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Abstract

Environmental sustainability has emerged as a critical organizational priority, prompting researchers and practitioners to explore factors influencing Employee Green Performance (EGP). This study investigates the relationship between Environmental Management (EM) and EGP, with Environmental Commitment (EC) as a moderating variable. Grounded in Social Exchange Theory, the study employs a quantitative approach, using structured questionnaires to collect data from 180 employees in the Afghan banking sector. The findings reveal a significant positive relationship between Environmental Management and Employee Green Performance, affirming that organizational environmental practices effectively enhance employee engagement in sustainability-oriented behaviours. Moreover, Environmental Commitment strengthens this relationship, highlighting its critical role as a psychological driver that aligns individual motivations with organizational environmental goals. Moreover, the moderating role of Environmental Commitment strengthens this relationship, demonstrating that employees with a higher environmental commitment are more likely to exhibit green performance in response to Environmental Management initiatives. Based on the study's results, it is recommended that banks and other financial institutions foster a sustainability-focused organizational culture, prioritize employee training on environmental practices, and design initiatives that align employees' intrinsic motivations with the organization's environmental goals. Encouraging employee participation in green initiatives and recognizing discretionary green behaviours can further enhance EGP, driving organizational and ecological performance.

Keywords: Environmental Commitment, Environmental Management, Employee Green Performance, Banking Sector

1. Introduction

In the face of escalating environmental challenges, the role of employees in promoting sustainability has gained prominence. Employee green performance (EGP) refers to the extent to which employees voluntarily or formally engage in behaviours that contribute to environmental sustainability within their organizations (Daily et al., 2009). EGP is

essential for achieving organizational environmental goals, yet its determinants remain underexplored, especially in regions where environmental practices are still emerging. The motivation for this study lies in the growing recognition of employees' role in achieving organizational environmental goals. Given the increasing environmental challenges developing economies face, understanding how organizations can effectively drive EGP is critical for promoting sustainable development and supporting national environmental agendas. Scholars highlight that employee behaviours, both discretionary and mandated, significantly influence an organization's environmental outcomes (Ramus & Killmer, 2007). This gap is particularly evident in developing economies, where cultural, structural, and operational barriers hinder optimal employee engagement in sustainability practices. Research is needed to identify factors that enhance EGP, which is critical for organizations seeking to navigate the intersection of employee engagement and sustainability. Unlike previous studies that focused primarily on the impact of organizational support and financial incentives on employee performance (Renwick et al., 2016), this study goes a step further by investigating how intrinsic factors, such as employee environmental commitment (EC), moderate the relationship between environmental management (EM) and EGP.

Environmental management (EM) has emerged as a pivotal organizational strategy for addressing environmental challenges and enhancing sustainability (Renwick et al., 2016). As a systematic approach to planning, implementing, and monitoring environmental policies and practices, EM enables organizations to minimize their ecological footprint while improving operational efficiency (Masri et al., 2017). EM initiatives, such as implementing environmental management systems (EMS), cleaner production techniques, and cross-departmental collaborations, have demonstrated significant potential to enhance employee engagement in green behaviours (Delmas et al., 2012). Furthermore, organizations with robust EM practices often report improved employee morale, reduced absenteeism, and enhanced organizational commitment (Reinhardt et al., 1999; Wagner et al., 2011). Unlike prior studies that mainly emphasize the direct impact of EM on overall organizational outcomes (Delmas et al., 2012; Renwick et al., 2016), this study takes a more granular approach by examining how EM affects individual employee performance in the form of EGP. Focusing on Afghan banking sector employees, this study addresses a contextual research gap. It extends existing knowledge to a developing economy where the regulatory, institutional, and operational challenges are distinct from those in developed countries.

Environmental commitment (EC) has been recognized as a critical moderating variable that can enhance the effectiveness of EM in driving EGP (Paille & Morelos, 2014). Unlike prior studies that have examined EC as a standalone predictor of employee pro-environmental behaviour (Raineri & Paillé, 2016), this study investigates EC as a moderating variable that strengthens the relationship between EM and EGP. Focusing on the interaction between EM and EC, this study offers a more comprehensive understanding of how employee characteristics and organizational practices collectively drive EGP. This approach differentiates the current study from past research, which has primarily explored the direct effects of organizational factors on EGP without accounting for individual employee differences.

Despite its importance, the role of EC in moderating the relationship between EM and EGP has received limited attention in academic literature, particularly in developing economies. Addressing this gap is critical, as EC bridges the individual-organizational

interface and highlights the discretionary behaviours contributing to sustainability (Ramus & Killmer, 2007). This study seeks to investigate EC's moderating role, offering a novel contribution to the literature and advancing the understanding of how intrinsic employee factors interact with organizational practices.

Social Identity Theory (SIT) provides the underpinning framework for this study by explaining how individuals derive a sense of identity and belonging from their affiliation with organizations (Tajfel & Turner, 1986). SIT suggests that employees are more likely to adopt behaviours that align with organizational values when they identify with their organization. In the context of this study, SIT elucidates how EM fosters a shared environmental identity among employees, encouraging them to engage in green behaviours. EC strengthens this identification as a motivational driver that moderates the relationship between EM and EGP. By integrating SIT, this study contributes to the theoretical discourse on the interplay between individual and organizational factors in promoting sustainability. It also extends SIT by applying it to environmental management and employee behaviours in a developing economy.

1.1 Problem Statement

Afghanistan presents a unique context for studying the dynamics of EM, EGP, and EC due to its environmental vulnerabilities and socio-political challenges. Decades of instability have led to significant environmental degradation, compounded by limited regulatory enforcement and underdeveloped infrastructure. Establishing the National Environmental Protection Agency (NEPA) and introducing environmental legislation have been notable steps forward, but much remains to be done. As a cornerstone of Afghanistan's economic development, the banking sector holds significant potential to influence sustainable practices. However, limited research exists on the banking sector despite its potential to influence sustainability practices through financial policies and organizational operations. The problem addressed in this study is the limited understanding of how EM practices influence EGP, particularly in contexts where individual employee factors, such as EC, play a role in driving green behaviour. Unlike developed countries, where regulatory frameworks are well established, the Afghan banking sector faces challenges such as low environmental awareness, limited regulatory enforcement, and resource constraints. This problem necessitates a deeper understanding of how employee-level factors can support organizational sustainability goals in emerging economies like Afghanistan.

This study aims to investigate how EM influences EGP in Afghanistan's banking sector and examine the moderating role of EC in this relationship. By addressing a critical research gap, the study aims to provide actionable insights for policymakers and organizational leaders, contributing to the broader discourse on sustainability in emerging economies. The findings of this study will inform banking sector leaders on how to design EM policies that align with employee values, promote EC, and enhance EGP. This insight is significant for countries like Afghanistan, where environmental sustainability requires the active participation of employees due to the limited capacity of regulatory institutions to enforce environmental compliance.

1.2 Research Questions

The following questions are intended to address the following research questions:

- i. What is the impact of environmental management on employee green performance in the banking sector of Afghanistan?
- ii. *What is the moderating role of environmental commitment between environmental management and employee green performance in the banking sector of Afghanistan?*

2. Literature Review

2.1 Employee Green Performance (EGP)

Employee Green Performance (EGP) encompasses behaviours that contribute to an organization's sustainability goals, including both in-role tasks (required job responsibilities) and extra-role actions (voluntary, discretionary behaviours) (Daily et al., 2009). Recent studies, such as Pham et al. (2023), emphasize the need to explore how contextual factors like organizational policies and employee motivations impact EGP. For instance, Pham et al. (2023) conducted a study in the hospitality industry and found that a supportive organizational culture and green leadership positively influence EGP. This study used a mixed-methods approach, combining qualitative interviews with quantitative surveys to assess the relationship between organizational factors and EGP in Vietnam's hospitality sector.

These behaviours include recycling, reducing energy usage, supporting green initiatives, and innovating solutions for environmental challenges (Ramus & Killmer, 2007). Research indicates that EGP is influenced by individual motivation, organizational culture, and resource access (Raineri & Paillé, 2016). Research on EGP suggests that it is influenced by individual-level factors (such as personal motivation) and organizational factors (such as managerial support and incentives) (Raineri & Paillé, 2016). In their education sector study, Ahmad et al. (2022) examined the role of leadership style in promoting EGP. Using structural equation modelling (SEM), they found that transformational leadership significantly enhances EGP through increased employee motivation.

Despite existing research, most studies on EGP have focused on developed economies, while the factors influencing EGP in developing economies like Afghanistan remain underexplored. This gap highlights the need for further research to understand how organizational policies and employee commitment influence EGP in resource-constrained contexts.

2.2 Environmental Management (EM)

Environmental Management (EM) encompasses the policies, practices, and systems organizations implement to reduce environmental harm and promote sustainability (Renwick et al., 2016). EM includes environmental management systems (EMS), pollution prevention measures, and cross-departmental collaborations (Masri et al., 2017). Recent research by Lee et al. (2024) investigated how digital transformation impacts EM practices in the manufacturing sector. Their study, conducted in South Korea, used regression analysis to establish that adopting green digital tools significantly enhances the implementation of EMS and employee engagement in green behaviours.

EM is critical in shaping EGP by fostering a work environment that supports sustainable behaviour. Al-Ghazali et al. (2022) explored the role of EM in enhancing employee green

behaviour in Jordan's industrial sector. Their study, which applied a survey-based quantitative approach, revealed that waste management programs and sustainability training significantly impact EGP.

Despite these advancements, no evidence exists of how EM translates into EGP in developing economies, particularly Afghanistan. The absence of effective environmental management policies and enforcement mechanisms poses challenges in promoting employee-driven green behaviours. Therefore, this study focuses on the role of EM in driving EGP in Afghanistan's banking sector, where such relationships have not been thoroughly examined.

2.3 Environmental Commitment (EC)

Environmental Commitment (EC) is employees' intrinsic motivation, emotional attachment, and moral obligation toward supporting environmental sustainability (Raineri & Paillé, 2016). New evidence from Farooq et al. (2023) in the telecommunications sector of Pakistan shows that EC enhances EGP through the mediation of green self-efficacy. This study used SEM and found that employees with higher EC are more likely to engage in discretionary green behaviours.

Studies suggest that EC strengthens the impact of EM by enhancing employees' intrinsic drive to align their actions with organizational sustainability goals (Chou, 2014). For example, Kamal et al. (2023) studied the healthcare sector in Malaysia. They found that EC moderated the relationship between EM and EGP, with employees exhibiting stronger green behaviours when their environmental commitment was high. The study employed multi-group analysis (MGA) to highlight how different levels of EC affect the EM-EGP link.

Despite its recognized importance, studies on EC have primarily focused on developed economies. Limited attention has been paid to how EC influences EGP in developing countries like Afghanistan, where financial and cultural constraints may shape employees' motivations toward sustainability.

2.4 Underpinning Theory

This study is underpinned by Social Exchange Theory (SET), which explains how reciprocal relationships are established between organizations and employees (Blau, 1964; Cropanzano & Mitchell, 2005). SET posits that employees reciprocate organizational support, such as EM practices, by engaging in positive behaviours like EGP. This relationship has been empirically validated in sustainability (Raineri & Paillé, 2016), where employees reciprocate environmental training, support, and rewards by engaging in EGP. The present study extends SET by exploring how EC acts as a moderator in the EM-EGP relationship. While prior studies have examined the direct relationship between EM and EGP (Renwick et al., 2016), limited research has explored how EC influences this relationship, particularly in developing economies like Afghanistan. By addressing this gap, the study advances the theoretical understanding of the interplay between organizational policies and individual psychological factors driving EGP.

2.5 Environmental Management and Employee Green Performance

Extant research consistently shows that EM positively influences EGP by providing the necessary resources, training, and cultural support for green behaviours. For instance, Jabbour et al. (2010) argue that environmental training equips employees with the

knowledge and skills to effectively identify and address environmental challenges. Similarly, Renwick et al. (2013) emphasize that organizations implementing EMS observe higher levels of employee engagement in sustainability practices.

Environmental training is another key component of EM that positively influences EGP. According to Pinzone et al. (2016), organizations that invest in educating employees about environmental issues and sustainability practices see higher levels of eco-friendly behaviour. For example, training programs focusing on waste reduction, energy conservation, and pollution prevention enable employees to implement these practices daily. Pham et al. (2020) further highlight that environmental training fosters employee engagement by instilling a sense of responsibility toward organizational environmental goals.

However, inconsistencies arise in the literature regarding the extent of EM's influence. For example, while some studies find a strong correlation between EM and EGP, others highlight contextual challenges, such as resource constraints and cultural barriers, that limit EM's effectiveness (Zibarras & Coan, 2015). This underscores the need for studies focusing on specific industries and geographic contexts, such as Afghanistan's banking sector.

H1: Environmental management significantly influences employee green performance.

2.6 Environmental Commitment's Role in Environmental Management and Employee-Green Performance

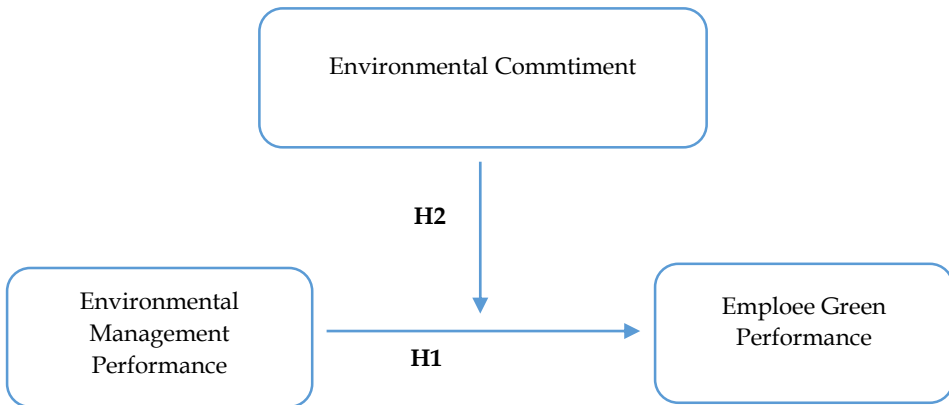
Studies on EC as a moderator suggest it enhances the EM-EGP relationship by fostering an emotional connection between employees and organizational sustainability goals. Raineri & Paillé (2016) argue that EC enables employees to internalize environmental values, leading to voluntary green behaviours. Keogh & Polonsky (1998) highlight that EC is a psychological driver, encouraging employees to exceed formal expectations in supporting green initiatives. EC is deeply rooted in employees' identification with organizational environmental values. According to Raineri and Paillé (2016), employees who perceive a strong alignment between their personal environmental beliefs and the organization's sustainability goals are likelier to exhibit green behaviours. This alignment strengthens the EM-EGP relationship by ensuring employees view organizational policies congruent with their values, thus fostering voluntary participation in green practices.

Choi and Yu (2014) further emphasize that EC enhances employees' willingness to exceed formal environmental expectations, such as adopting innovative waste-reduction strategies or participating in community-based green projects. Employees with high EC often perceive environmental initiatives as opportunities for personal growth and fulfilment, reinforcing their engagement in green performance. EC's moderating effect is particularly evident in discretionary green behaviours, which are not explicitly required but significantly enhance organizational sustainability. Meyer et al. (2001) noted that employees with strong EC are likelier to engage in proactive behaviours, such as identifying inefficiencies in environmental practices and suggesting improvements. This discretionary behaviour bridges the gap between formal EM practices and their successful implementation at the individual level.

Despite these insights, limited research examines how EC moderates the EM-EGP relationship, particularly in resource-constrained settings. This study addresses this gap by investigating EC's role in enhancing EM's effectiveness in Afghanistan's banking sector, where institutional and cultural challenges are prevalent. This study addresses a critical gap in understanding the EM-EGP relationship in developing economies. It also explores the under-researched moderating role of EC, offering new insights into individual-level factors that enhance organizational sustainability efforts.

H2: The relationship between environmental management and employee green performance is stronger when environmental commitment is high.

Figure 1
Theoretical Framework



Source: Created by the authors

3. Research Methodology

The methodology section provides a detailed account of this study's philosophical underpinnings, methods, and techniques. It outlines the systematic approach taken to explore the relationship between Environmental Management (EM) and Employee Green Performance (EGP) with the moderating role of Environmental Commitment (EC) in the banking sector of Afghanistan.

3.1 Research Philosophy and Approach

Positivism is particularly appropriate for quantitative data studies, as it facilitates hypothesis testing through statistical analysis. This approach avoids subjective interpretations and focuses on generating replicable and reliable results (Collis & Hussey, 2013). By employing surveys and structured questionnaires, the study adheres to the principles of positivism, ensuring that all conclusions are derived from empirical evidence.

The deductive approach is suitable for this study because it relies on established theories to explain the relationships among EM, EGP, and EC. Starting with a general premise and moving towards specific observations ensures the study remains focused and theoretically grounded (Creswell & Creswell, 2017).

3.2 Unit of Analysis

The unit of analysis for this study is the individual employees within the banking sector of Afghanistan. Since the study focuses on understanding how EM influences the green performance of employees, the data is collected at the individual level. Specifically, responses from employees working in both governmental and private banks are analyzed.

The focus on individuals as the unit of analysis allows the study to capture employee-specific factors, such as their commitment to environmental goals and engagement with organizational sustainability initiatives.

3.3 Population and Sample Size

The population of the study includes employees from all banks operating in Afghanistan. These consist of three governmental banks, seven private banks, and two international banks. The study excludes foreign banks, whose environmental management practices and training programs may differ significantly from local banks. A sample size of at least 180 respondents is targeted to ensure statistical reliability and representativeness. This number is determined based on the recommendation of collecting a minimum of five responses per variable for effective analysis (Hair et al., 2010).

$$n = \text{number of questions} * 10$$

$$n = 18 * 10 = 180$$

3.4 Sampling Technique

The study employs convenience sampling, a non-probability sampling technique, to collect data from employees working in the main branches of selected banks. Convenience sampling is chosen due to time and resource constraints and accessibility to the target population.

3.5 Operationalization of Variables

In order to maintain the study's reliability and validity, the environmental commitment was measured using eight items adapted from (Afsar et al., 2019). Environmental management will be assessed using seven adapted from (Alvarez Gil et al., 2001). Moreover, Pre-existing, validated scales (e.g., Pinzone et al., 2016 for EGP) were adapted and tested for content, construct, and criterion validity within the study's context. Internal consistency of the scales should be verified using Cronbach's Alpha, ensuring reliability across all items within each construct.

4. Data Analysis

After quantitative data collection, the next stage is to evaluate the quantitative data gathered from a sample of participants to answer research questions. However, several basic tasks must be done before evaluating the data. This guarantees that the information is accurate, complete, and acceptable for future investigation. These first processes are detailed in this chapter. General rules for computing and displaying basic descriptive statistics are offered.

4.1 Demographic Profile of Respondents

In this part, the details of the respondents as gender, age, education, and employment experiences are considered in the tables below:

Table 1

Respondents' Profile

Attribute	Frequency	Percentage %
Gender		
Male	137	76.1
Female	43	23.9
Age		
20-30	86	47.8
31-40	67	37.2
41-50	27	15
Above 50	0	0
Education		
12 th grade and college	26	14.4
Bachelor	74	41.1
Master and Phd	80	44.4
Work. Experience		
1 to 5 years	57	31.7
5 to10 Years	100	55.6
Above <10 Years	23	12.8

Source: Created by the authors

Males make up 76.1 per cent (n=137) of the total respondents, which is the largest percentage, according to table (4.1). 23.9 per cent (n=43) of the responders in the second category are female. A whopping 47.8% (n=86) of the responders, or the majority, are between the ages of 20 and 30. The age group of responders between (31-40) is the second largest, with 37.2% (n=67). Aged 41-50, the third group of respondents makes up 15% (n=27).

Undergraduate respondents comprise 41.1 per cent (n=74) of the total respondents, while postgraduate respondents comprise 40.4 per cent (n=80). Moreover, the next biggest category is high school and college graduates, with 14.4 per cent (n=26). According to the table, 31.7 per cent (n=57) of participants have worked for 1-5 years, compared to 55.6 per cent (n=100) of participants who have worked for 5-10 years. More than ten years of work experience were reported by 12.8% (n=23) of the respondents. The second largest, with 37.2% (n=67). Aged 41-50, the third group of respondents makes up 15% (n=27).

Undergraduate respondents comprise 41.1 per cent (n=74) of the total respondents, while postgraduate respondents comprise 40.4 per cent (n=80). Furthermore, the next biggest category is high school and college graduates, with 14.4 per cent (n=26).

4.2 Descriptive Statistics

Table 2

Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
EM	180	1.29	5.00	3.5730	.66218
EGP	180	1.67	5.00	4.0074	.63711
EC	180	2.00	5.00	4.0148	.59045
Valid N (listwise)	180				

Source: Created by the authors

4.3 Interpretation

1 =Strongly agree, 2 =agree, 3 =neutral, 4= = disagree, and 5= = strongly disagree are all shown in table (4.4) as (5, 4, 3, 2, and 1). As shown in the table above, the mean is 3.5730 (EM=3.5730), which indicates that, on average, all 180 respondents agree. For EGP, the mean is 4.0074 (EGP=4.0074), meaning that the respondents agree. For EC, the mean is 4.0148 (EC=4.0148), indicating that the respondents agree.

4.4 Reliability Analysis

Table 3
Reliability Test

Construct	Cronbach's alpha	Deleted items	No of items
EM	.799	0	7
EGP	.684	0	3
EC	.798	0	8

Source: Created by the authors

Any value more than or equal to 6 is regarded as dependable, whereas any value less than 6 is regarded as unaccepted or unreliable data. Reliability is defined as consistency or getting the same result. The acceptable and reliable level of Cronbach's alpha for EM is 799; if it is higher, 6 is regarded as reliable. The EGP's Cronbach's alpha is 684 and above and represents a reliable value. Cronbach's alpha for EC is 798, and if it is higher than.6, it is considered acceptable.

4.5 Normality

Table 4
Normality Test

	Skewness	SE_Skew	Kurtosis	SE_Kurt	Z_Kurt
EM	-0.552	0.181	-3.049	0.36	1.961
EGP	-1.192	0.181	-6.584	0.36	7.368
EC	-0.690	0.181	-3.811	0.36	2.836

Source: Created by the authors

EM has skewness (-0.552) that is greater than >-1 and non-normal, and kurtosis (0.706), which is less than 1 and usual, based on univariate skewness and kurtosis. For EGP, the skewness (-1.192) and kurtosis (2.654), the two more than >1, are non-normal. For EC, skewness (-0.690) -1 implies normalcy, whereas kurtosis (1.021) > 1 shows non-normality.

While several variables exist in the present investigation (EM, EGP, and EC), the investigator examined Mardia's multivariate skewness and kurtosis. Using Mardia's multivariate skewness and kurtosis, we can determine that the findings range from 2.30782 to 19.90909. The multivariate's range for skewness is +3, while its range for kurtosis is +10.

4.6 Moderation Analysis

The second table in SPSS, modelled by a linear regression analysis, is called Model Summary. It goes into great detail on the features of the model.

Table 5
Moderation Analysis

Model Summary						
R	R-sq	MSE	F	df1	df2	p
.6271	.3933	.2505	38.0308	3.0000	176.0000	.0000
Model						
	coeff	se	t	p	LLCI	ULCI
constant	4.0445	.0390	103.5994	.0000	3.9674	4.1215
EM	.2654	.0601	4.4194	.0000	.1469	.3840
EC	.4315	.0689	6.2638	.0000	.2956	.5675
Int_1	-.2808	.0873	-3.2181	.0015	-.4530	-.1086

Source: Created by the authors

4.7 Interpretation

The R-squared (R^2) value is 0.3933, which means that approximately 39.33% of the variance in Employee Green Performance (EGP) is explained by the model, including Environmental Management (EM), Environmental Commitment (EC), and their interaction (Int_1). While this is not an extremely high percentage, it is a reasonable indication of model fit given the complexity of real-world behavioural studies. The coefficient for Environmental Management (EM) is 0.2654, which is significant ($p < 0.000$). This means that for every unit increase in Environmental Management practices, Employee Green Performance increases by 0.2654 units, holding other variables constant. The coefficient for Environmental Commitment (EC) is 0.4315, which is also significant ($p < 0.000$). This indicates that for every unit increase in Environmental Commitment, Employee Green Performance increases by 0.4315 units, holding other variables constant. The interaction term (Int_1) is significant and highlights the importance of environmental commitment as a moderating variable in the relationship between environmental management and employee green performance. However, the negative interaction effect indicates that higher levels of EC may diminish the direct influence of EM on EGP. The lower and upper bounds of the confidence intervals (LLCI = -0.4530, ULCI = -0.1086) for the interaction term do not include zero, further confirming the significance of this moderating effect.

5. Conclusion

The analysis of this study demonstrates that Environmental Management (EM) significantly influences Employee Green Performance (EGP) and that Environmental Commitment (EC) moderates this relationship. These findings align with and extend the existing body of literature by highlighting the importance of organizational environmental practices and individual employee motivation in fostering sustainability-oriented behaviours.

The results corroborate previous studies that emphasize the role of EM in promoting green behaviours among employees. For example, Zibarras and Coan (2015) identified that organizational sustainability practices improve employees' eco-friendly behaviours by creating a supportive environmental culture. Similarly, Pinzone et al. (2016) noted that environmental training and resource allocation enhance employee engagement in green initiatives. This study reinforces these findings by demonstrating that EM positively influences EGP in the context of the Afghan banking sector, where institutional and cultural factors present unique challenges.

Additionally, the moderating role of EC supports the arguments made by Raineri and Paillé (2016), who emphasized that employees' psychological commitment amplifies the effectiveness of environmental policies. However, this study extends its findings by providing empirical evidence of EC's moderating effect in a resource-constrained and developing economy, thereby addressing a critical research gap.

Extension of Social Exchange Theory (SET): The findings affirm the applicability of SET in understanding the reciprocal relationship between organizational practices (EM) and individual behaviours (EGP). Demonstrating the moderating role of EC, the study highlights how intrinsic employee motivations strengthen the reciprocity framework.

5.1 Practical Implications

Organizations should integrate EM practices into their core strategies by investing in environmental training, developing green policies, and fostering a sustainability-focused culture. Managers should actively promote EC by aligning organizational values with employees' personal environmental beliefs, creating opportunities for participation in green initiatives, and recognizing discretionary green behaviours. In the banking sector, targeted initiatives such as energy-efficient workplace designs, waste management systems, and eco-friendly banking practices can enhance EGP and contribute to broader sustainability goals.

5.2 Future Directions

Exploration of Mediating Variables: Future studies could examine additional mediating variables, such as job satisfaction or perceived organizational support, to better understand the mechanisms underlying the EM-EGP relationship. Comparative studies could explore how cultural differences influence the strength of the EM-EGP relationship and the moderating role of EC.

References

- Al-Ghazali, B. M., Shah, S. H. A., & Sohail, M. S. (2022). The role of five big personality traits and entrepreneurial mindset on entrepreneurial intentions among university students in Saudi Arabia. *Frontiers in Psychology, 13*, 964875.
- Alvarez Gil, M. J., Burgos Jiménez, J., & Céspedes Lorente, J. J. (2001). An analysis of environmental management, organizational context, and performance of Spanish hotels. *Omega, 29*(6), 457-471.
- Choi, Y., & Yu, Y. (2014). The influence of perceived corporate sustainability practices on employees and organizational performance. *Sustainability, 6*(1), 348-364.
- Collis, J., & Hussey, R. (2014). Writing up the research. In *Business Research* (pp. 297-330). Palgrave Macmillan.

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- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Daily, B. F., Bishop, J. W., & Massoud, J. A. (2009). The role of training and empowerment in environmental performance: A study of the Mexican maquiladora industry. *International Journal of Operations & Production Management*, 29(3), 267-290.
- Delmas, M. A., & Pekovic, S. (2012). Environmental standards and labor productivity: Understanding the mechanisms that sustain sustainability. *Journal of Organizational Behavior*, 34(2), 230-252.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson.
- Jabbour, C. J. C., & Jabbour, L. C. F. (2010). Green human resource management and green supply chain management: Linking two emerging agendas. *Journal of Cleaner Production*, 18(10), 1031-1040.
- Keogh, P. D., & Polonsky, M. J. (1998). Environmental commitment: A basis for environmental entrepreneurship? *Journal of Organizational Change Management*, 11(1), 38-49.
- Masri, H. A., & Jaaron, A. A. (2017). Assessing green human resources management practices in the Palestinian manufacturing context: An empirical study. *Journal of Cleaner Production*, 143, 474-489.
- Paillé, P., & Mejía-Morelos, J. H. (2014). Antecedents of pro-environmental behaviours at work: The moderating influence of psychological contract breach. *Journal of Environmental Psychology*, 38, 124-131.
- Pham, N. T., Hoang, H. T., & Phan, Q. P. T. (2020). Green human resource management: A comprehensive review and future research agenda. *International Journal of Manpower*.
- Pinzone, M., Guerci, M., Lettieri, E., & Redman, T. (2016). Progressing in the change journey towards sustainability in healthcare: The role of 'Green'HRM. *Journal of Cleaner Production*, 122, 201-211.
- Raineri, N., & Paillé, P. (2016). Linking corporate policy and supervisory support with environmental citizenship behaviors: The role of employee environmental beliefs and commitment. *Journal of Business Ethics*, 137(1), 129-148.
- Ramus, C. A., & Killmer, A. B. (2007). Corporate greening through prosocial extra-role behaviours—a conceptual framework for employee motivation. *Business Strategy and the Environment*, 16(8), 554-570.
- Reinhardt, F. (1999). Market failure and the environmental policies of firms: Economic rationales for "beyond compliance" behaviour. *Journal of Industrial Ecology*, 3(1), 9-21.
- Renwick, D. W., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1-14.
-

- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
- Sharma, R., & Gupta, N. (2015, January). Green HRM: An innovative approach to environmental sustainability. In *Proceedings of the Twelfth AIMS International Conference on Management* (pp. 2-5).
- Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91(3), 482.
- Turban, D. B., & Greening, D. W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40(3), 658-672.
- Turner, J. C., & Oakes, P. J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *British Journal of Social Psychology*, 25(3), 237-252.
- Vallaster, C. (2017). Managing a company crisis through strategic corporate social responsibility: A practice-based analysis. *Corporate Social Responsibility and Environmental Management*, 24(6), 509-523. <https://doi.org/10.1002/csr.1424>
- Wagner, M. (2011). Corporate performance implications of extended stakeholder management: New insights on mediation and moderation effects. *Ecological Economics*, 70, 942-950.
- Zibarras, L. D., & Coan, P. (2015). HRM practices used to promote pro-environmental behavior: A UK survey. *The International Journal of Human Resource Management*, 26(16), 2121-2142.

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