

Moderating Role of Green Transformational Leadership on the Relationship between Green Human Resource Practices and Environmental Performance of Hotels in Kano, Nigeria

Kuwata Mohammed Goni*, Yusrinadini Zahirah Binti Md. Isa, Tahirah Binti Abdullah

Faculty of Entrepreneurship and Business, University Malaysia Kelantan, Kota Bharu, Malaysia

Email: *kuwatagoni@gmail.com

How to cite this paper: Goni, K. M., Isa, Y. Z. B. Md., & Abdullah, T. B. (2023). Paper Moderating Role of Green Transformational Leadership on the Relationship between Green Human Resource Practices and Environmental Performance of Hotels in Kano, Nigeria. *Journal of Human Resource and Sustainability Studies*, 11, 415-440. <https://doi.org/10.4236/jhrss.2023.113024>

Received: June 17, 2023

Accepted: July 23, 2023

Published: July 26, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). <http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

This study investigates the moderating role of green transformational leadership on the relationship between green human resource management and environmental performance in the hotel industry in Nigeria. The main objective was to examine the effect of green HRM on environmental performance, and also evaluate whether such relationship could be improved with the existence of green TFL style. Convenience sampling technique was used to collect data from 649 staff of the hotels out of the 670 copies of questionnaire distributed, and PLS-SEM was used for the analysis. The results showed that green HRM has a direct positive effect on environmental performance, and green transformational leadership was not significant in moderating the relationship. The findings of this study provide an insight into how hotels management in Kano, Nigeria can contribute positively to the environment by ensuring that all employees and managers were adequately staffed, trained, and inspired with green initiatives to work in a way that improves the environment. The study concluded that hotels management in Nigeria should emphasize green HRM practices because it helps to improve the environment. Further, the results also demonstrate that green TFL style does not facilitate adoption of green HRM practices, but only helps to improve environmental standard. Also, the hotels should emphasize on green staffing, green motivation, and encourage knowledge sharing as well as team work among employees. These will encourage employees to act in an environmentally responsible manner. Furthermore, this study contributes to the literature by demonstrating the importance of green HRM practices in preventing and protecting the environment.

Keywords

Environmental Performance, Green Human Resource Management, Green Transformational Leadership, Nigeria

1. Introduction

The hotel sector contributes significantly to the hospitality and tourism industries and helps countries to grow and flourish. The tourism and hospitality sectors are among the most successful in Malaysia. They account for almost 20 billion dollars of the country's Gross Domestic Product (GDP) (Bhuiyan, Siwar, & Ismail, 2013). Similarly, 3.85 million people were employed by the hotel industry in Pakistan, which contributes 7% to the country's GDP (Hadi, 2021). In African countries, Nigerian hotels and tourism get only about USD1.56 billion receipts in 2019, which is a paltry as against those obtained in Egypt (13.03 USD), South Africa (8.38 USD) and Morocco (8.18 USD) (Statista Report, 2022) respectively. Also, in terms of GDP, Nigeria contributed 4.4% in 2019 and 2.8% in 2020; while Morocco contributed 15.6% in 2019, and 8.3% in 2020 (Statista Report, 2022). Both countries witnessed decline in 2020, probably due to COVID-19 pandemic. This simply implies that Nigeria needs more attention in terms of hospitality and tourism research because it has the lowest receipts and GDP contributions even among its African counterparts. Nevertheless, the industry has left some environmental burden despite these indices as verified by (Kasavan et al., 2019).

Despite these indicators of advancement, the sector has left certain environmental burdens (Kasavan et al., 2019). Hotel waste products made up 21% of global gas emissions to the environment, thus the need to increase environmental performance. The hotel industry uses a lot of energy and produces a lot of pollution (Bohdanowicz, 2005). For instance, Stefanica & Sandu (2018) discovered that a hotel emits between 160 and 200 kilograms of carbon dioxide (CO₂) per square metre while producing electricity, heating, or cooling, depending on the type of fuel used. Hotels in Europe use 39 twh (terawatts per hour) of energy annually, emitting about 13.6 megatons of CO₂ (Stefanica & Sandu, 2018). Additionally, tourists use between 170 and 440 litres of water per day and produce an average of one kilogram of waste daily, of which no more than 60% is recyclable (Bohdanowicz, 2005). Furthermore, Nworuh et al. (2011) discovered that the generation of trash without adequate waste management is a significant environmental problem for hotels and the country as a whole. However, stakeholders in organizations are under pressure to develop and implement green initiatives and practices that have beneficial effects on the environment (Chen & Chang, 2013; Dubey et al., 2015; Yu, Ramanathan, & Nath, 2017). Pham et al. (2020) assert that the development of the environment would be promoted by green technology, products, and processes, as well as other green activities.

Green human resource management (GHRM) in the hospitality and tourism

industry has become the focus of current research on sustainability management due to customers' rising knowledge of the significance of making environmentally friendly tourism and hospitality services (Fazlurrahman, Rahman, & Arifah, 2021). In addition, GHRM is a strategy for addressing environmental degradation brought on by inadequate environmental management (Fazlurrahman, Rahman, & Arifah, 2021). The importance of people's sustainable behavior has been growing in recent literature since environmental performance is influenced, at least in part, by the interaction between humans and the environment (Rustam, Wang, & Zameer, 2020; Shafiei & Maleksaeidi, 2020; Chen et al., 2021; Kong et al., 2021). These demand that the leadership in their various companies implement green HR practices. Green HRM is a key strategic method for helping companies accomplish their sustainability objectives by going green. This can be done through selecting, employing, retaining, and developing young professionals with technical knowledge of green human resource management (Sudin, 2011). A win-win situation is created for the organization and its stakeholders when sustainable business practices, such as the adoption of green human resource management (HRM), are implemented. This is as a result of the numerous environmental problems that the hotel business has encountered. One of the key green activities regarded to have a high environmental impact is the hiring process, training and development, and empowering of people to perform environmentally. When referring to people management policies and practices, the term "green" refers to the interests of those policies and practices in relation to the more general corporate environmental standards (Ullah, 2017).

Moreover, the organization views leadership as a crucial resource for environmental management (Guest & Teplitzky, 2010; Zhou et al., 2018). Among the various leadership styles, transformational leadership fosters an environment that is creative and inspires, motivates, and encourages team members to support and/or identify with the leader's vision, which affects firm innovation and performance (Boehm et al., 2015; Mittal & Dhar, 2016; Ng, 2017). According to earlier research (Zuraik & Kelly, 2019), transformational leadership has a significant effect on creativity within the firm. To help the firm carry out its strategies and visions to achieve green performance, green transformational leadership (GTFL) in the organization plays a key role in the formulation of supportive green human resource management (GHRM) policies and practices (Jia et al., 2018). In a similar vein, green transformational leadership and human resource management may significantly help businesses build environmentally friendly service behavior (Sidney et al., 2022). It is anticipated that green transformational leadership (GTFL) will support beneficial GHRM practices like recruitment & selection, training & development, performance appraisal and management, and compensation & incentive systems to a greater extent in order to inspire, stimulate, and motivate followers to achieve organizational goals (Zhu, Chew, & Spangler, 2005). Leadership significantly affects HRM concepts, objectives, and policy choices.

However, the focus of the research is to evaluate the influence of green HRM on environmental performance of hotels in Kano. Secondly, this study assessed whether such relationship will improve if there is green TFL style, providing a major contribution to literature as there is no similar study that have examine such. In addition the survey was done in Kano being the major commercial center of the Northern Nigeria attracting large number of visitors from across the globe, serving as a methodological difference using better measurments as against previous studies done in the southern part of Nigeria. The study builds on the suggestions of the previous research (Osolase et al., 2022; Babalola & Olapade, 2014) whose study were based in the southern Nigeria, but suggested that similar research be done in other part of the country. In line with the above, this study aimed to achieve the following objectives:

- 1) To examine the effect of green HRM practices on environmental performance of hotels in Kano, Nigeria.
- 2) To evaluate whether green TFL moderate the relationship between green HRM practices and environmental performance of hotels in Kano, Nigeria.

2. Literature Review

2.1. Concept of Environmental Performance

Environmental performance refers to quantifiable results of the environmental management system that are connected to organizational monitoring of environmental problems based on its policy, more general objectives, and specific environmental goals (Hobincu, 2004). The term “environmental performance” (EP) refers to organizational initiatives that go above and beyond just following rules and regulations in order to satisfy and even surpass the public’s expectations for the preservation of the environment (Arda, Bayraktar, & Tatoglu, 2019). It takes into account how organizational practices, products, and resource usage affect the environment in a way that best complies with legal environmental standards (Dubey et al., 2015). Protecting the environment through preserving natural resources is another description of environmental performance (Roscoe et al., 2019).

2.2. Concept of Green Human Resource Management Practices

One of the most crucial components in a company aiming for ecologically friendly, employee-motivating practices is using green HRM (Ren et al., 2018). Green Human Resource Management (GHRM) policies have an impact on employee behavior in terms of environmental performance. Human resource management (HRM) strategies that support an organization’s environmental effects and are firmly established in successful environmental policies and plans are referred to as “green HRM” (Singh et al., 2020). Green HRM initiatives are innovations, policies, and practices that organizations utilize to simultaneously maximize positive environmental impacts while minimizing negative environmental impacts (Aru-irajah, Opatha, & Nawaratne, 2016; Kim et al., 2019). The main features of GHRM,

a new approach for realizing the entire HR process, are to incorporate environmental objectives into all facets of HRM, beginning with employment planning and extending to staff selection, training, and development, as well as their evaluation and impact on workplace practices (Bombiak & Marciniuk-Kluska, 2018). The ability, motivation, and opportunity (AMO) theory states that the three fundamental components of HR practices are ability, motivation, and opportunity (Appelbaum et al., 2000). When it comes to skills, a variety of techniques are used, including as hiring and selection procedures as well as training and development programs, to make sure that employees have the knowledge and abilities required to carry out a particular job. In a similar vein, incentives, both monetary and non-monetary, are used to encourage people to meet their performance goals. These incentives are based on performance evaluation. The term “opportunity” also refers to a group of rules that promote employee involvement in a range of activities through greater commitment, information sharing, and individual freedom. To promote collaboration with consumers and suppliers, staff Green training capability must be increased (Yu et al., 2020; Ding, Appoloni, & Shahzad, 2022).

Green HRM aims to recruit and train staff people who can adopt pro-environmental behaviors in order to achieve environmental performance. The actions that make up an organization’s human capital include hiring people with a green attitude, providing them with green training and empowerment, and rewarding them (Arulrajah, Opatha, & Nawaratne, 2016; Irani et al., 2022). According to Pinzone et al. (2019), Green training challenges employees intellectually and motivates them to adopt environmentally friendly practices. The best techniques for achieving organizational goals are green recruitment, green training, green performance evaluation, and green reward (Renwick, Redman, & Maguire, 2013). In a manner similar to this, Rincon-Roldan & Lopez-Cabrales (2022) define green human resource management (GHRM) as a function that manages critical HRM responsibilities like hiring, onboarding, training, performance assessments, and pay management. Furthermore, according to Pham, Paillé, and Halilem (2019), GHRM should provide a green environment, a green culture, green performance evaluations, and green training and development. In accordance with the foregoing, this study has chosen to focus on green HRM practices, which include green ability, motivation, and opportunities, according to the AMO theory created by (Appelbaum et al., 2000).

2.3. Concept of Green Transformational Leadership

According to Masri & Jaaron (2017), effective leadership is essential for encouraging employees to engage in environmental activities. They continued by saying that leadership is mostly responsible for encouraging teamwork, employee innovation, and higher levels of creativity within organizations. Therefore, it encourages advancement and makes it possible for firms to maintain a competitive advantage (Hughes et al., 2018). The primary goal of a green transformational leadership style is to provide employees with a clear vision, inspiration, and mo-

tivation while attending to their developmental requirements (Kusi, Zhao, & Sukamani, 2021). The aim of transformational leadership is to increase staff members' understanding of progressive concepts like autonomy, fairness, honesty, and humanism while encouraging people to put the needs of the organization ahead of their own (Aboramadan & Karatepe, 2021). The capacity of transformational leaders to empower followers is char impacted by four qualities: motivating drive, a magnetic personality, individualized attention, and intellectual stimulation (Elrehail et al., 2018). When a leader inspires people with a desirable vision and high expectations, they will be more driven to help the organization accomplish its goals and dreams. As a result, people become more devoted to the objective and goals of the firm, and they are also more inclined to share suggestions and opinions (Mansoor et al., 2021). The four facets of transformative leadership include inspiration, idealistic influence, individual consideration, and intellectual stimulation (Bass, 1990).

2.4. Review of Empirical Studies and Hypotheses Development

In the literature, there have been some important empirical studies relating the environmental performance of firms with various factors. Muazu, Rashid and Zaino (2017) makes use of 363 hotel managers in Abuja and Lagos, Nigeria, to identify factors that are likely to encourage hotels to embrace innovative ways of operating. According to the study, perceived environmental features, perceived organizational characteristics, and stakeholders' influence are factors that determine whether or not green practices are adopted in different hotels in Nigeria. These clearly demonstrate the necessity for green HR practices, and green transformational leadership. Irani and Kilic (2022) examine whether green process upgrades and green human resource management procedures could improve green hotels' environmental performance. The finding demonstrated that using green human resource management (GHRM) strategies increases environmental performance when green process innovations and employee environmental commitment are implemented. Fazlurrahman, Rahman and Arifah (2021) investigated the growth of green human resource management research over the last five years and mapped out future directions for this field of study using a systematic literature review methodology. The findings of the study suggest a positive relationship between GHRM training and education and the pro-environmental behavior of hospitality companies, which also has a positive impact on the success of task-related environmental programs carried out by employees.

Nisar et al. (2021) investigated how Malaysian green hotels' environmental performance was impacted by their use of green human resource management techniques. It also examines how pro-environmental behavior and green intellectual capital interact. The target audience was made up of Malaysian green hotel staff. According to data acquired from 374 employees that was subjected to PLS-SEM analysis, green human resource practices (green training & development and green disciplinary management) are significant predictors for green intellectual capital and favorably influence pro-environmental behavior. Find-

ings showed that environmental behavior on the part of employees has a considerable positive impact on how environmentally responsible hotels are. It has also been demonstrated that green human resource management approaches, through green intellectual capital and pro-environmental behaviors, indirectly improve environmental performance. The study by [Shafaei, Nejati and Yusoff \(2020\)](#) intends to provide light on the causes and effects of green HRM at the organizational level as well as its effects on individuals. It also looked at the process by which employing green HRM results in job satisfaction. At the organizational level of the study, 206 hotels throughout Malaysia were used, while 508 employees were polled at the individual level. The research demonstrates that, at the organizational level, organizational environmental culture and green HRM management are favorably correlated with the environmental performance of the organization.

Using the resource-based view and the ability-motivation-opportunity assumptions ([Singh et al., 2020](#)) investigated how green human resource management interacts with the relationships among green transformational leadership, green innovation, and environmental performance. The results of the study, which used questionnaires to gather information from 309 SMEs in the manufacturing sector, suggest that green HRM practices mediate the effect of green transformational leadership on green innovation. Additionally, it was discovered that green HRM indirectly affects a company's environmental performance through green innovation. [Yusouf et al. \(2018\)](#) investigated how green HRM practices in the hotel industry enhance environmental performance. The resource-based view theory-based research approach of the study looked at the relationship between green HRM practices and environmental performance in Malaysia's hotel industry (green recruitment and selection, green training and development, green performance appraisal, and green compensation). Partial least squares structural equation modeling was utilized to analyze the data for the study, which covered 206 hotels in total. The investigation's conclusions revealed that while green recruiting and selection, green training and development, and green compensation were significantly correlated with environmental performance, green performance appraisal did not.

H₁: Green HRM practices have positive and significant effect on environmental performance of hotels in Kano, Nigeria.

The literature also contains empirical studies examining the relationship between environmental performance and green transformational leadership style, green HRM. According to [Zhou, et al. \(2018\)](#), the Resource Based View theory of organisation views leadership as a crucial resource. Green transformational leadership (GTFL) fosters an environment in the workplace where the leader motivates or inspires the staff to invest their time and energy in environmentally sustainable green products, processes, and services ([Ng, 2017](#)). To achieve green sustainability, GTFL is a crucial part of delivering or implementing green strategies through green practises or policies ([Jia et al., 2018](#)). Green transformational leadership, according to [Cop et al. \(2021\)](#), has a beneficial impact on green work

engagement, which in turn benefits environmental performance. In a study conducted in Pakistan, Zafar et al. (2017) discovered that green transformational leadership has a large and advantageous impact on green performance. According to Özgül and Zehir (2021), a key internal resource and competence of the organisations in terms of environmental sustainability is green transformational leadership through green ideas.

In their study, Sobaih et al. (2022) looked at the direct impact of green transformational leadership (GTFL) on the environmental performance of food organisations as well as the indirect impact of employees' green behaviour. The results of a study using 1050 employees from various food businesses around the Kingdom of Saudi Arabia (KSA) showed that GTFL had a favourable, significant impact on both task-related and pro-environmental behaviour as well as environmental performance. The findings also indicated that task-related behaviour only partially mediates the relationship between GTFL and environmental performance, while pro-environmental behaviour completely mediates the relationship. Additionally, Özgül and Zehir (2021) showed how green transformational leadership (GTFL) encourages companies to embrace environmentally friendly practises, which is a crucial internal resource and organisational competence for environmental sustainability. The effects of perceived organisational support and green transformational leadership on long-term organisational performance were examined by Kusi et al. in 2021. Data were collected by questionnaire from 305 employees of Nepali construction enterprises, and PLS-SEM was used for analysis. The results showed that green transformational leadership plays a supportive role in connecting organisational support for corporate social responsibility in order to improve environmental performance.

Sun et al. (2022) looked at the relationship between green transformational leadership and environmental performance, utilising environmental values as a moderator and green human resource management and innovation as mediators. The study used a questionnaire from SMEs to collect data from 110 respondents, and PLS-SEM was used for analysis. The results show that green transformational leadership has a favourable and considerable impact on environmental performance. Additionally, a mediation analysis shows that green innovation and green human resource management effectively mediate the impact of green transformational leadership on the environment. Furthermore, structural equation modelling has revealed that environmental values have a moderating effect on the effects of green transformational leadership on the environment. The causes and boundary conditions of how green transformational leadership affects employees' taking-charge behaviour are explored by (Du et al., 2019) 429 workers at Chinese industrial companies provided the data. The findings demonstrate that personal initiative serves as a mediating factor between green transformational leadership's strong positive impact on employees' taking-charge behaviour and other factors. Additionally, a green corporate identity tempers the beneficial effects of green transformational leadership on employees' individual initiative and, as a result, their tendency to take the initiative.

According to Özgül and Zehir (2021), employee green behaviour is stimulated by green transformational leadership. Employees' voluntary green behaviours have a strong, direct association with GTFL style that is beneficial (Robertson & Carleton, 2017). In their study Li et al. (2022) developed a theoretical framework for analysing the impact of low-carbon innovation performance on planned behaviour theory, green transformational leadership, organisational environmental culture, and Chinese automobile manufacturing. The results from a 155-person sample showed that low carbon innovation performance is positively impacted by green transformational leadership, organisational environmental culture, and key elements of the theory of planned behaviour model, including environmental attitude, subjective norm, and perceived behaviour capability. The indirect impact of green transformational leadership was also examined, and it was discovered that organisational environmental culture and elements related to the theory of planned behaviour mediated the link between transformational leadership and the success of low-carbon innovation. In view of the above, it could be observed that green transformational leadership (GTFL) style has significant influence on green HRM and environmental performance of organizations. Hence, the hypothesis has been formulated:

H2: *Green Transformational leadership style moderate the relationship between green HRM practices and environmental performance of hotels in Kano, Nigeria.*

2.5. Ability Motivation Theory

The study is underpinned by Ability Motivation Theory developed by Appelbaum et al. (2000). The theory provides an integrative view that explains how management of organizations who are responsible for the firm's environmental performance, support it through HRM practices. According to the theory, firms can enhance green HRM practices, which include the ability of employees to contribute to the success of the company through (recruitment and selection, training and development), inspiration (rewards, incentives, and compensation), and opportunity (teamwork and empowerment) (Gerhart, 2005). The Ability Motivation Theory is frequently used in HRM performance studies. (Bos-Nehles, van Riemsdijk, & Looise, 2013). According to Bos-Nehles, van Riemsdijk, and Looise (2013), the Ability Motivation Theory is frequently used in HRM performance studies. In line with the above, the following model (Figure 1) was developed for this study:

Figure 1 depicts the research model showing the direct link between green HRM practices and environmental performance as well as the extent to which green TFL style moderate such relationship.

3. Research Methodology

The study employed survey and cross-sectional research approach. A survey study design is a systematic procedure for gathering data from a representative sample of people utilising instruments made up of closed-ended and/or open-ended

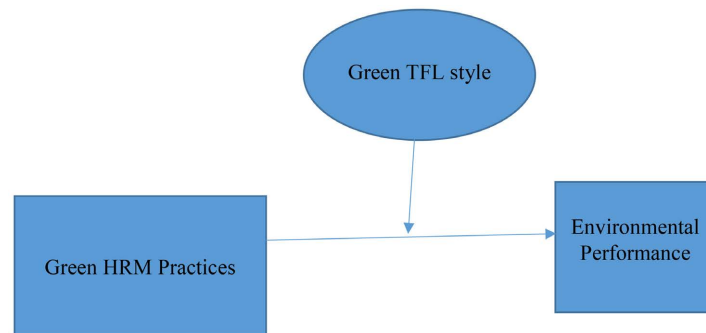


Figure 1. Research Model

questions, observations, and/or interviews where possible (Lavrakas, 2008). Furthermore, the study employed cross-sectional research because data were retrieved on the spot or a single point in time from the respondents (Ojeleye et al., 2023). This study population comprises all the hotels in Kano, Nigeria. According to the report by Kano State Tourism Management Board Report (2020), there are a total of 205 registered hotels in Kano State, Nigeria. The sample size was determined using the table from (Krejcie & Morgan, 1970), and it gives a sample size of 134, which is based on the population of 205 hotels. Thus, the study used convenience sampling technique to select only five (5) staff (mainly managers and supervisors) from each of the 134 hotels surveyed within Kano metropolis. Consequently, the total number of questionnaire distributed was 670 (5 participants from each hotel). Out of which 649 (96.9%) copies of questionnaire were returned and used for the analysis. The specific model for hypothesis (H1) and (H2) are as follows:

$$EP_{it} = \alpha + \beta_1 HRM_{it} + \varepsilon_{it} \quad (1)$$

$$EP_{it} = \alpha + \beta_1 HRM_{it} + \beta_2 GTFL_{it} + \beta_3 (HRM_{it} * GTFL_{it}) + \varepsilon_{it} \quad (2)$$

Measurements

The dependent variable which is environmental performance was measured by adapting a scale from the study of (Kim et al., 2019; Ahmed et al., 2022). A sample item was “*environmental management within our hotel has reduced waste*”. The scale has a Cronbach alpha (α) coefficient of 0.888 which is reliable enough based on the minimum threshold of 0.70 suggested by Hair, et al. (2010). All items were measured on a five (5) points Likert scale ranging from 1) strongly disagree to 5) strongly agree. Secondly, the instrument for measuring green transformational leadership style (GTFL) which is the moderating variable, was adapted from (Chen & Chang, 2013; Singh et al., 2020). The scale contains six (6) items and Cronbach alpha of 0.904. The sample item includes; “*the leadership in my hotel emphasize achievement of environmental goals*”. All items will be measured on a five (5) points Likert scale ranging from 1 strongly disagree to 5 strongly agree. Lastly, Green HRM practices which is the independent variable was measured by adapting a scale from (Sun et al., 2022; Renwick et al., 2013; Singh et al., 2020). The scale has three (3) dimensions and a total of thirteen (13)

items. The dimensions include; *green ability*, *green motivation*, and *green opportunity*. Example of the sampled item include; “*employee gets reward for acquiring specific environmental competencies*”. The Cronbach alpha for the green ability (6 items), green motivation (4 items) and green opportunity (3 items) were 0.898, 0.839, and 0.848, respectively. All items will be measured on a five (5) points Likert scale ranging from 1 strongly disagree to 5 strongly agree.

4. Results and Discussions

4.1. Data Analysis

The study conducted preliminary analysis such as missing values, outliers, normality test, non-response bias and common method bias using Statistical Software for Social Sciences (SPSS version 24). The result of the multivariate outlier showed that no chi-square value was less than 0.001 suggesting that the data is free from outliers. In addition, Harman one-factor test was 20% less than 50% value to confirm no common method bias for statistical remedy prior to ensuring that the necessary procedural remedy was followed such as ensuring confidentiality of respondents, simplicity in wordings, rephrasing of double-barreled questions and psychological separation of constructs. Missing values were replaced using mean substitution since the missing values are less than 5% and were random as recommended by (Tabachnick & Fidell, 2019). Normality of data was assumed based on the recommendation of (Field, 2017) who posited that based on central limit theorem when a sample is greater than 30 respondents, normality can be assumed. Lastly, to analyse the hypothesized relationship, data was analysed using the two functional models of structural equation modelling which include; the measurement and structural models.

4.2. Measurement Model

The measurement model consists of individual items measuring each latent construct, the internal consistency reliability, discriminant validity among others were discussed. The study employed a reflective-formative construct higher-order. Firstly, the lower-order construct was assessed and analyzed, prior to assessing the higher-order construct. For the lower order the study assessed the item loadings, internal consistency, convergent validity and discriminant validity. According to Hair et al. (2021) rule of thumb, an indicator with 0.70 outer loading is reliable and suitable for current or already developed scale. However, researchers maintained that rather than immediately eliminating an indicator with a loading of less than 0.70, researchers should consider deleting the factor if its removal improves or raises the Average Variance Extracted (AVE) as well as the Composite Reliability (CR). As a result, the loading must be between 0.40 and 0.70 in order for an indication to be kept. Hence, the deletion is subject to the increment or otherwise of the AVE and CR. Meanwhile, Hulland (1999) suggests retainment of loadings of 0.5 and above and deletion of loading below 0.5 since they add little or no explanatory power to the model. Therefore, in agreement with Hulland (1999) rule of thumb, out of 25 items measuring five (5)

reflective constructs of this study, two items were deleted. Precisely, (GA6 and GTFL1). Furthermore, the internal consistency was confirmed using composite reliability. According to [Sekaran and Bougie \(2016\)](#) value ≥ 0.7 depicts that the instrument is reliable.

Thus, from [Table 1](#) below the value of composite reliability ranges between 0.814 and 0.862. In addition, to establish convergent validity, Average Variance Extracted (AVE) was looked at and all the constructs have AVE value greater than 0.5 threshold recommended by [Fornell and Larcker \(1981\)](#). The value ranges between 0.502 and 0.613 as depicted in [Table 1](#). In addition, [Figure 2](#) below presents the measurement model for the lower order construct depicting the relationship between green HRM practices (green ability, green motivation, and green opportunities), and environmental performance, as well as the extent to which green TFL style attenuate such relationships. These could be vividly seen below:

Table 1. Item loadings, reliability and convergent validity.

Construct	Items	Loadings	CR	AVE
Environmental Performance	EP1	0.699	0.862	0.556
	EP2	0.725		
	EP3	0.793		
	EP4	0.768		
	EP5	0.737		
Green Transformational Leadership	GTFL2	0.609	0.834	0.502
	GTFL3	0.721		
	GTFL4	0.748		
	GTFL5	0.745		
	GTFL6	0.712		
Green Ability	GA1	0.713	0.842	0.516
	GA2	0.699		
	GA3	0.767		
	GA4	0.694		
	GA5	0.715		
Green Motivation	GM1	0.765	0.814	0.523
	GM2	0.731		
	GM3	0.737		
	GM4	0.656		
Green Opportunity	GO1	0.822	0.826	0.613
	GO2	0.709		
	GO3	0.813		

Note: CA = Cronbach's Alpha, CR = Composite Reliability and AVE = Average Variance Extracted.

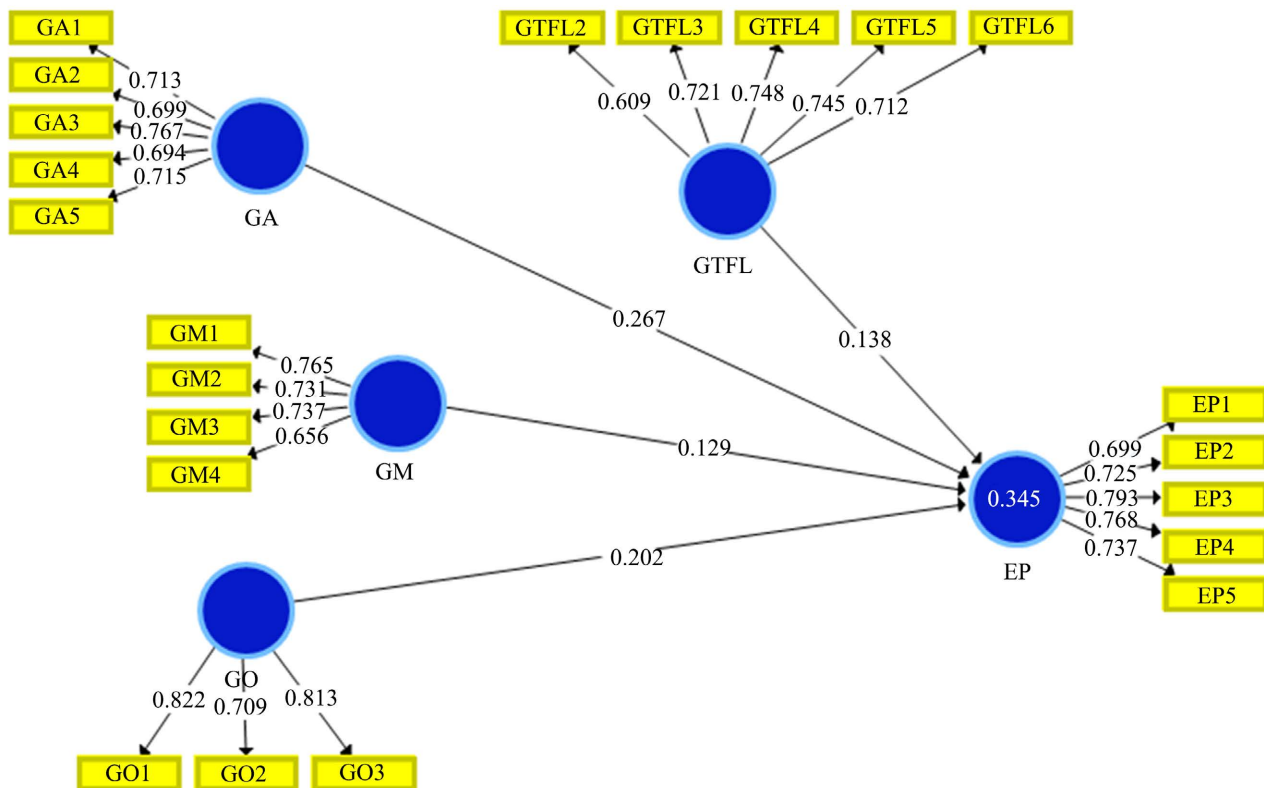


Figure 2. Measurement model for lower-order construct.

Figure 2 above shows the measurement model for the lower order construct. It could be observed that two items were deleted specifically (GA6) on green ability as one of the constructs measuring green HRM and (GTFL1) another item measuring green TFL. These items were removed due to low or weak item loadings as suggested by (Hulland, 1999), that any loading less than (0.50) should be removed. However, all the remaining items have loadings above 0.50 and hence their items were retained. **Table 1** shows the details:

Heterotrait-Monotrait (HTMT) ratio of correlation measure was used to investigate the discriminant validity of the reflective constructs, since it is believed to be more relevant and superior than Fornell-Larcker criterion and cross-loadings techniques. According to Henseler, Ringle and Sarstedt (2015), even though the Fornell-Larcker criterion and cross-loadings are the most commonly used methods by researchers for assessing discriminant validity, they do not reliably detect the lack of discriminant validity in common research situations, particularly when correlations range between 0.65 and 0.85. Meanwhile, two HTMT thresholds are recommended to confirm discriminant validity. First, Kline (2016) recommended a value of 0.85 for construct that are conceptually similar while Henseler et al. (2015) suggested a more relax benchmark of 0.90 for construct that conceptually different. Hence, the study chose 0.85 since the study's constructs are conceptually different. **Table 2** below shows that all the values are below the chosen threshold as such discriminant validity is established:

Table 2. Measurement model: discriminant validity heterotrait-monotrait ratio (HTMT).

Constructs	EP	GA	GM	GO	GTFL
EP					
GA	0.627				
GM	0.602	0.739			
GO	0.582	0.591	0.745		
GTFL	0.567	0.698	0.769	0.669	

To assess the collinearity and significance of formative model, the study two conditions were examined for each indicator to enter into the construct as outlined by Hair et al. (2014). First, is to assess the collinearity among the indicators with variance inflation factor (VIF) values, the value of which should not be greater than five (5). Second, is to assess the significance of statistical contribution (both relative and absolute contribution) of each indicator to the construct. Nevertheless, before assessing these conditions, as the construct is reflective-formative type of hierarchical component model (HCM), the disjointed two-step approach had been employed (see Figure 3). The first stage was performed by assessing the lower-order components based on the standard model which draws direct relationship between the constructs (Sarstedt et al., 2019). To assess the hierarchical component model (HCM) in the second stage, the latent variable scores from the stage one results allow creating and estimating this model. Consequently, the latent variable scores for green ability, green motivation and green opportunities were used to estimate green HRM practices.

Figure 3 shows the measurement model for the higher order construct using the disjointed two stage approach. Figure 3 is characterized by the outer weight of the dimensions of the green HRM, the association between green HRM and environmental performance, as well as the extent to which green TFL attenuate such relationship. Figure 3 also depicts the Beta values showing the predictive capacity of the variables. It could be observed that green HRM and EP has a Beta value of (0.489), green TFL and EP has a Beta value of (0.134), and lastly the moderator GTFL * GHRM and EP depicts a Beta value of (0.002). This simply implies that any change in green HRM practices would lead to about (48%) variability in the environmental performance. However, green TFL depicted very weak or almost no influence in moderating the relationship. The importance of the Beta values has been explained elaborately in Table 3, alongside their *P*-values and *T*. values. Table 3 also presents the outer weights, *T*-statistics, *P*-values, Outer loadings as well as the VIF.

As can be seen from Table 3, the VIF value of indicator of the formative construct (Green HRM Practices) is below the critical value of five (5). This clearly indicates that there is no multicollinearity between the indicators. On the other hand, the outer weights values of the formative indicators revealed evidence of

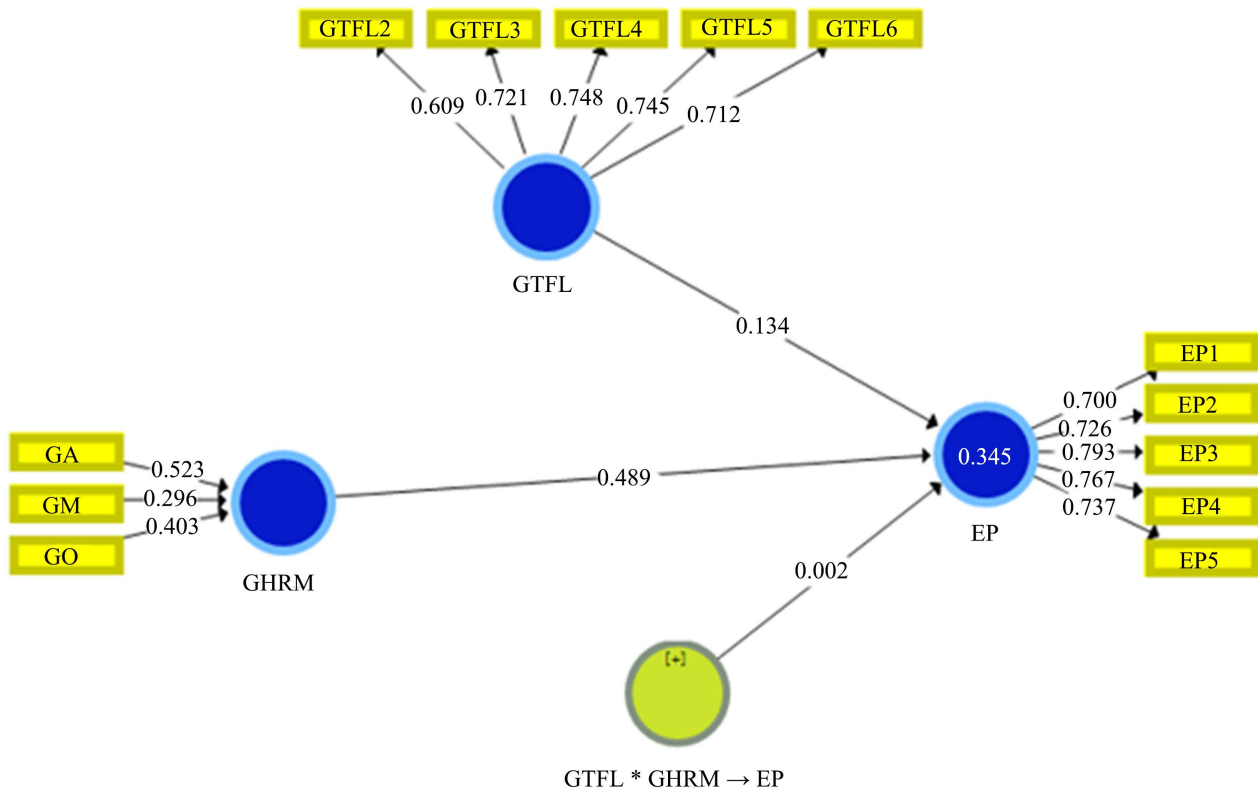


Figure 3. Measurement model for higher-order construct (the disjoint two-stage approach).

Table 3. Collinearity assessment of higher-order construct validity.

HOC	LOCs	Outer Weight	T-statistics	P-values	Outer Loadings	VIF
GHRM	GA	0.523	6.898	0.000	0.860	1.488
	GM	0.296	3.375	0.001	0.788	1.637
	GO	0.403	4.807	0.000	0.785	1.430

relative contributions to the main construct. Nevertheless, the outer loadings of the formative indicators have shown an absolute contribution or importance to the construct, as their respective values are all above the threshold of 0.50. Thus, all the three indicators GHRM are important to the formative construct (Hair et al., 2014; Sarstedt et al., 2019). To sum, all the adapted variables in this study are reliable and valid for the study.

4.3. Structural Model

The structural model was used to ascertain the hypothesized relationship between GHRM and EP, and the moderating role of GTFL. Furthermore, the co-efficient of determination R^2 , effect size f^2 and predictive relevance Q^2 were assessed in this section.

Figure 4 shows the structural model for the higher order construct (the disjointed two stage approach), showing the T-values. It could be observed that

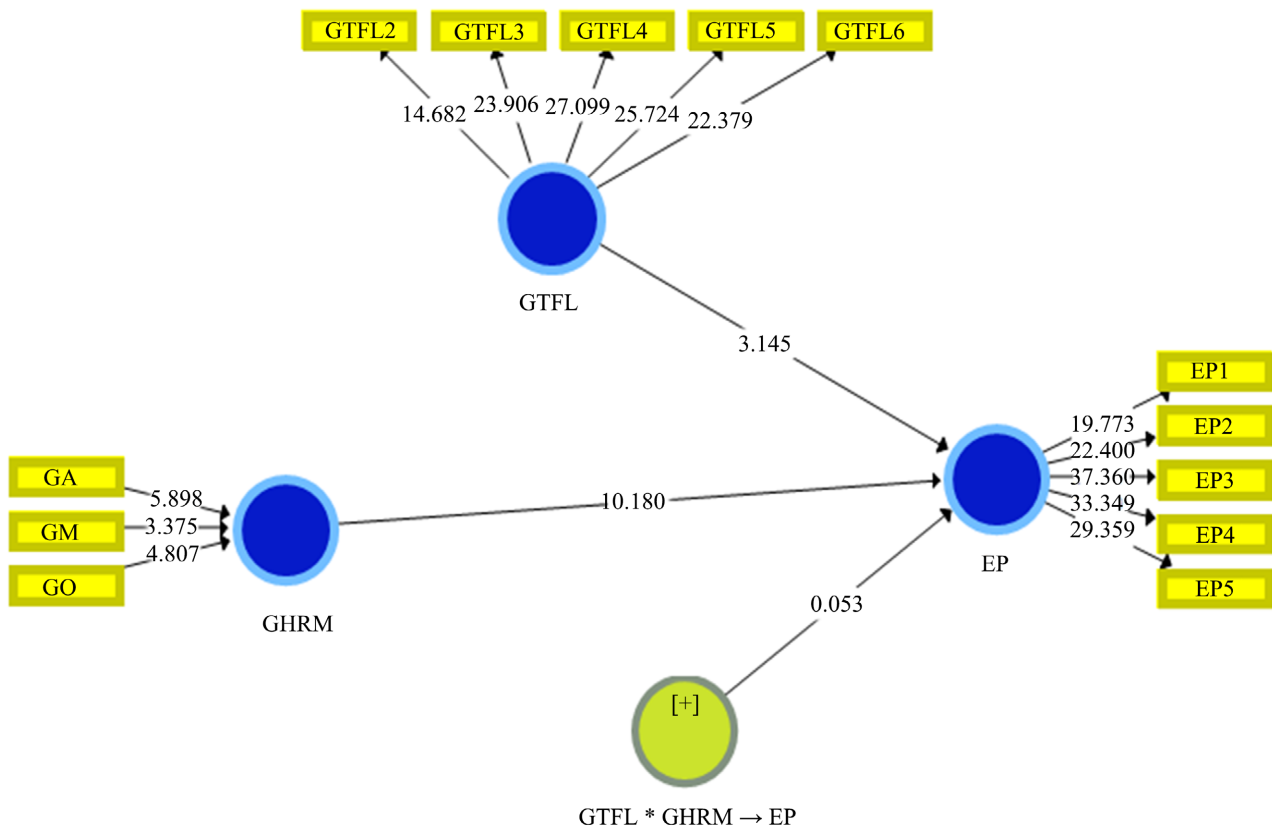


Figure 4. Structural model for higher-order construct (the disjoint two-stage approach).

T-Values for green HRM and EP is (10.180), and green TFL and EP is (8.145), and the moderator GTFL * GHRM and EP is (0.053). These results imply that green HRM has significant influence on environmental performance, while green TFL does not moderate such link significantly. These were vividly shown in **Table 4**.

Table 4 and **Figure 4** shows the model specification analysing the direct effect as hypothesised by the following. It can be seen that green HRM practices has a significant and positive effect on environmental performance ($\beta = 0.489$, T-value = 10.180, P -value = 0.000). This means a unit increase in green human resource management will lead to 48.9% increase in environmental performance. Thus, the first hypothesis (H_1) which states that Green HRM practices has positive and significant effect on environmental performance of hotels in Kano, Nigeria is hereby supported. On the contrary, the moderating result showed that green transformational leadership did not significantly moderate the relationship between green HRM practices and environmental performance ($\beta = 0.002$, $t = 0.958$, $P = 0.958$). The P -value 0.958 is more than the maximum threshold of 0.10 threshold to be statistically significant. Hence, hypothesis (H_2) which states that green TFL style moderates the relationship between green HRM practices and environmental performance of hotels in Kano, Nigeria was not supported.

The co-efficient of determination (R^2) is 0.345 (see: **Table 4**) which is the variance in the endogenous variable (EP) that is explained by the exogenous and moderating variables. It therefore, means that 35% of the variation in EP is explained by GHRM and GTFL. According to **Chin (1998)** R^2 value of 0.345 can be considered moderate. In addition, the checked for the effect size (f^2) which measure the individual contribution of the exogenous variable (GHRM and GTFL) to the variance in the endogenous variable (EP). **Cohen (1988)** the f^2 values of 0.02, 0.15, and 0.35, indicate small, medium, and large effects respectively. On the basis of Cohen's recommendations, GHRM and GTFL have 0.175 and 0.021 small effect size respectively while GTFL*GHRM has no effect size. Depicted in **Table 5**.

Lastly, the predictive relevance Q^2 which depicts the practical utility of the model is 0.175. It assesses whether a model accurately predicts data not used in the estimation of model parameters (**Hair et al., 2018**). According to **Garson (2016)** Q^2 must be greater than zero to clearly have a practical utility. Consequently, the study's model has predictive relance since value of 0.175 is greater than zero (0) shown in **Table 6**.

Table 4. Path coefficient (direct and indirect effect).

Hypotheses	Relationship	Beta	Standard Error	T-Values	P-Values	Decision
H ₁	GHRM → EP	0.489	0.048	10.180	0.000	Supported
H ₂	GTFL * GHRM → EP	0.002	0.045	0.053	0.958	Not Supported
R^2		0.345				

Using the coefficients (Beta) of the path relationship, the standard error (SE), and t-value (T Statistics), the hypotheses were tested at 5% level of significance.

Table 5. Assessment of effect size (f^2).

Construct	f^2 (EP)	Effect Size
GHRM	0.175	Small
GTFL	0.021	Small
GTFL * GHRM	0.000	Non

Table 6. Predictive relevance (Q^2).

	SSO	SSE	$Q^2 (=1 - SSE/SSO)$
EP	3245.000	2675.699	0.175
GHRM	1947.000	1947.000	
GTFL	3245.000	3245.000	
GTFL * GHRM → EP	649.000	649.000	

4.4. Discussions

Given the results obtained from the analysis, overall results indicate that green HRM practices were significant in explaining environmental performance of hotels in Kano. This finding was supported by previous studies who claimed that adopting green human resource practices can improve environmental performance (Irani et al., 2022; Nisar et al., 2021). Specifically, the findings means that the hotels make considerable efforts in ensuring that employees have the necessary competencies to carry out a particular task, including hiring and selection procedures, training, and development plans. Emphasis are placed on green staffing process by putting great effort in selecting the right person, hiring only those who possess environmental values, putting employee in to mandatory environmental training, design environmental training to enhance employee's environmental skills and knowledge, as well as monitor compliance by staff on use of the knowledge acquired through environmental training in their jobs. This is in line with the results of previous researches (Nisar et al., 2021; Yusouf et al., 2018) who also claimed that employee behaviour through green recruiting, selection, remuneration green training & development influence environmental consciousness of hotels.

In addition, the results also demonstrate that the hotels evaluate employee performance by the use of monetary and non-monetary rewards to encourage staff to fulfil their environmental performance targets. This is in line with Nisar, et al. (2021) who argued that green HR practices like staff appraisal on green practices favourably influence pro-environmental behaviour. More precisely, employee gets rewarded for environmental management, employee were encouraged and rewarded for acquiring specific environmental competencies, performance were assessed in line with environmental concerns, environmental incidents, responsibilities, concerns and policy were included as part of employees appraisals. These were also supported by Fazlurrahman, et al. (2021) who discovered that assessment of staff compliance with green policies and practices, also contribute to environmental performance. Similarly, the outcome of the analysis also shows that the hotels set guidelines that promote employee involvement in numerous tasks through heightened engagement, knowledge sharing, and individual freedom. In line with this, employees are inspired and encouraged to become environmental friendly, the hotel encourage team-work efforts for resolving environmental issues, and also give employees the freedom to discuss environmental issues in meetings, and perhaps suggests possible ways for improvement. This corroborates with Irani, et al. (2022) and Osolase, et al. (2022) who claimed that in order to boost employee involvement in eco-friendly efforts, its pertinent to implement green HR initiatives and practices like green competencies, team work, and knowledge sharing across the organization.

Conversely, the outcome of the analysis also revealed that green TFL style does not improve the relationship between green HRM practices and environmental performance of the hotels in Kano Nigeria. This result supports the ar-

guments that green TFL style only fosters environmental performance by inspiring, and encourages people within the organization to imbibe green practices (Zhao and Huang, 2022). However, organizations like the hotels industry themselves only established a green staffing policy that encourage recruitment, selection, and placement of those employees with green initiatives and enhance their skills and knowledge through training and development on green issues, establishment of performance based reward system in line with achievements and compliance with green practices. In a nutshell, the hotels leaderships only inspire subordinates with environmental plan, provide subordinates a clear environmental vision, encourage subordinates to work on environmental plan, motivates employees to attain environmental goals, consider environmental beliefs of the subordinates, as well as stimulating the subordinates to think and share their green ideas. These claims were also argued by Al-Serhan (2020) and Cop, et al. (2021) who posited that green TFL does not have direct relation with green HRM practices, but only create an enabling environment to encourage green practices and eco-friendly behaviours in organizations.

5. Conclusion

Based on the findings, this research concludes that green HR practices improve environmental performance of hotels in Kano, Nigeria. Also, the relationship between green HRM and environmental performance of the hotels does not improve with the existence of green TFL style. These imply that the hotels ensure that only people that possess the necessary competencies were employed. Greater attention is given to green staffing process by hiring only those who possess environmental values, putting employee in to mandatory environmental training, design environmental training to enhance employee's environmental skills and knowledge, as well as monitor compliance by staff on the use of knowledge acquired through environmental training in their jobs. Similarly, the hotels use rewards to inspire staff to meet their environmental performance targets. Employees' gets rewarded for environmental management, employees were encouraged and rewarded for acquiring specific environmental competencies, performance was appraised in line with environmental impacts, and environmental responsibilities, concerns and policy were included as part of employees appraisals. Also the hotels establish guidelines that promote teamwork, knowledge sharing, encourage the employee's to be environmental friendly, employee involvement in numerous tasks, as well as inspiring them to express their initiatives with regards to environmental policies and practices of the organization.

Recommendations

In line with the conclusion, it is recommended that management of hotels in Kano should reinforce their green HRM practices, by adequately improving and constantly review their green staffing process, green training and development, green appraisals with rewards, team work spirit, and sharing of green initiatives

to boost environmental performance. When these are achieved, the major issues of waste, water and energy pollution causing environmental problems could be reasonably saved, and these would foster environmental performance of the hotels not only in Kano but Nigeria at large. In addition, the customers also prefer those hotels that actively show concern on environmental issues, hence leading to increased patronage and satisfaction. Similarly, the government and policy makers will be guided appropriately in developing and enforcing laws and policies that support environmentally sustainable practices, thereby gaining an increased improvement in environmental standards.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Aboramadan, M., & Karatepe, O. M. (2021). Green Human Resource Management, Perceived Green Organizational Support and Their Effects on Hotel Employees' Behavioral Outcomes. *International Journal of Contemporary Hospitality Management*, 33, 3199-3222. <https://doi.org/10.1108/IJCHM-12-2020-1440>
- Ahmed, B., Xie, H., Zia-Ud-Din, M., Zaheer, M., Ahmad, N., & Guo, M. (2022). Fostering the Environmental Performance of Hotels in Pakistan: A Moderated Mediation Approach from the Perspective of Corporate Social Responsibility. *Frontiers in Psychology*, 13, 857906. <https://doi.org/10.3389/fpsyg.2022.857906>
- Al-Serhan, A. F. (2020). Role of Green Transformational Leadership in Sustainable Business Development: Mediating Effect of Green Technology Innovation. *Palarch's Journal of Archaeology of Egypt/Egyptology*, 17.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Cornell University Press.
- Arda, O. A., Bayraktar, E., & Tatoglu, E. (2019). How Do Integrated Quality and Environmental Management Practices Affect Firm Performance? Mediating Roles of Quality Performance and Environmental Proactivity. *Business Strategy and the Environment*, 28, 64-78. <https://doi.org/10.1002/bse.2190>
- Arulrajah, A. A., Opatha, H. H. D. N. P., & Nawaratne, N. N. J. (2016). Employee Green Performance of Job: A Systematic Attempt towards Measurement. *Sri Lankan Journal of Human Resource Management*, 6, 37-62. <https://doi.org/10.4038/sljhrm.v6i1.5631>
- Babalola, W., & Olapade, O. (2014). Direction for the Future of Tourism, Hospitality and Events Management Education in Nigeria. *Journal of Tourism, Hospitality and Sports*, 2, 39-52.
- Bass, B. M. (1990). From Transactional to Transformational Leadership: Learning to Share the Vision. *Organizational Dynamics*, 18, 19-31. [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S)
- Bhuiyan, M. A. H., Siwar, C., & Ismail, S. M. (2013). Tourism Development in Malaysia from the Perspective of Development Plans. *Asian Social Science*, 9, 11-18. <https://doi.org/10.5539/ass.v9n9p11>
- Boehm, S. A., Dwertmann, D. J., Bruch, H., & Shamir, B. (2015). The Missing Link? Investigating Organizational Identity Strength and Transformational Leadership Climate

- as Mechanisms That Connect CEO Charisma with Firm Performance. *The Leadership Quarterly*, 26, 156-171. <https://doi.org/10.1016/j.leaqua.2014.07.012>
- Bohdanowicz, P. (2005). European Hoteliers' Environmental Attitudes: Greening the Business. *Cornell Hotel and Restaurant Administration Quarterly*, 46, 188-204. <https://doi.org/10.1177/0010880404273891>
- Bombiak, E., & Marciniuk-Kluska, A. (2018). Green Human Resource Management as a Tool for the Sustainable Development of Enterprises: Polish Young Company Experience. *Sustainability*, 10, Article No. 1739. <https://doi.org/10.3390/su10061739>
- Bos-Nehles, A. C., van Riemsdijk, M., & Looise, J. C. (2013). Employee Perceptions of Line Management Performance: Applying the AMO Theory to Explain the Effectiveness of Line Managers' HRM Implementation. *Human Resource Management*, 52, 861-877. <https://doi.org/10.1002/hrm.21578>
- Chen, S., Qiu, H., Xiao, H., He, W., Mou, J., & Siponen, M. (2021). Consumption Behavior of Eco-Friendly Products and Applications of ICT Innovation. *Journal of Cleaner Production*, 287, Article ID: 125436. <https://doi.org/10.1016/j.jclepro.2020.125436>
- Chen, Y. S., & Chang, C. H. (2013). The Determinants of Green Product Development Performance: Green Dynamic Capabilities, Green Transformational Leadership, and Green Creativity. *Journal of Business Ethics*, 116, 107-119. <https://doi.org/10.1007/s10551-012-1452-x>
- Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. In M. G. A. (Ed.), *Modern Methods for Business Research*. Lawrence Erlbaum Associates.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Lawrence Erlbaum Associates, Publishers.
- Cop, S., Olorunsola, V. O., & Alola, U. V. (2021). Achieving Environmental Sustainability through Green Transformational Leadership Policy: Can Green Team Resilience Help? *Business Strategy and the Environment*, 30, 671-682. <https://doi.org/10.1002/bse.2646>
- Ding, X., Appolloni, A., & Shahzad, M. (2022). Environmental Administrative Penalty, Corporate Environmental Disclosures and the Cost of Debt. *Journal of Cleaner Production*, 332, Article ID: 129919. <https://doi.org/10.1016/j.jclepro.2021.129919>
- Du, K., Li, P., & Yan, Z. (2019). Do Green Technology Innovations Contribute to Carbon Dioxide Emission Reduction? Empirical Evidence from Patent Data. *Technological Forecasting and Social Change*, 146, 297-303. <https://doi.org/10.1016/j.techfore.2019.06.010>
- Dubey, R., Gunasekaran, A., Papadopoulos, T., & Childe, S. J. (2015) Green Supply Chain Management Enablers: Mixed Methods Research. *Sustainable Production and Consumption*, 4, 72-88. <https://doi.org/10.1016/j.spc.2015.07.001>
- Elrehail, H., Emeagwali, O. L., Alsaad, A., & Alzghoul, A. (2018). The Impact of Transformational and Authentic Leadership on Innovation in Higher Education: The Contingent Role of Knowledge Sharing. *Telematics and Informatics*, 35, 55-67. <https://doi.org/10.1016/j.tele.2017.09.018>
- Fazlurrahman, H., Rahman, M. F. W., & Arifah, I. D. C. (2021, November). Green Human Resource Management in the Hospitality Sector: A Systematic Literature Review. In *BISTIC Business Innovation Sustainability and Technology International Conference (BISTIC 2021)* (pp. 201-210). Atlantis Press.
- Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). SAGE Publications, Inc.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unob-

- servable Variables and Measurement Error. *Journal of Marketing Research*, 18, 39-50. <https://doi.org/10.1177/002224378101800104>
- Garson, G. D. (2016). *Partial Least Squares: Regression & Structural Equation Models* (3rd ed.). Statistical Publishing Associates.
- Gerhart, B. (2005). Human Resources and Business Performance: Findings, Unanswered Questions, and an Alternative Approach. *Management Revue*, 16, 174-185. <https://doi.org/10.5771/0935-9915-2005-2-174>
- Guest, D. W., & Teplitzky, A. L. (2010). High-Performance Environmental Management Systems: Lessons Learned from 250 Visits at Leadership Facilities. *Environmental Quality Management*, 20, 25-38. <https://doi.org/10.1002/tqem.20269>
- Hadi, P. (2021). *Pakistan Evolving to Develop Human Capacity in Tourism*. <https://www.globalvillagespace.com/pakistan-evolving-to-develop-human-capacity-in-tourism>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis* (7th ed.). Pearson Education Limited.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*. Springer Nature Switzerland. <https://doi.org/10.1007/978-3-030-80519-7>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). *When to Use and How to Report the Results of PLS-SEM*. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*, (7th ed.). Pearson Education International.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *Journal of Academic Marketing Science*, 43, 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hobincu, R. V. (2004). *Environmental Policy and the Creation of Environmental Management Systems*. Perfect.
- Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, Creativity, and Innovation: A Critical Review and Practical Recommendations. *The Leadership Quarterly*, 29, 549-569. <https://doi.org/10.1016/j.leaqua.2018.03.001>
- Hulland, J. (1999). Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Recent Studies. *Strategic Management Journal*, 20, 195-204. [https://doi.org/10.1002/\(SICI\)1097-0266\(199902\)20:2<195::AID-SMJ13>3.0.CO;2-7](https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7)
- Irani, F., & Kilic, H. (2022). An Assessment of Implementing Green HRM Practices on Environmental Performance: The Moderating Role of Green Process Innovation. *Journal of Global Hospitality and Tourism*, 1, 16-30. <https://doi.org/10.5038/2771-5957.1.1.1001>
- Irani, F., Kiliç, H., & Adeshola, I. (2022). Impact of Green Human Resource Management Practices on the Environmental Performance of Green Hotels. *Journal of Hospitality Marketing & Management*, 31, 570-600. <https://doi.org/10.1080/19368623.2022.2022554>
- 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, 3237-3255. <https://doi.org/10.3390/su10093237>
- Kano State Tourism Management Board Report (2020). Ministry of Art, Culture, and Tourism, Kano, Nigeria.
- Kasavan, S., Mohamed, A. F., & Halim, S. A. (2019). Drivers of Food Waste Generation: Case Study of Island-Based Hotels in Langkawi, Malaysia. *Waste Management*, 91, 72-79.

- <https://doi.org/10.1016/j.wasman.2019.04.055>
- Kim, Y. J., Kim, W. G., Choi, H. M., & Phetvaroon, K. (2019). The Effect of Green Human Resource Management on Hotel Employees' Eco-Friendly Behavior and Environmental Performance. *International Journal of Hospitality Management*, 76, 83-93. <https://doi.org/10.1016/j.ijhm.2018.04.007>
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling* (4th ed.). The Guilford Press.
- Kong, L., Sial, M. S., Ahmad, N., Sehleanu, M., Li, Z., Zia-Ud-Din, M., & Badulescu, D. (2021). CSR as a Potential Motivator to Shape Employees' View towards Nature for a Sustainable Workplace Environment. *Sustainability*, 13, Article No. 1499. <https://doi.org/10.3390/su13031499>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610. <https://doi.org/10.1177/001316447003000308>
- Kusi, M., Zhao, F., & Sukamani, D. (2021). Impact of Perceived Organizational Support and Green Transformational Leadership on Sustainable Organizational Performance: A SEM Approach. *Business Process Management Journal*, 27, 1373-1390. <https://doi.org/10.1108/BPMJ-09-2020-0419>
- Lavrakas, P. J. (2008). *Encyclopedia of Survey Research Methods*. SAGE Publications Ltd. <https://doi.org/10.4135/9781412963947>
- Li, L., Fuseini, J., Tan, M., & Sanitnuan, N. (2022). Effect of Green Transformational Leadership and Organizational Environmental Culture on Manufacturing Enterprise Low Carbon Innovation Performance. *Asia-Pacific Journal of Business Review*, 6, 27-60.
- Mansoor, A., Farrukh, M., Lee, J. K., & Jahan, S. (2021). Stimulation of Employees' Green Creativity through Green Transformational Leadership and Management Initiatives. *Sustainability*, 13, Article No. 7844. <https://doi.org/10.3390/su13147844>
- Masri, H. A., & Jaaron, A. A. M. (2017). Assessing Green Human Resources Management Practices in Palestinian Manufacturing Context: An Empirical Study. *Journal of Cleaner Production*, 143, 474-489. <https://doi.org/10.1016/j.jclepro.2016.12.087>
- Mittal, S., & Dhar, R. L. (2016). Effect of Green Transformational Leadership on Green Creativity: A Study of Tourist Hotels. *Tourism Management*, 57, 118-127. <https://doi.org/10.1016/j.tourman.2016.05.007>
- Muazu, L., Rashid, B., & Zainol, N. A. (2017). Predictors of Likelihood of Adoption of Green Practices in Hotels: The Case of Abuja and Lagos, Nigeria. *Environmental Management and Sustainable Development*, 6, 72-90. <https://doi.org/10.5296/emsd.v6i1.10931>
- Ng, T. W. (2017). Transformational Leadership and Performance Outcomes: Analyses of Multiple Mediation Pathways. *The Leadership Quarterly*, 28, 385-417. <https://doi.org/10.1016/j.leaqua.2016.11.008>
- Nisar, Q. A., Haider, S., Ali, F., Jamshed, S., Ryu, K., & Gill, S. S. (2021). Green Human Resource Management Practices and Environmental Performance in Malaysian Green Hotels: The Role of Green Intellectual Capital and Pro-Environmental Behavior. *Journal of Cleaner Production*, 311, Article ID: 127504. <https://doi.org/10.1016/j.jclepro.2021.127504>
- Nworuh, O. B., Morakinyo, O. M., Iwuala, C. C., Nwoke, E. A., & Ukomma, S. A. (2011). Wastes Management Practices in Selected Hotels in Owerri, Nigeria. *Journal of Environmental Sciences and Resource Management*, 3, 66-73.
- Ojeleye, Y.C., Ojeleye, C. I., Kareem, R. F., & Abdullahi, A. (2023). Proactive Personality and Entrepreneurial Intentions among Nigerian Students: Moderating Role of Perceived

- Institutional Support. *Oeconomica Jadertina*, 13, 19-34.
<https://doi.org/10.15291/oc.4139>
- Osolase, E. H., Rasdi, R. B. M., & Mansor, Z. B. D. (2022). Exploring the Awareness on Green Human Resource Development Practices among Hotel Industry Employees in Lagos State, Nigeria: A Preliminary Study. *International Journal of Academic Research in Business and Social Sciences*, 12, 34-45.
<https://doi.org/10.6007/IJARBSS/v12-i4/12913>
- Özgül, B., & Zehir, C. (2021). The Influence of Green-Transformational Leadership Style on Corporate Sustainability: A Systematic Literature Review and Propositions for Future Studies. *Istanbul Management Journal*, 90, 1-30.
<https://doi.org/10.26650/imj.2020.90.0001>
- Pham, D. D. T., Paillé, P., & Halilem, N. (2019). Systematic Review on Environmental Innovativeness: A Knowledge-Based Resource View. *Journal of Cleaner Production*, 211, 1088-1099. <https://doi.org/10.1016/j.jclepro.2018.11.221>
- Pham, N. T., Thanh, T. V., Tučková, Z., & Thuy, V. T. N. (2020). The Role of Green Human Resource Management in Driving Hotel's Environmental Performance: Interaction and Mediation Analysis. *International Journal of Hospitality Management*, 88, Article ID: 102392. <https://doi.org/10.1016/j.ijhm.2019.102392>
- Pinzone, M., Guerci, M., Lettieri, E., & Huisingh, D. (2019). Effects of "Green" Training on Pro-Environmental Behaviors and Job Satisfaction: Evidence from the Italian Healthcare Sector. *Journal of Cleaner Production*, 226, 221-232.
<https://doi.org/10.1016/j.jclepro.2019.04.048>
- Ren, M., Zeng, W., Yang, B., & Urtasun, R. (2018, July). Learning to Reweight Examples for Robust Deep Learning. In *International Conference on Machine Learning* (pp. 4334-4343). PMLR.
- Renwick, D. W., Redman, T., & Maguire, S. (2013). Green Human Resource Management: A Review and Research Agenda. *International Journal of Management Reviews*, 15, 1-14. <https://doi.org/10.1111/j.1468-2370.2011.00328.x>
- Rincon-Roldan, F., & Lopez-Cabrales, A. (2022). Linking Organisational Values and Sustainability: The Role of AMO Practices. *Personnel Review*, 51, 1651-1671.
<https://doi.org/10.1108/PR-06-2020-0414>
- Robertson, J. L., & Barling, J. (2017). Contrasting the Nature and Effects of Environmentally Specific and General Transformational Leadership. *Leadership & Organization Development Journal*, 38, 22-41. <https://doi.org/10.1108/LODJ-05-2015-0100>
- Roscoe, S., Subramanian, N., Jabbour, C. J., & Chong, T. (2019). Green Human Resource Management and the Enablers of Green Organisational Culture: Enhancing a Firm's Environmental Performance for Sustainable Development. *Business Strategy and the Environment*, 28, 737-749. <https://doi.org/10.1002/bse.2277>
- Rustam, A., Wang, Y., & Zameer, H. (2020). Environmental Awareness, Firm Sustainability Exposure and Green Consumption Behaviors. *Journal of Cleaner Production*, 268, Article ID: 122016. <https://doi.org/10.1016/j.jclepro.2020.122016>
- Sarstedt, M., Hair, J. F., HaJun-Hwa, C., Becker, J.-M., & Ringle, C. M. (2019). How to Specify, Estimate, and Validate Higher-Order Constructs in PLS-SEM. *Australasian Marketing Journal*, 27, 197-211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- Sekaran, U., & Bougie, R. (2016). *Research Method for Business: A Skill Building Approach* (7th ed.). John Wiley & Sons Ltd.
- Shafaei, A., Nejati, M., & Yusoff, Y. M. (2020). Green Human Resource Management: A Two-Study Investigation of Antecedents and Outcomes. *International Journal of Manpower*, 41, 1041-1060. <https://doi.org/10.1108/IJM-08-2019-0406>

- Shafiei, A., & Maleksaeidi, H. (2020). Pro-Environmental Behavior of University Students: Application of Protection Motivation Theory. *Global Ecology and Conservation*, 22, e00908. <https://doi.org/10.1016/j.gecco.2020.e00908>
- Sidney, M. T., Wang, N., Nazir, M., Ferasso, M., & Saeed, A. (2022). Continuous Effects of Green Transformational Leadership and Green Employee Creativity: A Moderating and Mediating Prospective. *Frontiers in Psychology*, 13, Article ID: 840019. <https://doi.org/10.3389/fpsyg.2022.840019>
- Singh, S. K., Del Giudice, M., Chierici, R., & Graziano, D. (2020). Green Innovation and Environmental Performance: The Role of Green Transformational Leadership and Green Human Resource Management. *Technological Forecasting and Social Change*, 150, Article ID: 119762. <https://doi.org/10.1016/j.techfore.2019.119762>
- Sobaih, A. E. E., Hasanein, A., Gharbi, H., & Abu Elnasr, A. E. (2022). Going Green Together: Effects of Green Transformational Leadership on Employee Green Behaviour and Environmental Performance in the Saudi Food Industry. *Agriculture*, 12, Article No. 1100. <https://doi.org/10.3390/agriculture12081100>
- Statista Report (2022). *Hospitality and Tourism Industry GDP Contribution by African Countries*. <https://www.statista.com/statistics/261754/international-tourism-receipts-of-african-countries>
- Stefanica, M., & Sandu, C. B. (2018). The Relationship between Hotels' Environmental Performance and Social Responsibility: Case Study on Italian Hotels from Veneto Region. In *Conference Proceedings: 2nd International Scientific Conference ITEMA* (p. 202). The Association of Economists and Managers of the Balkans. <https://doi.org/10.31410/itema.2018.202>
- Sudin, S. (2011, June). Strategic Green HRM: A Proposed Model That Supports Corporate Environmental Citizenship. In *International Conference on Sociality and Economics Development, IPEDR* (Vol. 10, pp. 79-83).
- Sun, X., El Askary, A., Meo, M. S., Zafar, N. U. A., & Hussain, B. (2022). Green Transformational Leadership and Environmental Performance in Small and Medium Enterprises. *Economic Research-Ekonomska Istraživanja*, 35, 5273-5291. <https://doi.org/10.1080/1331677X.2021.2025127>
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics* (7th ed.). Pearson Education.
- Ullah, M. (2017). Integrating Environmental Sustainability into Human Resource Management: A Comprehensive Review on Green Human Resource Management (Green HRM) Practices. *Maghreb Review of Economics and Management Journal*, 4, 6-22. <https://doi.org/10.12816/0037717>
- Yu, W., Chavez, R., Feng, M., Wong, C. Y., & Fynes, B. (2020). Green Human Resource Management and Environmental Cooperation: An Ability-Motivation-Opportunity and Contingency Perspective. *International Journal of Production Economics*, 219, 224-235. <https://doi.org/10.1016/j.ijpe.2019.06.013>
- Yu, W., Ramanathan, R., & Nath, P. (2017). Environmental Pressures and Performance: An Analysis of the Roles of Environmental Innovation Strategy and Marketing Capability. *Technological Forecasting and Social Change*, 117, 160-169. <https://doi.org/10.1016/j.techfore.2016.12.005>
- Yusouf, Y. M., Nejati, M., Kee, D. M. H., & Amran, A. (2018). Linking Green Human Resource Management Practices to Environmental Performance in Hotel Industry. *Global Business Review*, 21, 1-18. <https://doi.org/10.1177/0972150918779294>
- Zafar, A., Nisar, Q. A., Shoukat, M., & Ikram, M. (2017). Green Transformational Lea-

dership and Green Performance: The Mediating Role of Green Mindfulness and Green Self-Efficacy. *International Journal of Management Excellence*, 9, 1059-1066.

<https://doi.org/10.17722/ijme.v9i2.916>

Zhao, W. & Huang, L. (2022). The Impact of Green Transformational Leadership, Green HRM, Green Innovation and Organizational Support on the Sustainable Business Performance: Evidence from China. *Economic Research-Ekonomska Istraživanja*, 35, 6121-6141. <https://doi.org/10.1080/1331677X.2022.2047086>

Zhou, S., Zhang, D., Lyu, C., & Zhang, H. (2018). Does Seeing “Mind Acts upon Mind” Affect Green Psychological Climate and Green Product Development Performance? The Role of Matching between Green Transformational Leadership and Individual Green Values. *Sustainability*, 10, Article No. 3206. <https://doi.org/10.3390/su10093206>

Zhu, W., Chew, I. K., & Spangler, W. D. (2005). CEO Transformational Leadership and Organizational Outcomes: The Mediating Role of Human-Capital-Enhancing Human Resource Management. *The Leadership Quarterly*, 16, 39-52.

<https://doi.org/10.1016/j.leaqua.2004.06.001>

Zuraik, A., & Kelly, L. (2019). The Role of CEO Transformational Leadership and Innovation Climate in Exploration and Exploitation. *European Journal of Innovation Management*, 22, 84-104. <https://doi.org/10.1108/EJIM-10-2017-0142>