHRM policies implementation provides important results in terms of the attitude, performance and satisfaction of employees to GHRM implementation policies (Saeed et al., 2019; Sathasivam et al., 2021; Yafi et al., 2021). The body of literature interrogating GHRM implementation policies and its outcomes on employee's green behaviour attitudes and acceptability highlights the clear importance that environmental human resources practices play in organizational sustainability (Yasin et al., 2023). However, with this highlights, GHRM implementation and adoption in the context of organisations have suffered severe setbacks on many accounts (Rehman et al., 2021).

The human resource management of any organisation is statutorily responsible for the implementation of GHRM by outlining the strategic plans and policy actions required for the effective implementation of GHRM. However, research evidence has shown that several challenges often hinder the effective implementation of GHRM (Lange & Dewitte, 2019). The differences in human behaviour, ideology, culture and socialisation are issues around the acceptability and effective implementation of GHRM in any organisation (Saeed et al., 2022). The challenge of creating a consistent climate change awareness among the workforce remains critical for the implementation of GHRM (Gilal et al., 2019). Thus, the struggle to ensure a green mindset at all levels of the workforce are challenge constraining GHRM implementation (Masri & Jaaron, 2017).

People are generally different in terms of psychology and personality. These differences can be explained through many levels, and often impact policy acceptability. Since the way people behave in immediate environment can be explained by personality and psychological differences, GHRM implementation can, to an extent, be explained by workforce personality and psychological differences (Ayeswarya, 2018). The environmental behaviour model proposes personality as the fundamental root of an individual's attitude, values and ideology. In essence, it is important that careful attention is given to workforce attitude, traits and ideological orientation and how these affect their green behaviour and GHRM compliance and implementation (Waheed et al., 2020).

Another challenge of GHRM implementation is the knowledge and understanding of employees about GHRM initiatives. For instance, studies have shown that employees or individuals with little knowledge or education about the impact of their behaviours on the environment will hardly show any pro-environmental behaviour towards the environmental sustainability of the organisation (Yasin et al., 2023; Graves et al., 2013). In other words, the more there is evidence of green knowledge on the part of employees, the easier the implementation of GHRM policies in an organisation (Aranganathan, 2018). Organisational culture sets the organisational beliefs and rules that influence employee behaviour within an organisation (Hasebrook et al., 2022). In essence, the presence of green and environmental policies will build a culture in which employees are expected to act and behave in accordance. For effective implementation of GHRM, it is important to understand the role of human resources in the monitoring and evaluation of employees' adaptability to the organisational

culture, as employees with a good sense of the organisational culture are more easily in compliance with GHRM implementation (Wassan et al., 2020).

Financial constraints represent another challenge to the implementation of GHRM. Existing studies reported the high cost of installing green technologies and environmental sustainability gadgets as implementation challenges for many organisations (Yuriev et al., 2020). In addition, the lack of environmental management knowledge amongst managers has been reported as a constraint to the implementation of GHRM. Thus, increasing managers' education on environmental management sustainability can be a positive outlook (Kim et al., 2017). The lack of managerial support from the top management also explains another implementation impediment of GHRM (Demirel et al., 2019). GHRM policies and implementation should be aligned with existing government environmental laws and regulations (Yafi et al., 2021; Woo & Kang, 2021).

Education and training of the workforce on improved energy usage and exhibition of environmentally friendly behaviour also represent one of the implementation challenges of GHRM (Zacher et al., 2023). Education and training on energy efficiency and management from the top management to the lower rank of the organisation have consistently appeared in the GHRM literature (Le Roux & Pretorius, 2016). Employees with a low level of education and training on how to manage the environmentally sustainable agenda of the organisation will always set the organisation back in reaching and implementing its green and environmental policies (Demirel et al., 2019). Education and training no doubt drive the swift implementation of GHRM through gaining new environmental skills and knowledge (Waheed et al., 2020). Existing and newly recruited employees should constantly be trained for the acquisition of new GHRM knowledge. Thus, planning and monitoring GHRM training and education programmes are crucial for the implementation of GHRM (Sathasivam et al., 2021; Omisore et al., 2017).

Lastly, effective communication of GHRM policies from the top management to employees also often improves the implementation of GHRM (Yuriev et al., 2020; Saeed et al., 2019). Communication aids in creating awareness and sensitizing the workforce on GHRM projects and their expected behavioural roles in ensuring its implementation in the workplace. However, research studies have shown a lopsided and unclear communication of GHRM from top management and human resources to other layers of employees in the organisation, leading to confusion about the goals and expected roles of all employees in GHRM implementation.

3. Methodology

The philosophical assumption upon which this study is built is the interpretivism research philosophy in support of the qualitative research methods adopted for this study. The interpretivism philosophical understanding is justified to unravel deep-seated experiences, opinions and understanding of EGB initiatives and GHRM implementation challenges through semi-structured interviews (Kumar, 2012). In other words, interpretivism assumptions support the qualitative understanding of subjective research phenomena such as understanding the EGB and the adherent implementation challenges of GHRM. The case study research design was employed to complement the interpretive philosophical approach. The assumption of the case study research design embraces the interrogation of a research phenomenon that is either not clear or not appropriately understood from a single or multiple cases (Sekaran & Bougie, 2016). In this study, the case study research design is utilized to improve the limit of knowledge known on the themes of EGB and GHRM implementation challenges, particularly from a single case of a manufacturing organisation in Lagos, Nigeria. This is justified to address the gap in the literature as the collection of studies on EGB and GHRM implementation challenges is hardly focused on Nigeria's manufacturing sector.

A total of 15-line managers were sampled from the human resources department of a manufacturing organisation. These line managers were recruited from the different units of the department including Occupational Health and Safety, Compensation and Rewards, Recruitment and Selection, Performance and Evaluation Systems and Employee Relations of a manufacturing organization in Lagos, Nigeria. These line managers were specifically recruited from Human Resource Management for a holistic understanding of EGB initiatives and GHRM implementation challenges. The sample size is justified to allow for a deep exploration of the research problem in tandem with the traditions of qualitative research where the emphasis is on a small sample of respondents (Yin, 2016; Saunders et al., 2009).

The selection of the samples only considers a careful assessment and knowledge of the respondents on EGB and GHRM implementation challenges. Thus, the recruitment of respondents follows the purposive sampling traditions with the intention that selected respondents possess the appropriate qualities and characteristics desired for unravelling qualitative responses to the research problem. For instance, it is only conducive to understanding EGB and GHRM implementation challenges from the perspective of line

managers domiciled in the Human Resource Unit of an organisation since they are saddled with the implementation and management of EGB initiatives.

The study employed the semi-structured interview approach for the collection of qualitative data. This is justified as it allows for the unravelling of complementary questions and responses in the circumstance that there is observed ambiguity in the trends of questions enquired and responses (Yin, 2016). An interview schedule was employed for a smooth progression of questions and responses. The interview questions were all written in the English Language as this represent the universal medium of communication understood by all the respondents.

The data quality of the interview followed Trochim and Donnelley's (2007) four qualitative reliability steps including credibility, transferability, dependability and conformability. For the credibility of the data, it was ensured that a synergy existed between the qualitative data and the opinions expressed by the respondents. Transferability of data promotes the transferability of data to another research context. In other words, the research findings highlighted in this study can be replicated in a similar research setting. In terms of dependability, appropriate ethical compliance was followed in the conduct of the research and report of findings. Lastly, conformability was pursued by ensuring a nexus exists between the data and the results of the study.

The study followed appropriate ethical considerations in terms of data collection and the diffusion of the research findings. The study was conducted in a manufacturing company in Lagos State, Nigeria, and one of the ethical standards was the preference for anonymity by the organisation, although appropriate approval was sought before the commencement of the study with selected line managers of the organisation. Thus, before the commencement of the interview, the consent of all identified line managers was adequately granted. The consent form was signed by all respondents indicating their interest in participating in the study. Respondents were informed of their voluntary participation or exit from the study, even as it unfolded.

The qualitative data was analysed with the NVivo (v.14) qualitative software for the identification of themes and sub-themes. Thereafter, the Content Analytical Tools were employed to make sense of the identified themes and sub-themes. The data analysis provides important insight into understanding the EGB initiatives and GHRM implementation challenges from the perspective of a manufacturing organisation. Pseudonyms were all used in

reporting the verbatim responses of all respondents. All responses to the interview questions were in the English Language.

4. Results and Discussion

Table 1

Matrix of themes and sub-themes

Research objectives	Main Themes	Sub-themes
To identify employees'	Environmental sustainability, response	Clean green environment, recycling
perception and	to climate change, efficient use of raw	plastics, discouraging paper use, frequent
understanding of green	materials, pollution and environmental	environmental sanitization, use of non-
behaviour practices	disaster	fossils equipment
To highlight the	Improved managers' understanding of	Constant briefing about green behaviour
different green	green behaviour, consistent awareness	initiatives, using organizational
behaviour initiatives	and campaigns, collectivism and	platforms like emails, HR rewarding
practices	reviews, and access and accountability	green behaviours
	to green project funds	
To identify and	Green evaluation and monitoring	Appraising green behaviour, norms and
understand green	challenge, socio-cultural constraints,	ideological constraints, poor attitude to
behaviour	personality and socialization challenge	learning and taking on new initiatives.
implementation	and managerial training and education	
challenges	challenge.	

4.1 Perception and understanding of green behaviour

The range of perceptions and understanding of green behaviour shared by many of the respondents include that green behaviour is perceived as a pathway to environmental sustainability realisation; response to climate change challenges and an effort towards reducing organisational costs and expenditures on materials and other utilization. The activities of the manufacturing sector no doubt represent one of the huge contributors to climate change challenges through pollution and other emissions considered harmful to humans and the environment. Thus, a clear understanding and application of green behaviour on the part of employees will foster swifter green behaviour compliance and implementation at all levels of the organisation.

By environmental sustainability, it is implied that every facet of the working environment must not only be safe and friendly but one that will reflect a high degree of green practices. For instance, the argument on the understanding of green behaviour as environmental sustainability efforts explains one of the core goals of green behaviour such as the eradication of pollution and an effort to safeguard the environment in the interest of both the workers and the communities. One of the respondents explained as follows:

My understanding of green behaviour is anchored on being environmentally sustaining and responsible. Responsible in the sense of being pro-environmental and ensuring our working environment is safe and free from any form of pollution. This also extends to ensuring that the communities where we work are free from toxins and pollution. Above all, being green entails contributing one's quarter to the environmental wellness and well-being of the working environment in such a manner that the working people are responsible for the environmental wellness of their environment and the communities around them.

Other respondent had the following to say about the understanding of green behaviour.

Well, I think my understanding of green behaviour has do with our we keep our environment clean and exhibit behaviours that are not detrimental to the environment in terms of ensuring that the environment is safe and habitable. One of the ways I believe this can be done making efforts to cultivate the habit of recycling to protect the environment from environmental pollution and degradation.

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Many of the respondents also shared their understanding of green behaviour as a response to the rapid and continuous climate change challenges. For instance, one of the perceptions shared reflected on the diverse impact of climate change including erosion, pollution, hot and severe temperatures, increased drought, and storms among others. In a sense,

understanding green behaviour as a response to the climate change challenges will no doubt develop a sense of commitment towards ensuring all hands are on the desk for the promotion of environmental sustainability. Respondents also argued that understanding the concept of green behaviour through the prism of being environmentally aware of the implied challenges of the impact of global climate change will help organisations and their workforce to be adequately responsible for their work environment in terms of sustainability.

This conclusion reflects the importance of green behaviour readiness as critical to building and developing a green compliance workforce. One of the respondents explained:

You know all the conversations around green behaviour complaints are not far from having an appropriate understanding of how to respond to climate change challenges including erosion, pollution, and other climate change challenges. So, for me, I would say my understanding of green behaviour is to be able to manage my work environment in a manner that supports environmental sustainability by giving responses to climate change challenges as well.

Other respondents shared their perception and understanding of green behaviour as the ability of the organisation to be cost-effective and efficient in the use of raw materials that can compromise the environmental sustainability of the business environment. In essence, green behaviour should be reflected and seen through how materials are utilized and managed in the workplace in the overall interest and pursuit of a green workplace. One of the respondents explained:

I think we must understand that the use and management of raw materials also constitute a vital component of green behaviour. So, for me, I understand green behaviour as the organisation's effective and efficient use and management of raw materials in such a manner that will have little or no impact on the workforce and the communities including pollution and erosion among others. In other words, the conventional understanding of green behaviour is reflected through policies and implementation of some behavioural acts, I strongly believe that the production process and how this is managed also play an important role in the understanding of green behaviour. By this, I mean how the organisation managed and used its raw materials.

4.2 Employees' green behaviour initiatives

Employees' green behaviour initiatives are strategies employed by organisations to ensure the traditions and customs of green behaviour are maintained in the workplace. These initiatives are seldom propagated through the Human Resource Department as a continuous and ongoing effort for green behaviour and environmental sustainability compliance. Many of the respondents reported a few green behaviour initiatives that were aimed at maintaining the green behaviour status quo in the organisation. For instance, these initiatives include improved managers' understanding of green behaviour initiatives, collectivism and consistent reviews of green behaviour policies and programmes, organisational green behaviour awareness and campaigns, and access and accountability of green project funds (see table 1).

While several organisations formulate green policies and programmes, it is important to argue that green policies and programmes without appropriate initiatives will tend to deviate from the organisational green actualisation. This narrative explains the importance of human resource managers and leaders in the realisation and actualisation of green behaviour projects for any organisation. According to some of the perspectives shared, the green behaviour of employees has been improved with the initiatives constituted by the top management of the organisation.

Improved managers' understanding and application of green behaviour initiatives remains one of the significant milestones to the actualisation of green behaviour in any organisation. Managers are saddled to saddle and direct the workforce in the areas of policy enforcement and compliance. Many of the respondents argued that without the guidance and direction of managers complying with the principles and expectations of green behaviour would not have been possible. This, in essence, explains the important role of managers in the implementation and evaluation of green behaviour programmes in any organisation. In addition, the reason for thorough managers' understanding and application of green behaviour is unconnected from the expectations that environmental sustainability remains one of the hallmarks of business sustainability and customer satisfaction, hence, equipping managers with the right knowledge and use of green behaviour will no doubt position the organisation in the right direction of sustainability. One of the respondents explained as follows:

I think one of the green behaviour initiatives that is important and relevant to achieving green behaviour in the workplace is the need for improved managers' understanding of green behaviour initiatives. The significance of this cannot be overemphasised since managers are the custodians of policy implementation and evaluation in any organisation. In essence, managers need to have a very good knowledge of green behaviour and other environmental policy measures, as this is crucial for attaining environmental sustainability and green behaviour outcomes.

Green behaviour actualisation must also be enforced through collectivism and consistent reviews of green behaviour policies and programmes. For instance, managers saddled with the implementation of green behaviour must ensure all are carried along in the proclamation, implementation and review and any green behaviour programmes. According to the respondents, collectivism remains an important initiative as it ensures everyone is on the right track towards ensuring the organisation achieves its green policies and programmes. Similarly, green behaviour initiatives and policies must also be collectively reviewed for improvement. Thus, recognising diverse human nature, policy and action programmes of any green behaviour must ensure that every member of the organisation is onboard in terms of its reviews and implementation, as this is sacrosanct to identifying any lapses and areas desiring improvement. While this narrative is not far-fetched, the argument pursued in this paper is the role of group behaviour in the reviews and implementation of green behaviour initiatives for positive environmental sustainability for the organisation. One of the respondents reported:

I believe that everyone must be carried along for a working green behaviour outcome. While it is acknowledged that managers play an important role in this regard, I believe that every member of the organisation must also be carried along to achieve our desired outcomes. Collectivism in this regard means that every opinion and view must be respected and included in the policy and programme of the green behaviour programme.

Another respondent also contributes to the significance of green behaviour initiatives and how this can be practicalized within the organization for desired outcome.

I think we need to commence prioritizing the importance of constant briefing on the significance of green behaviour initiatives. I strongly believe this will go a long way in stimulating employees to green behaviour compliant. One of the ways in which we can do this is to engage in constant check and reminder and this can be done through effective communication by sending emails periodically to all employees or using other medium such as posters around vital places in the organisation.

Respondents also argued that organisational green behaviour awareness and campaigns remain crucial to the realisation of a green and environmentally sustainable workforce. Green awareness has become one of the most utilised mechanisms used by organisations to propagate the significance of a green workforce. This awareness and campaigns are often tied to

organisational rules and regulations, and it is expected that employees comply with them. Many of the respondents contend compliance with green awareness and campaigns is often evaluated through reward systems, performance appraisals and other organisational perks. This initiative is tailored toward the realisation of a working and sustainable green workplace for all.

Awareness and campaigns are also used as other initiatives to spread the green workplace message in the organisation. This awareness is propagated through a few means such as notices in vital sections of the organisation and emails as well. The goal is to ensure that every member of the organisation is aware of the green message and follows the rules and regulations strictly. We also ensure that compliance with these awareness campaigns is evaluated sometimes through the reward systems and performance. The idea is to ensure everyone is on board and is doing what is right as far as achieving green organisation is concerned.

Access and accountability of green project funds is also another factor that drives effective green behaviour initiatives. Many of the interviewed managers argued that a lot of organisations, specifically manufacturing organisations do not have funds set aside for the promotion and management of green behaviour in the workplace. While GHRM could be described as a relatively new endeavour, it is unarguable that manufacturing organisations are yet to come to full compliance with green organisational practices such as setting aside green budgets. For others with green budgets, the respondents argued a lack of accountability and diversification of green project funds, thus causing green behaviour actualisation setbacks with the consequence of environmental pollution among other environmental challenges. One of the respondents explained:

For me, I think access and accountability of green project funds are also critical to having a well-grounded green behaviour initiative. We cannot have something on nothing. It is a known fact that most organisations do not have a budget set aside for their green project initiatives. And a few that do, it is not surprising that such funds are diversified and not used for green projects. In our organisation, this used to be the norm for a long time until we began to leap confidence to ensure that funds set aside for green projects are essentially utilised for the same purpose. Although we are not there yet as there are a few glimpses, I think we are improving in this regard.

4.3 Implementation challenges

Like any other policy implementation, the GHRM implementation is also shrouded with challenges in its implementation within an organisation. Many of the interviewed managers argued that GHRM suffers a variety of implementation challenges including socio-cultural constraints, personality and socialisation challenges, poor managerial training and education and green evaluation and monitoring challenges (see table 1). While the GHRM implementation is an important pathway to the realisation of a sustainable workplace environment, available evidence shows factors internal and external to the organisation often constrain this effort. In many contexts, these constraints have continued to hinder the green success of many organisations.

On the socio-cultural constraints, many of the respondents argued that the difference in socio-cultural background makes compliance with green rules and regulations challenging for many in the organisation. For instance, it was argued that many employees are new to the idea of effective energy utilisation and consumption such as putting off the computers or electricity when not in use or recycling trash as they are used to bins in their culture. Thus, implementing green behaviour must always take into consideration the different socio-cultural dimensions of employees who are to comply with the green rules and regulations.

One of the implementation problems I am familiar with is the socio-cultural background of many of our employees. We have had a lot of challenges in this regard in the past and we continue to do. People are from different cultures and the way they do things in their culture cannot be the same when they leave their culture to any culture. Some green behaviour initiatives are strange to some employees, and this can go as far as constraining any little green behaviour progress, we have made in the organisation. We are used to these issues as managers as we sit with the implementation. So, this is why we always advocate that green behaviour policies must take the socio-cultural understanding of employees.

Personality and socialisation also play a critical role in the implementation of GHRM policies and programmes. People are different based on ideology, emotion and attitude and all these traits form personality as individuals. As such, they are expected to react differently to issues and policies around them. Many of the respondents argued that one of the most pressing challenges of GHRM implementation challenges in the constraint of personality and how

people within the organisation socialise with the GHRM policies and programme. It was further contended that employees' personalities including values, emotions and drives are issues that affect the implementation of GHRM policies and programmes since people react and accept change differently. For instance, some personality finds it extremely difficult to accept that emails must be used in communicating rather than paper to avert pollution among other measures. One of the respondents explained:

I am aware that in this organisation, one of the issues affecting the effective implementation of GHRM policy is personality and socialisation. People come into an organisation with different behavioural make-up and because of these, they respond to change management differently as well. You will discover that green behaviour such as using emails rather than paper irritates some personalities because this was not their personability and socialisation makeup. So, these things are there, and they remain a challenge to implementing effective GHRM policies. But it's all a process and we are taking it one after the order.

Many of the respondents also argued that the challenge of managerial training and education is a concern for the swift implementation of GHRM policies in the organisation. With the fact that managers are responsible for the implementation and enforcement of green behaviour in the organisation, it is evident that most of these managers lack the requisite training and education for the effective management of GHRM policies in the organisation. For instance, the array of the perceptions shared reflects a situation where managers have not gone for any training and education on GHRM for the last 5 years for an update in green knowledge and skills. This analysis explains the situation of many manufacturing organisations that are supposed to be the custodians of green behaviour initiatives due to the volume of pollution and environmental degradation they contribute through the production process.

For me, I think one of the issues seriously affecting GHRM implementation is the challenge of training and education. To my knowledge, a number of these managers who implement and enforce GHRM policies are lacking in the requisite training and education needed to carry out these responsibilities and these are reflected in the implementation outcomes. In fact, as a manager in this organisation, I must be honest has been a long time since we went on green behaviour training, and despite this, we are expected to continue with the implementation and enforcement of GHRM policies without updating our knowledge and skills on green behaviour.

The results also showed a green evaluation monitoring challenge as explained by most of the respondents. For instance, it was argued that many organisations lack the adequate capacity for swift green evaluation and monitoring efforts due to the lack of organisational commitment to green behaviour actualisation in the interest of the organisation. One of the basic principles to ensuring organisational compliance to green behaviour initiatives is constant evaluation and monitoring of the green policy in the organisation. This conclusion is derived from the necessity to understand and identify any lapses or areas requiring further improvement with compliance with the green behaviour initiatives.

Most of the respondents argued that there was hardly any evaluation and monitoring effort commitment to the actualisation of the green behaviour policies in the organisation. Making sense from these narratives, it is important to stress that any green behaviour initiatives set out without effective evaluation and monitoring will suffer setbacks in terms of attaining the set organisational goals of green behaviour. One of the respondents explained as follows:

I think one of the green behaviour implementations challenges I know we have in this organisation is how to commit to the evaluation and monitoring of green behaviour initiatives in the organisation. The managers assigned to do this job are hardly committed to evaluating and monitoring the progress of the green behaviour initiatives and this is a strong implementation challenge in my opinion. You cannot implement a policy without constantly evaluating and monitoring its progress for improvement. This challenge has given room for poor commitment on the part of the employees who are supposed to be committed to the goals and objectives of the green behaviour initiatives.

Another respondent reiterated on the challenge of poor attitude to learning and taken on new initiatives.

I think it is important to also recount about the poor attitude to learning and taking on new initiatives by employees as impediment to green behaviour implementation. Some persons are resistance to change and very unwilling to adopt to new trends. We have seen people not showing interest to be green behaviour compliant and this remain a setback to green behaviour implementation.

5. Discussion

The focus of this study has been to rejig the green behaviour conversation through an attempt to understand employees' green behaviour initiatives and GHRM implementation challenges. The case of the Nigeria's manufacturing organization studied in this paper offers a rich empirical discourse on green behaviour initiatives in the context of understanding the implementation challenges and way forward for a sustainable and pollution-free working environment. The strategic importance of understanding green behaviour initiatives and implementation challenges through the prism of the manufacturing industry could help shape public policy for other industries on the significance of sustainability and implementation of green behaviour.

The results showed varied perceptions and understanding of green behaviour including as a response to climate change challenges, efficient and effective use of raw materials in the best interest of the organisation and community of work, and environmental sustainability efforts for the overall environmental sustainability of the organisation. The collection of responses shared about the understanding of green behaviour reflects an appreciable level of understanding on the part of the respondents. However, what remains unclear is the extent of practicability and application of this understanding in achieving a sustainable working environment devoid of pollution and other environmental challenges. Thus, understanding green behaviour practices does not necessarily mean their practicability due to a range of human differences. The human nature perceives and understand events differently, and this account the variances in the level of understanding and importance attached to green behaviour and climate changes discourse by employees. The implication of this argument is to reflect on the existing differences in terms of perception by the management, such that this will go a long way in predicting the outcome of employees' perception of green behaviour initiatives and climate change issues. One way to do this, of course might include the introduction of personality test in the areas of green behaviour acceptability by employees (Rehman et al., 2021). These results confirmed other existing studies (Dal Maso et al., 2020; Al-Swidi, Gelaidan & Saleh, 2021; Demirel et al., 2019).

The results also showed some employee green behaviour initiatives that are being introduced in the organisation towards the attainment of green behavioural practices and green workplaces. The collection of these initiatives includes collectivism and consistent reviews of green campaigns about green policies and practices, improved managers' understanding of

green behaviour and access and accountability of green behaviour project funds. These initiatives are no doubt explicit, however, the challenge remains the sincerity and passion of the organisation in ensuring green implementations across the board. This is so because most organisations are reluctant when it comes to investing in green projects. For instance, the initiative of consistent awareness and campaigns around the four walls of the organisation and community of work are expenditure-driven, and it is unclear to what extent the leaders of the organisation will be willing to invest in such initiatives (Fawehinmi et al., 2020). One of the ways to ensure the consistent awareness of green behaviour campaigns is the introduction of human resources strategic communication channels, including consistent emails and posters around different units of the organization. The practical implication of this awareness method is that it will tend to constantly stimulate employees about the importance of green behaviour initiatives. In so doing, employees will become accustomed with the strategic importance of supporting the organization in green behaviour initiatives and environmental sustainability policies (Sathasivam et al., 2021; Yafi et al., 2021).

Most organisations would rather prefer to invest in profit-driven projects that set aside funds for green project initiatives. Collectivism as an initiative might depend on human differences as some people are more complaint-driven than others. These findings support existing literature (Gupta, 2021; Li et al., 2023). The fact that an organization cannot function alone without the input and contributions of employees to the organizational success, it is important that managers and management take the importance of collectivism as a critical component of employees' green behaviour initiatives. One of the practical importance of collectivism is to ensure all and sundry are on the right path of environmental sustainability and green behaviour pursuits by following the established organisational policies. Collectivism allows for the effective monitoring and evaluation of employees' and their dedication to the green behaviour plans and policies of the organisation (Woo & Kang, 2021).

Findings also show several green behaviour implementation challenges impacting swift and responsive green behaviour practices in the organisation. These challenges include socio-cultural constraints, personality and socialisation, managerial training and education, and green evaluation and monitoring challenges. The collection of these challenges is like another industrial sector since green behaviour initiatives and implementation had only been embraced newly among Nigeria's industrial sector. For instance, the socio-economic background of employees can impact the successful implementation of green behaviour and practices since

people embrace change and policy differently, especially one that has to do with behavioural change (Mi et al., 2020; Ojo et al., 2020). Again, the management and implementation of green behaviour policy requires that managers have the requisite knowledge and education. However, the challenge of possessing the requisite skills and education on the part of managers remains a hindrance to the actualisation of green behaviour practices (Omisore et al., 2017; Gilal et al., 2019).

The level of commitment to green evaluation and monitoring can be used to gauge the expected green behavioural outlook of employees. For instance, the challenge of evaluation and monitoring after the implementation of policy remains a bane in Nigeria. There seems to be an interplay between the socio-cultural constraints and personality and socialisation as constraints to green behaviour implementation in the overall sense of it. For instance, studies have shown that personality formation is a product of gene and the environment (Rehman et al., 2021), and the environment to an extent is predicted by socio-cultural activities. In other words, it is safe to argue that employees' resistance to green behaviour initiatives in terms of their personality are largely shaped by their socio-cultural events. This analysis to an extent explains that personality make-up is a byproduct of events in the social environment (Sathasivam et al., 2021) as depicted in this paper. In addition, socio-cultural factors could also be used to explain the willingness of employees to get the desired training and education required for the effective implementation of green behaviours in the organisation (Woo & Kang, 2021). This analysis, to an extent, explains that people are unwilling to change or acquire new knowledge because of the socio-cultural ideology they believe.

6. Conclusion

The discourse of green behaviour and GHRM implementation has long remained a contention for a sustainable working environment. As with the case of Nigeria's manufacturing organisations, it is important to stress that any serious attempt to ensure organisations are compliant with green behaviour initiatives must be included in the employees' job description for swift compliance. The study provides empirical evidence on EGB initiatives and GHRM implementation challenges as a response to the continuous environmental and pollution degradation. The results highlight several EGB initiatives in place for the promotion of individual and organization green behaviour, such that will advance environmental sustainability. On the other hand, several impediments stifling the realization of green and

sustainable workplace were also reported. The study argues for a consistent green behaviour culture as pathway to ensuring the sustainability of green initiatives and agenda of the organization.

Rarely are manufacturing organisations in Nigeria concerned about green behaviour policies and enforcement, especially during recruitment. The policy implication is a call for these organisations to always include green behaviour and personality tests in their recruitment policy. This will help identify prospective employees with deviant to green behaviour compliance. Therefore, manufacturing organisations must strategically align green behaviour objectives and expectations to their recruitment policies for a positive green behaviour outlook. While managers are expected to lead the green behaviour crusade, they must undergo prompt training and retraining on the intricacies of green behaviour practices and implementation. This is so to be able to address any challenge that may arise during the implementation stage.

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ORCID

Samson Adewumi – https://orcid.org/0000-0003-4156-0971

References

- Al-Swidi, A.K. Gelaidan, H.M. & Saleh, R.M. (2021) The joint impact of green human resource management, leadership and organizational culture on employees' green behaviour and organisational environmental performance. *Journal of Clean Production*, 316(6), 1-15. http://dx.doi.org/10.1016/j.jclepro.2021.128112
- Aranganathan, P. (2018). Green recruitment: a new-fangled approach to attract and retain talent. *International Journal of Business Management*, 8(2), 69-76.
- Ayeswarya, R. (2017). A study on green human resource management practices and its impact on organizations. *International Journal of Advanced Research in Management, Architecture, Technology and Engineering*, 3(4), 106–113.

- Carmeli, A. Brammer, S. Gomes, E. & Tarba, S. Y. (2017). An organizational ethic of care and employee involvement in sustainability-related behaviours: a social identity perspective. *Journal of Organizational Behavior*, 38(9), 1380–1395. https://doi.org/10.1002/job.2185
- Dahlmann, F. Branicki, L. & Brammer, S. (2019). Managing carbon aspirations: the influence of corporate climate change targets on environmental performance. *Journal of Business Ethics*, 158(1), 1-24. https://dx.doi.org/10.1007/s10551-017-3731-z
- Dal Maso, L. Basco, R. Bassetti, T. & Lattanzi, N. (2020). Family ownership and environmental performance: the mediation effect of human resource practices.

 **Business Strategy the Environment, 29(3), 1548-1562. https://doi.org/10.1002/bse.2452
- Demirel, P. Li, Q.C. Rentocchini, F. & Tamvada, J.P. (2019). Born to be green: new insights into the economics and management of green entrepreneurship. *Small Business Economics*, 52(1), 759–771. http://dx.doi.org/10.1007/s11187-017-9933-z
- Diana, A. (2016). A study on the effectiveness of green recruitment practices among HR executives of the IT sector. *IOSR Journal of Business Management*, *I*(11), 8-11.
- Dilchert, S. (2018). Counterproductive sustainability behaviours and their relationship to personality traits. *International Journal of Selection and Assessment*, 26(1), 49–56. https://doi.org/10.1111/jisa.12204
- Dumont, J. Shen, J. & Deng, X. J. (2017). Effects of green HRM practices on employee workplace green behaviour: the role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613-627. https://doi.org/10.1002/hrm.21792
- Fawehinmi, O. Yusliza, M. Y. Mohamad, Z. Faezah, J.N. & Muhammad, Z. (2020). Assessing the green behaviour of academics. *International Journal of Manpower*, 1-23. https://doi.org/10.1108/IJM-07-2019-0347
- Gilal, F. G. Ashraf, Z. Gilal, N. G. Gilal, R. G. & Channa, N. A. (2019). Promoting environmental performance through green human resource management practices in higher education institutions: a moderated mediation model. *Corporate Social Responsibility Environmental Management*, 26(6), 1579-1590. http://dx.doi.org/10.1002/csr.1835

- Graves, L. M. Sarkis, J. & Zhu, Q. (2013). How transformational leadership and employee motivation combine to predict employee pro-environmental behaviours in China. *Journal of Environmental Psychology*, 35, 81-91. https://doi.org/10.1016/j.jenvp.2013.05.002
- Gupta, S.A. (2021). Implementation of green human resource management practices: Barriers and solutions. *Journal of Scientific Research*, 65(9), 71-77. http://dx.doi.org/10.37398/JSR.2021.650911
- Hasebrook, J.P. Michalak, L. Wessels, A. Koenig, S. (2022). Green behaviour: factors influencing behavioural intention and actual environmental behaviour of employees in the financial service sector. *Sustainability*, (14)17, 1-42. http://dx.doi.org/10.3390/su141710814
- Jia, J. Liu, H. Chin, T. & Hu, D. (2018). The continuous mediating effects of GHRM on employees' green passion via transformational leadership and green creativity. Sustainability, 10(9), 1–18. https://doi.org/10.3390/su10093237
- Katz, I.M. Rauvola, R.S. Rudolph, C.W. Zacher, H. (2022). Employee green behaviour: a meta-analysis. Corporate Social Responsibility and Environmental Management, 29, 1146–1157. https://doi.org/10.1002/csr.2260
- Kim, A. Kim, Y. Han, K. Jackson, S. E. & Ployhart, R. E. (2017). Multilevel influences on voluntary workplace green behaviour: Individual differences, leader behaviour, and coworker advocacy. *Journal of Management*, 43(5), 1335–1358. https://doi.org/10.1177/0149206311421830
- Kumar, R. (2012). *Research methodology: a step-by-step guide for beginners*. 3rd edition. California: Sage Publications.
- Lange, F. & Dewitte, S. (2019). Measuring pro-environmental behaviour: review and recommendations. *Journal of Environmental Psychology*, 63, 92–100. https://doi.org/10.1016/j.jenvp.2019.04.009
- Le Roux, C. & Pretorius, M. (2016). Navigating sustainability embeddedness in management decision-making. *Sustainability*, 8(5), 444. http://dx.doi.org/10.3390/su8050444
- Li, C. Aziz, F. Asim, S. Shahzad, A. & Khan, A. (2023). Employee green behaviour: a study on the impact of corporate social responsibility (CSR) on employee green behaviour, green culture: the moderating role of green innovation. *Environmental Science and Pollution Research*, 30(48), 1-16. https://doi.org/10.1007/s11356-023-29798-7

- Likhitkar, P. & Verma, P. (2017). Impact of green HRM Practices on organization sustainability and employee retention. *International Journal for Innovative Research in Multidisciplinary Field*, *3*(5), 152–157.
- Masri, H. A. & Jaaron, A. A. (2017). Assessing green human resources management practices in Palestinian manufacturing context: an empirical study. *Journal of Cleaner Production*, 143, 474-489. http://dx.doi.org/10.1016/j.jclepro.2016.12.087
- Mi, L. Sun, Y. Gan, X. Yang, H. Lv, T. Shang, K. Qiao, Y. & Jiang, Z. (2020). Promoting employee green behaviour through the person-organization fits the moderating effect of psychological distance. *Frontiers in Psychology*,11, 1-16. https://doi.org/10.3389/fpsyg.2020.568385
- Mishra, P. (2017). Green human resource management: a framework for sustainable organizational development in an emerging economy. *International Journal of Organizational Analysis*, 25(1), 762- 788. http://dx.doi.org/10.1108/IJOA-11-2016-1079
- Ojo, A. O. Tan, C. N. L. & Alias, M. (2020). Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector. *Social Responsibility Journal*, 2(3), 239-254. https://doi.org/10.1108/SRJ-12-2019-0403
- Omisore, A. G. Babarinde, G. M. Bakare, D. P. & Asekun-Olarinmoye, E. O. (2017). Awareness and knowledge of the sustainable development goals in a university community in Southwestern Nigeria. *Ethiopian Journal of Health Sciences*, 27(6), 669–676. https://doi.org/10.4314/ejhs.v27i6.12
- Opatha, H. N.D.P. & Arulrajah, A.A. (2014). Green human resource management science: simplified general reflections. *International Business Research*, 7(8), 101-112. http://dx.doi.org/10.5539/ibr.v7n8p101
- Rehman, S. U., Kraus, S., Shah, S. a., Khanin, D., & Mahto, R. v. (2021). Analyzing the relationship between green innovation and environmental performance in large manufacturing firms. *Technological Forecasting and Social Change*, 163, 120481. https://doi.org/10.1016/j.techfore.2020.120481
- Sabokro, M., Masud, M. M., & Kayedian, A. (2021). The effect of green human resources management on corporate social responsibility, green psychological climate and

- employees' green behavior. *Journal of Cleaner Production*, 313,127963. https://doi.org/10.1016/j.jclepro.2021.127963
- Saeed, B. B. Afsar, B. Shakir, H. Khan, I. Tahir, M. & Afridi, M.A. (2019). Promoting employee's pro-environmental behaviour through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), 424-438. https://doi.org/10.1002/csr.1694
- Sathasivam, K., Abu Bakar, R., & Che Hashim, R. (2021). Embracing organisational environmental sustainability: experiences in green human resource management. *Business Strategy & Development*, 4(2), 123–135. https://doi.org/10.1002/bsd2.133
- Saunders, M. Lewis, P. & Thornhill, A. (2009). *Research methods for the business student*. England: Pearson Education Limited.
- Sekaran, U. & Bougie, R. (2016). *Research methods for business: a skill-building approach*. 6th ed. United Kingdom: John Wiley and Sons Limited.
- Tang, G. Chen, Y. Jiang, Y. Paille, P. & Jia, J. (2018). Green human resource management practices: Scale development and validity. *Asia Pacific Journal of Human Resources*, 56(1), 31–55. https://doi.org/10.1111/1744-7941.12147
- Waheed, A. Zhang, Q. Rashid, Y. Tahir, M.S. & Zafar, M.W. (2020) Impact of green manufacturing on consumer ecological behaviour: stakeholder engagement through green production and innovation. *Sustainable Development*, 28(5),1395–1403 http://dx.doi.org/10.1002/sd.2093
- Wassan, A.N. Memon, M.S. Mari, S.I. Kalwar, M.A. (2023) Identifying the critical success practices of sustainability and their implementation in the manufacturing sector of Pakistan: an exploratory factor analysis. *Journal of Applied Research and Technological Engineering*, 4(1), 37–53. http://dx.doi.org/10.4995/jarte.2023.18623
- Woo, E.J. & Kang, E. (2021) Employee environmental capability and its relationship with corporate culture. *Sustainability*, 13(16), 1-22. 8684 https://doi.org/10.3390/su13168684.
- Yafi, E, Tahseen, S., & Haider, S. A. (2021). impact of green training on environmental performance through mediating role of competencies and motivation. *Sustainability*, 13(10), 5624. https://doi.org/10.3390/su13105624
- Yasin, R., Huseynova, a., & Atif, M. (2023). green human resource management, a gateway to employer branding: Mediating role of corporate environmental sustainability and

- corporate social sustainability. *Corporate Social Responsibility and Environmental Management*, 30(1), 369–383. https://doi.org/10.1002/csr.2360
- Yin, R.K. (2016). *Qualitative research from start to finish*. 2nd ed. New York: The Guilford Press.
- Yuriev, A. Dahmen, M. Paillé, P. Boiral, O. & Guillaumie, L. (2020). Pro-environmental behaviours through the lens of the theory of planned behaviour: a scoping review. *Resources, Conservation and Recycling*, 155, 1879–1658. https://doi.org/10.1016/j.resconrec.2019.104660
- Zacher, H. Rudolph, C. & Katz, I.M. (2023). Employee green behaviour is the core of environmentally sustainable organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 465–94. https://doi.org/10.1146/annurev-orgpsych-120920-050421
- Zhang, S. Wu, Z. Wang, Y. & Hao, Y. (2021). Fostering green development with green finance: An empirical study on the environmental effect of green credit policy in China.

 Journal of Environmental Management 296(1), 113-159.

 http://dx.doi.org/10.1016/j.jenvman.2021.113159