BUKTI KORESPONDENSI

ARTIKEL JURNAL INTERNASIONAL BEREPUTASI

Judul artikel : Green servant leadership and environmental performance: the mediating effect of green human capital management practices and green intellectual capital

Jurnal : Measuring Business Excellence. Volume 30 (4). 599–613.

Penulis : **Juliansyah Noor, Mahmoud Ahmad Mahmoud**, **Donny Abdul Latief Poespowidjojo**, dan **Soleh**

No	Perihal	Tanggal
1	Bukti konfirmasi submit artikel dan artikel yang disbumit	06 September 2025
2	Bukti konfirmasi review dan hasil review	06 Desember 2025
3	Bukti konfirmasi submit revisi dan artikel yang diresubmit	16 Januari 2026
4	Bukti konfirmasi artikel accepted	10 Agustus 2026
5	Bukti artikel published online	30 Oktober 2026

1. Bukti Konfirmasi Submit Artikel dan Artikel yang Disbumit (06 September 2025)

UNIVERSITAS LA TANSA MASHIRO
جامعة لا تنس مهيرا

Juliansyah Noor <juliansyah.noor@unilam.ac.id>

Measuring Business Excellence - Account Created in Manuscript Central

1 pesan

Measuring Business Excellence <onbehalfof@manuscriptcentral.com> 6 September 2025 pukul 23.24
Balas Ke: josvaniwaarden.MBE@gmail.com
Kepada: juliansyah.noor@unilam.ac.id

06-Sep-2025

Dear Assoc. Prof. Noor,

A manuscript titled Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital (MBE-09-2025-0189) has been submitted by Dr. Mahmoud Mahmoud to the Measuring Business Excellence.

You are listed as a co-author for this manuscript. Manuscript Central, the online peer-review system, automatically creates a user account for you. Your USER ID and PASSWORD for your account is as follows:

Site URL: https://mc.manuscriptcentral.com/mbex
USER ID: juliansyah.noor@unilam.ac.id
PASSWORD: https://mc.manuscriptcentral.com/mbex?URL_MASK=3e91576f39cf4c1d9ccd9c1dd8c3a581 Please note that the single use link will expire on 09-Sep-2025 4:24:41 PM GMT / 09-Sep-2025 5:24:41 PM BST. If the single use link has expired, you can generate a single use password by entering your email address into the Password Help function on your site log in page: https://mc.manuscriptcentral.com/mbex

You can use the above USER ID and PASSWORD to log in to the site and check the status of papers you have authored/co-authored. This password is case-sensitive and temporary.

Please log in to https://mc.manuscriptcentral.com/mbex to update your account information and change your password. If you do not provide your contact details in your account information we will be unable to contact you with access details upon publication of your article.

Thank you for your participation.

Yours sincerely
Measuring Business Excellence Editorial Office
Log in to Remove This Account

Measuring Business Exce

Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital

Journal:	*Measuring Business Excellence*
Manuscript ID	MBE-09-2025-0189
Manuscript Type:	Research Paper
Keywords:	Green servant leadership, environmental performance, green human capital management practices, green intellectual capital

SCHOLARONE™
Manuscripts

Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital

Abstract

Purpose – This paper explores the connections between Green Servant Leadership (GSL), Green Human Capital Management (G-HCM) practices, Green Intellectual Capital (GIC), and the Environmental Performance (EVP) of firms. Specifically, the mediating effect of G-HCM practices between green servant leadership and green intellectual capital relationship, as well as the mediating effect of green intellectual capital on the G-HCM and environmental performance relationships were investigated.

Design/methodology/approach – Data were collected through a cross-sectional survey questionnaire from 203 rural banks in Indonesian banking sector. The study used partial least squares structural equation modeling to test the hypotheses.

Findings – The findings indicate that G-HCM practices act as a mediator between green servant leadership and green intellectual capital. Furthermore, the research highlights that G-HCM practices, via its impact on green intellectual capital, indirectly influences environmental performance. The results confirm that all direct and indirect effects hypothesized in the study were supported.

Research limitations/implications – Findings are limited to rural banks; cross-industry samples are encouraged in future studies.

Practical implications – GSL and G-HCM practices must be enhanced by managers to improve GIC and environmental performance.

Social implications – The findings promote sustainable banking practices that contribute to environmental protection and ecological responsibility.

Originality/value – The study makes a meaningful contribution to advancing current theories by suggesting that the connection between G-HCM practices and environment performance is not solely determined by the additive effects of green servant leadership and green intellectual capital nor by their interactive effects, but a combination of both.

Keywords: Green servant leadership, environmental performance, green human capital management practices, green intellectual capital

JEL: M12, M19, O15, Q59

Paper type Research paper

1. Introduction

The existing literature on business sustainability, particularly focusing on ecological utilization, predominantly emphasizes general banks rather than rural banking (Heikkurinen et al., 2019). Rural banking greatly contributes to commercial activities environmentally, yet it has received insufficient attention in academic research (Naidoo and Gasparatos, 2018; Mas et al., 2021). It is becoming common practice for businesses across industries to produce greener processes and products in response to rising stakeholder demands for implementing environmental management measures (Shahzad et al., 2020; Baaha et al., 2020). To address the complex sustainability issues and satisfy the demands of many stakeholders, businesses are encouraged to leverage intangible resources (Oprean-stan et al., 2020; Panda and Sangle, 2019). Previous studies have demonstrated that environmental performance is significantly affected by personnel at all levels and activities of a business (Hameed and Naeem, 2020; Singh et al., 2022). Executives have a pivotal role in the rural banking environment because of the considerable influence they have over rural banks' performance (Latan et al., 2018; Shahab et al., 2019).

Measuring Business Excellence

Organizational capabilities are pivotal in developing and sustaining effective environmental management systems (Asiaei et al., 2021; Longoni et al., 2016; Baumgartner & Winter, 2014). However, existing studies have primarily focused on manufacturing or general banking contexts, leaving rural banks largely underexplored. Rural banks face distinctive challenges, including limited resources, lack of employee capability and motivation, and underdeveloped environmental governance (Lam et al., 2021). These characteristics raise questions about whether existing theories of green leadership and organizational capabilities fully account for this context. By examining rural banks in Indonesia, this study extends prior theory by testing a dual-mediation model in which green servant leadership fosters environmental performance through green human capital management and green intellectual capital. In doing so, the study contributes to the literature by (1) addressing an under-researched organizational setting, (2) refining RBV and AMO theory to explain environmental performance in resource-constrained financial institutions, and (3) providing empirical evidence that the connection between G-HCM and EVP is not simply additive but emerges from the combined and mediated effects of leadership and intellectual capital.

According to Hayton (2004) and Štaffenová and Kucharčíková (2024), leadership and human capital management (HCM) are integral in building essential internal competencies and capabilities for human resource management in rural banking. Furthermore, prior studies indicate that corporate culture, self-efficacy, and factors influencing employee work motivation also affect the environmental performance (Camilleri et al., 2023; Blankenship et al., 2021). According to Mansoor et al. (2021) and Wei et al. (2023), leadership behavior can affect green intellectual capital (GIC) and environmental performance (EVP).

Aboramadan et al. (2020) and Tuan (2019) argue that executives in rural banking need to adopt a green servant leadership (GSL) approach as well as implement environmentally oriented human capital management practices. The aim is to encourage and support the development of internal competencies required for GIC as well as improve EVP (Jirakraisiri et al., 2021; Wang, 2019; Asiaei et al., 2022). This study aims to address two significant questions: (1) Does G-HCM impact GIC? (2) Does GSL contribute to implementing G-HCM practices linked to GIC and EVP? We use the ability–motivation–opportunity (AMO) theory (Appelbaum et al., 2000) and the resource-based view (RBV) framework (Barney, 2001) as the overarching theoretical foundation. AMO explains how leadership attributes such as capabilities, wisdom, knowledge, commitments, skills, attitudes, experiences, and creativity function through ability, motivation, and opportunity mechanisms to shape green human capital management (G-HCM), while RBV provides justification for why these intangible attributes serve as valuable and strategic resources for sustaining competitive advantage (Munawar et al., 2022, p. 142).

Literature review

2.1 Relationship between Green Servant Leadership (GSL) and G-HCM (CAP and SAM)

GSL involves "providing direction, empowering, and developing individuals to become environmentally conscious citizens, while demonstrating humility, authenticity, interpersonal acceptance, and stewardship in relation to employees' pro-environmental contributions" (Tuan, 2019b, p. 2). Elzek et al. (2024) suggest that GSL drives to take "a bottom-up approach to serve employees' green-related interests by providing resources necessary for their engagement in voluntary and creative green endeavors." (p.3119). Research indicates that the motivational aspect of GSL positively influences on environmental performance, talent management, and workforce productivity (Tuan, 2019b; Tang et al., 2018).

In contrast, Pangarso et al. (2024) and Dumont et al. (2016) state that G-HCM practices help them find, train, motivate, and retain environmentally conscious employees. To get a strong GSL and improve environmental performance, it is thought that the role of GSL within organizations is important for making G-HCM policies and practices that work well (Tang et al., 2018). GSL's focus on addressing the unique needs of employees may lead to the development and implementation of G-HCM practices aimed at maintaining motivation and empowerment among their workforce (Elzek et al., 2024). Therefore, GSL assumes a crucial

For Peer Review Only

role in ensuring the implementation of effective G-HCM practices. This includes hiring and firing, training and development, performance management and evaluation, as well as pay and incentive systems. Therefore, we predict that:

H1: GSL has a positive link to capabilities.

H2: GSL has a positive link to skills and motivation.

2.2 Relationship between G-HCM (CAP and SAM) and GIC

G-HCM is a strategy that can help businesses create and implement eco-friendly plans and procedures (Latan et al., 2018). Roscoe et al. (2019) conclude that G-HCM procedures are in line with the purpose of environmental accountability. Renwick et al. (2016) state that G-HCM highlights the importance of human resources in reducing pollution and improving an organization's operational procedures. Asiaei et al. (2021) define GIC as "the total stock of all kinds of intangible assets, knowledge, capabilities, and relationships, etc. about environmental protection or green innovation of both the individual and organization levels within a company" (p.1587). According to Shahriari and Allameh (2020) and Yong and Fawehinmi (2019), the concept of GIC represents a resource that cannot be defined in financial terms and rather focuses on the ability, skills, and experience of human beings, which can generate a competitive edge and enhance growth. Jyoti and Bhau (2015) argue that organizations recruit employees who are active on green initiatives, offer skills and motivation, and compensate; such G-HCM practices improve environmental performance. Thus, we postulate the following hypothesis.

H3: Capabilities positively link to GIC.

H4: Skills and motivation positively link to GIC.

2.3 GIC and EVP relationship

GIC enhances organizational performance by equipping individuals with the necessary knowledge, abilities, skills, and competencies. This proficiency enables better performance, which in turn contributes to overall organizational success (Roscoe et al., 2019; Shahriari and Allameh, 2020; Yong and Fawehinmi, 2019). EVP is an organization's efforts to meet and go beyond what society expects of them when it comes to caring for the environment, going beyond just following the rules and regulations (Chen et al., 2005). Consequently, GIC is a factor in enhancing EVP. Based on the provided explanation, we postulate the following hypothesis.

H5: GIC positively link to EVP.

2.4 Mediating effect of G-HCM (CAP and SAM) on the GSL and GIC relationship

An approach to leadership known as "servant leadership" prioritizes the development and well-being of subordinates (Yukl and Gardner, 2019). Conversely, G-HCM emphasizes sustainability and monitors the functioning of organizations and the impact of their systems and processes on employees, typically on a broader level (Lewis et al., 2014). Siddiquei et al. (2021) proved that GSL has a positive link to EVP. Yu et al. (2024) analyzed the association between servant leadership and organizational performance. Elzek et al. (2024) state that GIC (capabilities, skill and motivation) moderates the connection between servant leadership and firm performance, particularly in the tourism sector. Servant leaders enhance intellectual capital within organizations and contribute to the success of products and services in the market by employing inspirational motivation and intellectual stimulation (Khatri et al., 2023; Khan et al., 2024). Furthermore, to foster intellectual capital, servant leadership allows employees the autonomy to select their tasks and determine the means to accomplish their objectives (Soomro and Soomro, 2024). GSL fully supports "the protection of the natural environment and translates this vision into employees through the enhancement of environmental performance" p. 5), significantly influencing firms' G-HCM practices (Renwick et al., 2016; Mansoor et al., 2021). Pangarso et al. (2024) proposed that G-HCM mediate the connection between GSL and GIC. Thus, we propose a hypothesis as follows.

H6: Capabilities mediate the association between GSL and GIC.

For Peer Review Only

H7: Skills and motivation mediate the association between GSL and GIC.

2.5 Mediating effect of GIC on the G-HCM (CAP and SAM) and EVP relationship

Prior studies (Khatri et al., 2023; Tran et al., 2022) indicate that G-HCM methods affect GIC and the EVP. The implementation of G-HCM encompasses various employee traits, including "capabilities, wisdom, knowledge, commitments, skills, attitudes, experiences, and creativity" (Munawar et al., 2022, p. 142). Green intellectual capital is vital for enterprises since it creates value (Soomro and Soomro, 2024). Moreover, human skills, including knowledge, creativity, and commitment, are crucial to environmental performance (Sharma et al., 2021). Employees who have excellent human resources can improve performance and reduce waste, supporting environmental performance (Siddique et al., 2021). Teferaa and Hunsake (2021) suggest that intangible assets such as social, organizational, and psychological capital can foster positive dynamics in any organization. In addition, the EVP of the employees is a key determinant of how effectively the organization realizes its objectives within its long-term environmental policies (Seeck and Diehl, 2016; Noor et al., 2023). Therefore, we suggest that:

H8: GIC mediates the link between capabilities and EVP.

H9: GIC mediates the link between skills and motivation and EVP.

The research framework is presented in Figure 1, based on a thorough literature analysis of the proposed hypotheses.

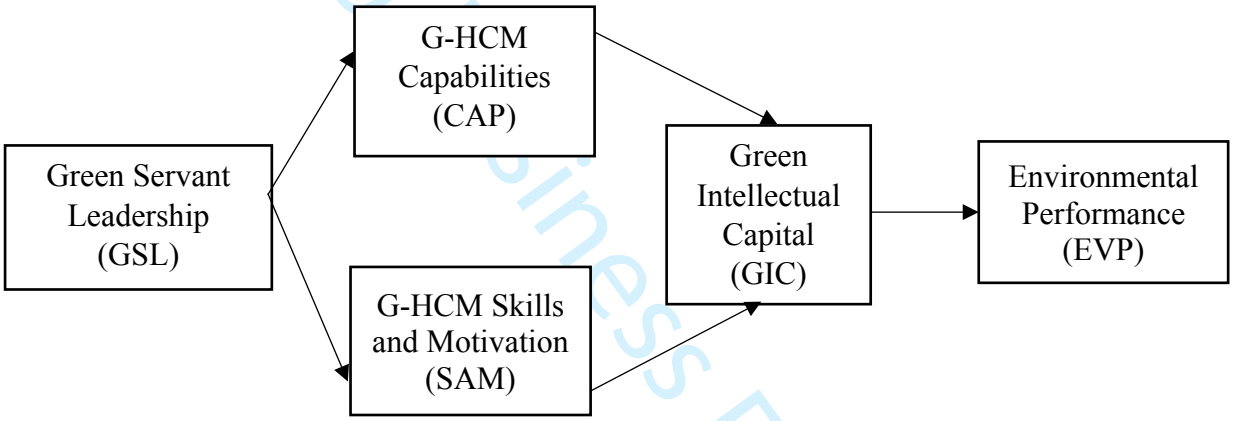


Figure 1. Research framework

3 Methodology

3.1 Sample and procedure

Consistent with preceding researches that used similar data collection and analysis methods, this study used the cross-sectional quantitative survey design (Shoaib et al., 2021; Mahmoud et al., 2022b). A total of 203 Indonesian rural banks were contacted, the researchers personally met with the general manager, human resources (HR) manager, and operations manager. These individuals completed the questionnaire and returned it. General managers filled out questionnaires related to GSL and EVP, while HR managers and operations managers completed questionnaires on G-HCM and GIC. All respondents rated the items on a five-point Likert scale, ranging from "1 (strongly disagree)" to "5 (strongly agree)". For this study, we employed the back-translation method, translating the questionnaire from English to Indonesian and then back to English, following the guidelines of Brislin (1986), as the majority of the respondents were Indonesian speakers.

3.2 Measurement of constructs

Based on a five-point Likert scale, the green servant leadership was assessed based on a 12-item scale (Tuan, 2019a). Sample items include, "My manager emphasizes the importance of contributing to the environmental improvement." G-HCM was measure using six items adapted

Measuring Business Excellence

from Singh et al. (2020). Sample items for G-HCM capabilities include "Recruiting only those who possess environmental values". The example for item of skills and motivation includes "Employees should use environmental training in their jobs". The GIC was measured by the seven-item framework from Asiaei et al. (2021). The sample item includes, "Managers in our organization can fully support their employees in achieving the goals of environmental protection". The scale measures environmental performance (EVP) was adapted from a 5-item scale, drawing inspiration from Boiral and Paille (2012) and Singh et al. (2020).

4 Results

4.1 demographic background

In this survey, 203 participants, including general managers, HR managers, and operations managers, were involved. There were 77.30% male and 22.70% female among general managers, with about 87% possessing at least bachelor's degree in law, engineering, and management respectively. Also, for HR managers, 64.60% of the respondents are males and 35.40% females, while 74.87% have at least a bachelor's degree in management, technology, and law. In the same way, of the operational managers, 85.30% were males and 14.70% were females, while 76.01% had bachelor's degrees in management and engineering. Finally, throughout the period, more than 55% of the rural banks had forty or more employees.

4.2 Measurement model

The PLS measurement model involves the assessment of item and construct reliability, as well as the convergent and discriminant validity of constructs (Mahmoud and Mahmoud, 2025; Mahmoud et al., 2025a, b). Item reliability result shows that all the items have a sufficient item reliability value above 0.70 (Hair et al., 2017). The threshold of the reliability coefficient used in this study was determined Hair et al. (2019) which argues that values >0.70 are sufficient to portray construct reliability for both the Cronbach alpha and Composite Reliability techniques. Table 1 displays the Cronbach alpha and Composite reliability values, which shows that all the values are greater than 0.70 indicating sufficient construct reliability. The construct convergent and discriminant validity were portrayed in Table 1 and Table 2. A construct is considered to have convergent validity when the Average Variance Extracted (AVE) is greater than 0.50 (Hair et al., 2017). All the AVE values in this study are between 0.624 and 0.724 and item loadings range is from 0.782 to 0.864, indicating that each construct demonstrated an impressive level of convergent validity (see Table 1). To ascertain the discriminant validity, Fornell and Larcker (1981) discriminant validity criteria was engaged; which requires that the AVE square root values for each construct must be larger than values within the same line of the correlation matrix to guarantee discriminant validity as portrayed in Table 2.

Table 1. Convergent Validity results

Table 2. Discriminant validity result

4.3 Structural model

Table 3 shows the results of the direct and indirect impacts tested using PLS-SEM modeling. According to Table 3, both H1 [GSL → CAP] and H2 [GSL → SAM] are supported by the data, with β values of 0.756 and 0.235, respectively, and t values of 18.568 and 4.761, respectively, and p-values that are less than or equal to 0.01, indicating that GSL positively and significantly impacts two dimensions of G-HCM in this study. Furthermore, Table 3 also shows that H3 [CAP → GIC], H4 [SAM → GIC], and H5 [GIC → EVP] are supported with values of ($\beta = 0.545$; $t = 7.267$, $p \leq 0.01$), ($\beta = 0.351$; $t = 6.722$, $p \leq 0.01$), and ($\beta = 0.568$; $t = 9.528$, $p \leq 0.01$) respectively. This indicates that green intellectual capital (GIC) is positively and significantly predicted by G-HCM, like capabilities and skills and motivation. Thus, the results

Measuring Business Excellence

have proved all the direct hypotheses. The mediating hypotheses H6 [GSL → CAP → GIC], H7 [GSL → SAM → GIC], H8 [CAP → GIC → EVP], and H9 [SAM → GIC → EVP] were also supported by the results ($\beta = 0.412$, $t = 7.267$, $p \leq 0.01$), ($\beta = 0.211$, $t = 3.541$, $p \leq 0.01$), ($\beta = 0.320$, $t = 4.558$, $p \leq 0.01$), and ($\beta = 0.198$, $t = 3.021$, $p \leq 0.01$), respectively. These findings suggest that GHCM dimensions positively mediate the green servant leadership (GSL) and GIC relationship, and the GIC mediates the GHCM dimensions and EVP relationships. Table 3 also thus confirmed all four of the study's indirect hypotheses (H6, H7, and H9) were accepted.

Table 3. The results of direct and indirect influences

5. Discussion

This study explores the connection between GSL, green human capital management (G-HCM) dimensions of capability and skills and motivation, GIC, and EVP. In line with the findings of H1 and H2 which shows a significant positive impact of GSL on G-HCM (CAP and SAM), a number of studies have shown a consistent result, with the most recent studies focusing on the retail industry (Yukl and Gardner, 2019; Renwick et al., 2016; Mansoor et al., 2021). Our research supplements and expands upon these findings by proving the positive role of GSL in enhancing G-HCM (CAP and SAM) among Indonesian rural banks. Likewise, the result approved the direct positive relationship between G-HCM (CAP and SAM) and GIC as described by H3 and H4. This indicates that employees with G-HCM (CAP and SAM) are more plausible to generate, share, and execute green ideas and practices, that strengthens the organization's GIC. H5 is the last direct hypothesis of the study, which validates the positive link between GIC and EVP. According to this finding, the GIC will increase the EVP. This adds to the existing literature in this field by indicating that GIC has the potential to enhance EVP of rural banks (Pangarso et al., 2024).

In addition, this study lends credence to the idea that G-HCM practices mediate the relationship between GSL and GIC as denoted by H6 and H7. This specify that green servant leaders, who give priority to environmental values and the development of employees, inspire and execute G-HCM practices like green training, empowerment, and motivation (Luu, 2020). These practices, will consequently improve the environmental capabilities of employees, the sharing of knowledge, and innovation which are the essential elements of GIC (Chen, 2008). G-HCM therefore serves as the conduit through which GSL drives the green knowledge assets development within organizations. Prior studies (Elzek et al., 2024; Khatri et al., 2023) find that leadership plays a significant role in shaping G-HCM, which in turn contribute to GIC in firms. Moreover, the study validates the indirect influence of G-HCM practices (CAP and SAM) on EVP through the GIC mediation as presented by H6 and H7. This finding serves as an important knowledge-based asset that could transmute green oriented human resource practices into sustainable results. G-HCM practices therefore nurture environmentally conscious capabilities, skills and motivation among the workforce (Jabbour and de Sousa Jabbour, 2016) which improve the GIC development to consequently facilitate the EVP (Chen, 2008).

6. Study Implications

The findings have important theoretical and practical ramifications and provide credence to all theories, both direct and indirect. Among the important theoretical ramifications is the mediating effect of GIC on the G-HCM practices (CAP and SAM) and EVP relationship which proves the theoretical support for the Resource-Based View (RBV), presenting the GIC as an important intangible and strategic resource that transforms G-HCM capabilities, skills and motivations into environmental performance at the organizational level (Hart, 1995). Preceding empirical studies proved that firms that leverage GIC as a mediating mechanism benefit from

Measuring Business Excellence

increased environmental efficiency and competitive advantage (Ángel del Brío, Junquera, and Ordiz, 2008; Pham, Hoang, and Phan, 2020). Another important theoretical ramification is that very few studies have analyzed the indirect impact of GSL on EVP by including two mediating variables. While there are some previous arguments linking GSL to environmental performance (Ha et al., 2023), This study delineates the fundamental relationship between two mediating variables and furnishes empirical proof of GSL's impact on EVP. As such, this study presents a comprehensive framework for understanding how GSL influences EVP through mediation processes. Furthermore, by focusing on environmental performance in the retail business, this study significantly contributes to the existing literature, particularly in the context of the rural banking that face various challenges. While there are a number of studies on G-HCM (Yusoff et al., 2020), most of them tend to view them as crucial elements for sustainable performance (Yusoff et al., 2020; Yong et al., 2019). This study goes beyond only looking at G-HCM activities through the lens of environmental management; it also helps us better understand how these method works, rather than just increasing EVP, contribute to the growth of GIC.

In practical sense, this study suggests that in order to increase environmental performance, rural banks must recruit environmentally conscious employees, and design appropriate selection methods that will ensure the prospective employees' understanding and concern for environmental matters. The study also suggests that managers implement green policies, which include promoting enhanced capabilities, skills, and motivation for staff members who do adhere to relevant environmental regulations, in light of the growing emphasis on environmental concerns in rural banks.

7. Conclusion

Our study proposes a number of conclusions for the rural banks. In order to develop G-HCM and maintain GIC, the research shows that green servant leadership is necessary. That is why it is imperative that rural banks educate their staff on environmental practices and initiatives through formal training programs. Additionally, making sure employees can put what they have learned in training to use is of the utmost importance. Because of this, retail employees will be able to advance their environmental literacy, which will boost GSL and EVP. Moreover, managers who want to promote G-HCM practices can learn a lot from this study, which provides strong evidence of the positive impacts of green servant leadership on G-HCM.

The findings also help managers recognize practices that can encourage the development of green intellectual capital among employees to improve environmental performance. It is important for the rural bank to recruit individuals who are environmentally conscious. To that end, recruiters can design appropriate selection methods, such as conducting tests to assess prospective employees' understanding and concern for environmental issues. Given the increasing attention to environmental issues in the rural banks, this study recommends that managers adopt green policies, including encouraging improved capabilities, skills, and motivation for employees who do comply with applicable environmental policies. Future research could explore different forms of servant leadership that support sustainable G-HCM. Given the complexity of G-HCM, we suggest that future research investigate the factors that influence environmental behavior and performance.

Acknowledgment

This research was conducted with the invaluable support of the Faculty of Business and Economics at La Tansa Mashiro University. The authors express their heartfelt thanks to the leadership within the faculty for their essential guidance and unwavering support, which were pivotal to the successful completion of this study.

References

Measuring Business Excellence

Aboramadan, M., Dahleez, K., and Hamad, M. H. (2020). Servant leadership and academics outcomes in higher education: the role of job satisfaction. *International Journal of Organizational Analysis*, *29*(3), 562–584. https://doi.org/10.1108/IJOA-11-2019-1923

Ángel del Brío, J., Junquera, B., and Ordiz, M. (2008). Human resources in advanced environmental approaches–a case analysis. International journal of production research, 46(21), 6029-6053.

Appelbaum, E., Bailey, T. R., Berg, P., and Kalleberg, A. L. (2000). *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Ithaca: ILR Press.

Asiaei, K., Bontis, N., Alizadeh, R., and Yaghoubi, M. (2021). Green intellectual capital and environmental management accounting : Natural resource orchestration in favor of environmental performance. *Business Strategy and the Environment*, *31*(1), 76–93. https://doi.org/10.1002/bse.2875

Asiaei, K., Jusoh, R., and Barani, O. (2022). How does green intellectual capital boost performance ? The mediating role of environmental performance measurement systems. *Business Stategy and Environment*, *31*(4), 1587–1606. https://doi.org/10.1002/bse.2971

Baaha, C., Opoku-Agyemanb, D., Acquahc, I. S. K., Agyabeng-Mensaha, Y., Afuma, E., Faibild, D., and Abdoulayea, F. A. M. (2020). Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: Evidence from manufacturing SMEs. *Sustainable Production and Consumption*, *27*, 100–114. https://doi.org/10.1016/j.spc.2020.10.015

Baumgartner, R. J., and Winter, T. (2014). The sustainability manager: A tool for education and training on sustainability management. *Corporate Social Responsibility and Environmental Management*, *21*(3), 167–174. https://doi.org/10.1002/csr.1313

Blankenship, J. C., Riffe, D., and Blankenship, J. C. (2021). Follow the Leader?: Optimism and Efficacy on Solo Journalism of Local Television Journalists and News Directors. *Journalism Practice*, *15*(1), 1–22. https://doi.org/10.1080/17512786.2019.1695535

Boiral, O., and Paille, P. (2012). Organizational Citizenship Behaviour for the Environment: Measurement and Validation. *Journal of Business Ethics*, *109*(4), 431–445. https://doi.org/10.1007/s10551-011-1138-9

Brislin, R. (1986). The Wording and Translation of Research Instruments. In W. J. Lonner and J. W. Berr (Eds.), *Field Methods in Cross-Cultural Research* (pp. 137–164). SAGE Publications.

Camilleri, M. A., Troise, C., and Morrison, A. M. (2023). Motivations and commitment to work in the hospitality industry: investigating employee psychology and responsible organizational behaviors. *Tourism Review*, *79*(1), 85–103. https://doi.org/https://doi.org/10.1108/TR-12-2022-0611

Chen, Y. S. (2008). The positive effect of green intellectual capital on competitive advantages of firms. Journal of business ethics, 77, 271-286.

Chen, Z. X., Aryee, S., and Lee, C. (2005). Test of a mediation model of perceived organizational support. *Journal of Vocational Behavior*, *66*(3), 457–470. https://doi.org/10.1016/j.jvb.2004.01.001

Dumont, J., Shen, J., and Deng, X. (2016). Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values. *Human Resource Management*, *56*(4), 613–627. https://doi.org/10.1002/hrm

Elzek, Y. S., Soliman, M., Riyami, H. Al, and Scott, N. (2024). Talent management and sustainable performance in travel agents: do green intellectual capital and green servant leadership matter? *Current Issues in Tourism ISSN:*, *27*(19), 3115–3130. https://doi.org/10.1080/13683500.2023.2252560

Elzek, Y. S., Soliman, M., Riyami, H. Al, Scott, N., Shihata, Y., Soliman, M., Riyami, H. Al,

Measuring Business Excellence

Scott, N., and Scott, N. (2024). *Current Issues in Tourism Talent management and sustainable performance in travel agents : do green intellectual capital and green servant leadership matter ?* https://doi.org/10.1080/13683500.2023.2252560

Fornell, C., and Larcker, D. F. (1981). Unobservable Variables and Measurement Error : Algebra and Statistics. *Journal of Marketing Research*, *18*(3), 382–388.

Ha, N. M., Nguyen, P. A., Luan, N. V., and Tam, N. M. (2023). Impact of green innovation on environmental performance and financial performance. *Environment, Development and Sustainability*, *26*, 17083–17104. https://doi.org/doi.org/10.1007/s10668-023-03328-4

Hair, J. F., Risher, J. J., Sarstedt, M., and Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hameed, Z., and Naeem, R. M. (2020). Do green HRM practices influence employees ' environmental performance ? *International Journal of Manpower*, *41*(7), 1061–1079. https://doi.org/10.1108/IJM-08-2019-0407

Hart, S. L. (1995). A natural-resource-based view of the firm. Academy of management review, 20(4), 986-1014.

Hayton, J. C. (2004). Strategic human capital management in SMEs: An empirical study of entrepreneurial performance. *Human Resource Management*, *42*(4), 375–391. https://doi.org/10.1002/hrm.10096

Heikkurinen, P., Young, C. W., and Morgan, E. (2019). Business for sustainable change : Extending eco-efficiency and eco-sufficiency strategies to consumers. *Journal of Cleaner Production*, *218*, 656–664. https://doi.org/10.1016/j.jclepro.2019.02.053

Jabbour, C. J. C., and de Sousa Jabbour, A. B. L. (2016). Green human resource management and green supply chain management: Linking two emerging agendas. Journal of cleaner production, 112, 1824-1833.

Jirakraisiri, J., Badir, Y. F., and Frank, B. (2021). Translating green strategic intent into green process innovation performance: the role of green intellectual capital. *Journal of Intellectual Capital*, *22*(7), 43–67. https://doi.org/https://doi.org/10.1108/JIC-08-2020-0277

Jyoti, J., and Bhau, S. (2015). Impact of Transformational Leadership on Job Performance: Mediating Role of Leader–Member Exchange and Relational Identification. *SAGE Open*, *5*(4). https://doi.org/10.1177/2158244015612518

Khan, M. M., Mubarik, M. S., Ahmed, S. S., and Tahir Islam, S. U. R. (2024). Utilizing every grain of intellect: exploring the role of individual-level intellectual capital in linking servant leadership with innovative work behavior. *Journal of Intellectual Capital*, *25*(1), 23–37. https://doi.org/doi.org/10.1108/JIC-11-2021-0307

Khatri, P., Dutta, S., Kumari, P., Duggal, H. K., Thomas, A., Cristillo, I., and Nobi, S. (2023). Modeling intellectual capital-based intrapreneurial ability of working professionals through servant leadership and self-efficacy. *Journal of Intellectual Capital*, *24*(6), 1485–1505. https://doi.org/10.1108/JIC-10-2022-0208

Lam, L., Nguyen, P., Le, N., and Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 1–16. https://doi.org/10.3390/joitmc7010066

Latan, H., Jose, C., Jabbour, C., Beatriz, A., Sousa, L. De, Fosso, S., and Shahbaz, M. (2018). Effects of environmental strategy, environmental uncertainty and top management's commitment on corporate environmental performance: The role of environmental management accounting. *Journal of Cleaner Production*, *180*(4), 297–306. https://doi.org/10.1016/j.jclepro.2018.01.106

Lewis, B. W., Walls, J. L., and Dowell, G. W. S. (2014). Difference in Degrees: Ceo

Measuring Business Excellence

Characteristics and Firm Environmental Disclosure. *Strategic Management Journal*, *35*(5), 712–722. https://doi.org/doi.org/10.1002/smj.2127

Longoni, A., Luzzini, D., and Guerci, M. (2016). Deploying Environmental Management Across Functions : The Relationship Between Green Human Resource Management and Green Supply Chain Management. *Journal of Business Ethics*, *151*, 1081–1095. https://doi.org/10.1007/s10551-016-3228-1

Luu, T. T. (2019). Green human resource practices and organizational citizenship behavior for the environment: The roles of collective green crafting and environmentally specific servant leadership. Journal of Sustainable Tourism, 27(8), 1167-1196.

Mahmoud, M. A., Ma'aji, M. M., Abdullahi, M. S., Karaye, A. B., and Garba, A. S. (2025a). Factors influencing the Islamic Fintech acceptance: moderating role of Islamic financial literacy. Journal of Islamic Accounting and Business Research.

Mahmoud, M. A., and Mahmoud, A. (2025). Government support and SMEs' dimensional performance during the COVID-19 crises: Does disruption orientation matter?. International Journal of Productivity and Performance Management.

Mahmoud, M. A., Umar, U. H., Danlami, M. R., and Ado, M. B. (2025b). An analysis of Islamic financing access in Nigeria: perspectives of MSME owners. International Journal of Islamic and Middle Eastern Finance and Management, 18(1), 49-67.

Mansoor, A., Jahan, S., and Riaz, M. (2021). Does green intellectual capital spur corporate environmental performance through green workforce? *Journal of Intellectual Capital*, *22*(5), 823–839. https://doi.org/https://doi.org/10.1108/JIC-06-2020-0181

Mas, F. D., Tucker, W., Massaro, M., and Bagnoli, C. (2021). Corporate social responsibility in the retail business : A case study. *Corporate Social Responsibility and Environmental Management.*, *29*(1), 223–232. https://doi.org/10.1002/csr.2198

Munawar, S., Yousaf, H. Q., Ahmed, M., and Rehman, S. (2022). Effects of green human resource management on green innovation through green human capital, environmental knowledge, and managerial environmental concern. *Journal of Hospitality and Tourism Management*, *52*(3), 141–150. https://doi.org/10.1016/j.jhtm.2022.06.009

Naidoo, M., and Gasparatos, A. (2018). Corporate Environmental Sustainability in the retail sector: Drivers, strategies and performance measurement. *Journal of Cleaner Production*, *203*(12), 125–142. https://doi.org/10.1016/j.jclepro.2018.08.253

Noor, J., Tunnufus, Z., Handrian, V. Y., and Yumhi, Y. (2023). Green human resources management practices , leadership style and employee engagement : Green banking context. *Heliyon*, *9*(12), 1–10. https://doi.org/10.1016/j.heliyon.2023.e22473

Oprean-stan, C., Stan, S., and Br, V. (2020). Corporate Sustainability and Intangible Resources Binomial : New Proposal on Intangible Resources Recognition and Evaluation. *Sustainability*, *12*(10), 1–23. https://doi.org/doi:10.3390/su12104150 10.3390/su12104150 downloaded on 2020-06-10

Panda, S. S., and Sangle, S. (2019). Stakeholder engagement as a dynamic capability. *Business Strategy and Developmentdeve*, *3*(2), 204–212. https://doi.org/10.1002/bsd2.89

Pangarso, A., Setyorini, R., Umbara, T., and Latan, H. (2024). Green Organizational Culture and Competitive Advantage in Indonesian Higher Education: The Mediation Roles of Green Human Capital Management and Absorptive Capacity. In M. Y. Yusliza and D. W. S. Renwick (Eds.), *Green Human Resource Management: A View from Global South Countries* (pp. 139–161). Springer International Publishing. https://doi.org/doi.org/10.1007/978-981-99-7104-6_8 139

Pham, N. T., Hoang, H. T., and Phan, Q. P. T. (2020). Green human resource management: a comprehensive review and future research agenda. International Journal of Manpower, 41(7), 845-878.

Renwick, D. W. S., Jabbour, C. J. C., Muller-Camen, M., Redman, T., and Wilkinson, A.

For Peer Review Only

(2016). Contemporary developments in Green (environmental) HRM scholarship. *International Journal of Human Resource Management*, *27*(2), 114–128. https://doi.org/10.1080/09585192.2015.1105844

Roscoe, S., Subramanian, N., Jabbour, C. J. C., and 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*(5), 737–749. https://doi.org/10.1002/bse.2277

Seeck, H., and Diehl, M. (2016). A literature review on HRM and innovation – taking stock and future directions. *The International Journal of Human Resource Management*, *28*(6), 913–944. https://doi.org/10.1080/09585192.2016.1143862

Shahab, Y., Ntim, C. G., Chen, Y., Ullah, F., Li, H.-X., and Ye, Z. (2019). Chief executive officer attributes , sustainable performance , environmental performance , and environmental reporting : New insights from upper echelons perspective. *Business Strategy and Development*, *29*(1), 1–16. https://doi.org/10.1002/bse.2345

Shahriari, M., and Allameh, S. M. (2020). Organizational culture and organizational learning : does high performance work systems mediate ? *Journal of Workplace Learning*, *32*(8), 583–597. https://doi.org/10.1108/JWL-03-2020-0047

Shahzad, M., Qu, Y., Ullah, A., Ding, X., and Ur, S. (2020). Translating stakeholders ' pressure into environmental practicese The mediating role of knowledge management. *Journal of Cleaner Production*, *275*. https://doi.org/10.1016/j.jclepro.2020.124163

Sharma, S., Prakash, G., Kumar, A., Krishna, E., and Antony, J. (2021). Analysing the relationship of adaption of green culture , innovation, green performance for achieving sustainability : Mediating role of employee commitment. *Journal of Cleaner Production*, *303*, 127039. https://doi.org/10.1016/j.jclepro.2021.127039

Shoaib, M., Abbas, Z., Yousaf, M., Zámečník, R., Ahmed, J., and Saqib, S. (2021). The role of GHRM practices towards organizational commitment: A mediation analysis of green human capital. Cogent Business and Management, 8(1), 1870798.

Siddique, M., Ali, K., Kausar, N., and Chaudhry, M. A. (2021). Enhancing environmental performance through green HRM and green innovation : Examining the mediating role of green creativity and moderating role of green shared vision Enhancing Environmental Performance through Green HRM and Green Innovation : Examining. *Pakistan Journal of Commerce and Social Sciences*, *15*(2), 265–285.

Siddiquei, A., Asmi, F., Asadullah, M. A., and Mir, F. (2021). Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: a case of China. *International Journal of Manpower*, *42*(7), 1161–1182. https://doi.org/10.1108/IJM-07-2020-0350

Singh, S. K., Del Giudice, M., Chiappetta Jabbour, C. J., Latan, H., and Sohal, A. S. (2022). Stakeholder pressure, green innovation, and performance in small and medium-sized enterprises: The role of green dynamic capabilities. *Business Strategy and the Environment*, *31*(1), 500–514. https://doi.org/10.1002/bse.2906

Singh, S. K., Giudice, M. Del, Chierici, R., and 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*(1), 1–23. https://doi.org/10.1016/j.techfore.2019.119762

Soomro, S. A., and Soomro, S. A. (2024). Green intellectual capital and employee environmental citizenship behavior : the mediating role of organizational agility and green creativity. *Journal of Intellectual Capital*, *25*(4), 822–840. https://doi.org/10.1108/JIC-03-2024-0067

Štaffenová, N., and Kucharčíková, A. (2024). Human capital management – values , competencies , and motivation – concerning Industry 4 . 0. *Economic Research-*

For Peer Review

Ekonomska Istraživanja, *37*(1), 1–22. https://doi.org/10.1080/1331677X.2024.2324160

Tang, G., Chen, Y., Jiang, Y., Paillé, P., and Jia, J. (2018). Green human resource management practices: scale development and validity. *Asia Pacific Journal of Human Resources*, *56*(1), 31–55. https://doi.org/10.1111/1744-7941.12147

Teferaa, C. A., and Hunsake, W. D. (2021). Intangible assets and organizational citizenship behavior: A conceptual model. *Heliyon*, *6*(7), 1–11.

Tran, N. P., Dinh, C. T. H., Hoang, H. T. T., and Vo, D. H. (2022). Intellectual Capital and Firm Performance in Vietnam : The Moderating Role of Corporate Social Responsibility. *Sustainability*, *14*(19), 1–13. https://doi.org/https://doi.org/10.3390/su141912763

Tuan, L. T. (2019a). Effects of environmentally-specific servant leadership on green performance via green climate and green crafting. *Asia Pacific Journal of Management*, *38*(9), 925–953. https://doi.org/doi.org/10.1007/s10490-019-09687-9

Tuan, L. T. (2019b). Environmentally-specific servant leadership and green creativity among tourism employees : dual mediation paths. *Journal of Sustainable Tourism*, *28*(1), 1–24. https://doi.org/10.1080/09669582.2019.1675674

Wang, C. (2019). How organizational green culture influences green performance and competitive advantage The mediating role of green innovation. *Journal of Manufacturing Technology Management*, *30*(4), 666–683. https://doi.org/10.1108/JMTM-09-2018-0314

Wei, F., Abbas, J., Alarifi, G., Zhang, Z., Adam, N. A., and Queiroz, M. J. de. (2023). Role of green intellectual capital and top management commitment in organizational environmental performance and reputation: Moderating role of pro-environmental behavior. *Journal of Cleaner Production*, *405*. https://doi.org/https://doi.org/10.1016/j.jclepro.2023.13684

Yong, J. Y., and Fawehinmi, O. O. (2019). Green human resource management: A systematic literature review from 2007 to 2019. *Benchmarking: An International JournaL*, *27*(7), 2005–2027. https://doi.org/10.1108/BIJ-12-2018-0438

Yong, J. Y., Yusliza, M., Ramayah, T., and Fawehinmi, O. (2019). Nexus Between Green Intellectual Capital and Green Human Resource Management. *Journal of Cleaner Production*. https://doi.org/10.1016/j.jclepro.2018.12.306

Yu, T., Abbas, J., Abbas, R., and Hina, R. (2024). Role of environment - driven CSR, green servant leadership, and green dynamic capabilities in firm green innovation: Evidence from manufacturing industry. *Environment, Development and Sustainability*, *26*(11), 24521–24568. https://doi.org/10.1007/s10668-024-05201-4

Yukl, G., and Gardner, W. L. (2019). *Leadership in Organizations* (9th eds.). Pearson Education Limited.

Yusoff, Y. M., Nejati, M., Kee, D. M. H., and Amran, A. (2020). Linking Green Human Resource Management Practices to Environmental Performance in Hotel Industry. *Global Business Review*, *21*(3), 663–680. https://doi.org/10.1177/0972150918779294

For Peer Review Only

Table 1. Convergent Validity results

Variables	Item	Loading	Alpha	CR	AVE
Green Servant Leadership	GSL1	0.722			
	GSL2	0.734			
	GLS3	0.855			
	GLS4	0.873			
	GLS5	0.812			
	GLS6	0.712			
	GLS7	0.762	0.841	0.864	0.699
	GLS8	0.803			
	GLS9	0.765			
	GLS10	0.823			
	GLS11	0.861			
	GLS12	0.792			
Capabilities	CAP1	0.829			
	CAP2	0.819	0.803	0.861	0.624
	CAP3	0.802			
Skills and motivation	SAM1	0.793			
	SAM2	0.901	0.796	0.782	0.724
	SAM3	0.817			
Green Intellectual Capital	GIC1	0.750			
	GIC2	0.788			
	GIC3	0.849			
	GIC4	0.860	0.817	0.812	0.654
	GIC5	0.768			
	GIC6	0.874			
	GIC7	0.798			
Environmental performance	EVP1	0.849			
	EVP2	0.865			
	EVP3	0.765	0.798	0.801	0.723
	EVP4	0.789			
	EVP5	0.801			

Note: AVE-Average Variance Extracted; CR-Composite Reliability
Source(s): Authors' own work

Table 2. Discriminant validity result

Variables	GSL	CAP	SAM	GIC	EVP
GSL	**0.775**				
CAP	0.756	**0.851**			
SAM	0.751	0.801	**0.862**		
GIC	0.729	0.786	0.761	**0.790**	
EK	0.567	0.756	0.643	0.701	**0.818**

Note: GSL= green servant leadership; CAP= capabilities; SAM= skills and motivation; GIC= green intellectual capital; EVP= environmental performance.
Source(s): Authors' own work

Measuring Business Excellence

Table 3. The results of direct and indirect influences

Hypotheses	Relationships	beta	t-value	ρ-value	Discission
H1	GSL → CAP	0.756	18.568	0.000	Accepted
H2	GSL → SAM	0.235	4.761	0.001	Accepted
H3	CAP → GIC	0.545	7.267	0.000	Accepted
H4	SAM → GIC	0.351	6.722	0.000	Accepted
H5	GIC → EVP	0.568	9.528	0.000	Accepted
H6	GSL → CAP → GIC	0.412	4.123	0.000	Accepted
H7	GSL → SAM → GIC	0.211	3.541	0.005	Accepted
H8	CAP → GIC → EVP	0.320	4.558	0.000	Accepted
H9	SAM → GIC → EVP	0.198	3.021	0.002	Accepted

Note: GSL= green servant leadership; CAP= capabilities; SAM= skills and motivation; GIC= green intellectual capital; EVP= environmental performance.
Source(s): Authors' own work

Measuring Business Excellence

2. Bukti Konfirmasi Review dan Hasil Review (06 Desember 2025)

Measuring Business Excellence - Decision on Manuscript ID MBE-09-2025-0189

From: Measuring Business Excellence (onbehalfof@manuscriptcentral.com)

To: elmahmuud@yahoo.com; elmahmuud88@gmail.com

Date: Saturday, December 6, 2025 at 06:01 AM GMT+8

05-Dec-2025

Dear Dr. Mahmoud Mahmoud:

Manuscript ID MBE-09-2025-0189 entitled "Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital" which you submitted to the Measuring Business Excellence, has been reviewed. The comments of the reviewers are included at the bottom of this letter.

The reviewers have recommended major revisions to the submitted manuscript, before it can be considered for publication. Therefore, I invite you to respond to the reviewers' comments and revise your manuscript.

To revise your manuscript, log into https://mc.manuscriptcentral.com/mbex and enter your Author Centre, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.

You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Please also highlight the changes to your manuscript within the document by using the track changes mode in MS Word or by using bold or coloured text.

Once the revised manuscript is prepared, you can upload it and submit it through your Author Centre. The deadline for uploading a revised manuscript is 06-Mar-2026 from receiving this email. If it is not possible for you to resubmit your revision within this timeframe, we may have to consider your paper as a new submission.

When submitting your revised manuscript, you will be able to respond to the comments made by the reviewer(s) in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s).

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Please note that Emerald requires you to clear permission to re-use any material not created by you. If there are permissions outstanding, please send these to Emerald as soon as possible. Emerald is unable to publish your paper with permissions outstanding.

Once again, thank you for submitting your manuscript to the Measuring Business Excellence and I look forward to receiving your revision.

Yours sincerely
Dr. Jos van Iwaarden
Editor, Measuring Business Excellence
josvaniwaarden.MBE@gmail.com

Associate Editor
Comments to the Author:
(There are no comments.)

Reviewers' Comments to Author:

Referee: 1

Recommendation: Minor Revision

Comments:
This is quite interesting work. The introduction requires some additional work to improve its clarity and readability. Specifically, move the content on page 2 lines 18-25 to after the sentence on page 1 around line 57, beginning with "Previous studies have demonstrated..." Also, I recommend moving the sentence on page 1 around line 58 that begins with "Executives have a pivotal role..." to begin the paragraph on page 2 line 26. These two edits would make the supporting material for "personnel" and "executive"--as those two roles relate to environmental performance--flow more clearly.

On page 2 near line 14, you introduce RBV and AMO, only to define them around line 34 on page 2. I recommend you define them as soon as you introduce them or hold your assertion that the study adds to the literature until the end of the introduction.

In your literature review, section 2.1, you introduce GSL. I recommend you also relate GSL to servant leadership theory as many readers may be familiar with it notionally, but unaware of the connection. You do this later in section 2.4, but I recommend doing it earlier. For example, define servant leadership--> define GSL ---> let the literature demonstrate the relationship between GSL and G-HCM. IN the same section para 2, you begin with "in contrast" which prepared me for some other result than improved EVP. I recommend another opener, such as "additionally."

Again, in the same section, you argue that GSL's "focus on addressing the unique needs of employees..." connects with G-HCM, but you haven't supported that unique focus when you introduced GSL earlier. Moreover, I can not find where you have linked G-HCM directly to "capabilities," and "skills and motivation." However, later in section 2.2, you assign those variables to GIC (see lines 20-21). I recommend you move the sentence around page 4 lines 7-9 that clearly shows these variables linked to G-HCM.

Finally, in section 2.1, you posit that GSL assumes a crucial role vis a vis G_HCM. I found myself seeking a definition of the main concepts at this point. I recommend you add a section to the literature review to simply define the terms, then use subsequent sections to give evidence to the relationships.

In section 2.2, it is difficult to draw a straight line in the evidence presented between G-HCM and GIC. Moreover, around line 22, the sentence beginning with "Jyoti and Bhau (2015)..." is worded awkwardly.

In section 2.3, the evidentiary line is clearer, but it could be improved by connecting EVP to organizational success.

In section 2.4, line 42, you begin the second sentence with "Conversely..." This transition does not fit with the flow. I recommend "Moreover..." Additionally, I recommend you move from general to particular concerning the relationship between servant leadership and performance in lines 44-46 on page 3. Also, I was curious what the literature concluded about the relationships, not just the evidence that they are related. How does GSL relate to EVP according to Siddiquei et al (2021)? The sentence in lines 54-56 on page 3 seems to be missing a full in text citation.

Section 2.5 does not provide a clear line for evidence leading to H8 and H9. After line 10, the author takes a leap from tight definitions of GIC to generalities about human performance. I recommend strengthening the evidence by keeping it within GIC literature.

In section 4.1, the demographics would be more readable in table or (better) graphical format or both.

In section 4.2, the PLS measurement model is not introduced in long form.

In section 5, around line 35, the wording in the sentence beginning with "This specify that..." is grammatically incorrect (verb form).

ON page 7 in lines 8 the sentence beginning with "While there are some..." has a capitalization error.

In section 7, the author's first conclusion's support seems circular. I recommend the author repeat the conclusion that there are relationships. If moving towards practical application, one conclusion is that using GSL improves G-HCM's abilities to improve GIC and thus, EVP. One might argue that hiring for GSL is of utmost importance.

Additional Questions:
1. Originality: Does the paper contain new and significant information adequate to justify publication?: Yes, limited to rural banks in Indonesia. Additionally, it claims to add to the literature by studying the relationship of two mediating variables that have been omitted in previous work.

2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: I make recommendations for revisions in this area to the author. At times, the author's line from concept to hypothesis in the literature review needs additional work. In most cases, my recommendations are simply to rearrange the evidence.

3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: The methodology is clear and appropriate. The theoretical bases for the study appear to be solid and appropriate.

4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: The results are presented clearly, however the conclusions seem to race to an end and read more like practical applications.

5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: This paper has some implications for research and practice. First, it adds to the literature by extending theories into a specific industry sector and type (rural banks in Indonesia). It does an adequate job of bridging theory and practice. In practice, its conclusions may be used to improve organizational performance limited to environmental performance. There are some limits as identified (rural banks), but the conclusions should discuss limitations more extensively, including the study's locum in Indonesia.

6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: Generally, yes, but this is where some improvement is in order. See my specific comments to the author on the introduction section to improve the reader's grasp for the concepts and constructs more immediately.

Referee: 2

Recommendation: Major Revision

Comments:

The Author is strongly advised to take the proposed suggestions into careful consideration.

Additional Questions:
1. Originality: Does the paper contain new and significant information adequate to justify publication?: Originality and Scope The manuscript presents noteworthy elements of originality. It clearly outlines—albeit with some room for improvement—the enhancement processes regarding both leadership models in rural banks and the management innovation processes currently taking place in Indonesia. These processes constitute significant indicators of a transition toward a sustainable future, particularly concerning environmental sustainability and human resource management.

2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: Literature Review Green Servant Leadership is a topic of substantial interest with high potential impact, not only on local rural banks but also on communities and territories. Therefore, it is advisable to expand the bibliography, primarily by citing Greenleaf on servant leadership and Teece on dynamic capabilities. Furthermore, it would be valuable to investigate within the literature whether and how green servant leadership constitutes an innovation with respect to the existing values and/or managerial culture of the country under investigation. Finally, the authors should explore the literature regarding the differences and points of convergence with the concept of "purpose."

3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: Methodology and Data Analysis It appears that the study relies exclusively on quantitative data derived from the survey. Although the authors state that "the researchers met with the general manager, human resources (HR) manager, and operations manager," it is advisable to conduct qualitative analyses on themes such as leadership, skills, motivation, and human capital. This would allow the researchers to gain direct insight from those invited to participate in the survey. Listening to managers is of paramount importance for identifying further issues, aspects, and factors that were not covered by the survey instrument.
Furthermore, it is recommended to perform more granular analyses on the survey data provided. For example:
• Is it possible to distinguish between rural banks of different sizes (by turnover or number of employees)?
• Can differences be identified between various geographic regions of the country?
• Are there distinct patterns between male and female respondents, between HR managers and business managers, or among different age groups?
These analyses could highlight aspects of significant interest that have not been sufficiently considered in the paper. Additionally, the context in which the research was conducted is not entirely clear; for instance, is this paper the result of research following a change management project promoted at a national level?

4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: The results are presented clearly but incompletely. The incompleteness pertains to the practical implementation of green servant leadership. Specifically:
• If present, what were the sources of resistance?
• What actions were necessary to overcome implementation difficulties?
• Which entities were responsible for developing the rural bank employees' competencies required by green servant leadership?
• Did the bank customers perceive the change resulting from the diffusion of green servant leadership?

5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: The research impact could be significantly enhanced by bridging the gap between theory and practice. For example, this gap could be narrowed if the paper is enriched with the themes indicated in Point 3. Moreover, it would be appropriate to augment the research—and consequently the paper—with an assessment of customer/stakeholder satisfaction to ascertain if there was an actual impact on clients. This assessment could be conducted, for example, through focus groups or interviews with opinion leaders.

6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: The communication is clear. Specifically, the section regarding the quantitative analysis (the measurement and structural model) is well-presented. The language appears appropriate and clear, and the use of acronyms is limited to the essentials.

DEADLINE: 06-Mar-2026

To go straight to your paper click this link: *** PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. ***

https://mc.manuscriptcentral.com/mbex?URL_MASK=3de443a7095a48ce83e70969bb6c83f6

3. Bukti Konfirmasi Submit Revisi dan Artikel Yang Diresubmit (16 Januari 2026)

RESPONSE TO REVIEWER COMMENTS

Dear Editor and Reviewers,

Thank you for the time invested to carefully consider and provide constructive and insightful feedback for our manuscript. Your feedback has provided an extremely valuable improvement to the clarity, structure, and overall quality of our manuscript. Thus, we have thoroughly revised the manuscript and addressed all comments raised by the reviewers.
We have provided a detailed, point-by-point response to each of the reviewer comments below. For ease of review, all revisions made in the manuscript are written in blue ink and highlighted in green.

Thank you once again for your thoughtful feedback and consideration.

Response to Reviewer 1 (Referee 1)

Reviewers' Comments to Author:

Referee: 1

Recommendation: Minor Revision

Comments:

Comment 1 (Introduction – structure and flow)

This is quite interesting work. The introduction requires some additional work to improve its clarity and readability. Specifically, move the content on page 2 lines 18-25 to after the sentence on page 1 around line 57, beginning with "Previous studies have demonstrated..." Also, I recommend moving the sentence on page 1 around line 58 that begins with "Executives have a pivotal role..." to begin the paragraph on page 2 line 26. These two edits would make the supporting material for "personnel" and "executive"--as those two roles relate to environmental performance--flow more clearly.

Response:

Thank you for this valuable comment. The Introduction has been revised to improve clarity and logical flow. The text previously located on page 2 (lines 18–25) has been moved to follow the sentence beginning with "Previous studies have demonstrated…" on page 1, thereby strengthening the discussion of personnel-related influences on environmental performance. In addition, the sentence beginning with "Executives have a pivotal role…" has been relocated to the opening of the subsequent paragraph to enhance the coherence of the discussion on executive-level influences. We believe these revisions will improve the overall readability of the Introduction.

Comment 2

Measuring Business Excellence

On page 2 near line 14, you introduce RBV and AMO, only to define them around line 34 on page 2. I recommend you define them as soon as you introduce them or hold your assertion that the study adds to the literature until the end of the introduction.

Response

Thank you for this comment. The Introduction has been revised by defining RBV and AMO at their first mention and aligning the statement of contribution accordingly. We believe this revision improves theoretical clarity and coherence.

Comment 3 (Section 2.1 – positioning GSL)

In your literature review, section 2.1, you introduce GSL. I recommend you also relate GSL to servant leadership theory as many readers may be familiar with it notionally, but unaware of the connection. You do this later in section 2.4, but I recommend doing it earlier. For example, define servant leadership--> define GSL ---> let the literature demonstrate the relationship between GSL and G-HCM. IN the same section para 2, you begin with "in contrast" which prepared me for some other result than improved EVP. I recommend another opener, such as "additionally."

Response

Thank you for this comment. Section 2.1 has been revised to introduce servant leadership theory prior to defining green servant leadership (GSL), thereby clarifying their conceptual relationship at an earlier stage. In addition, the paragraph opener has been revised by replacing "in contrast" with a more appropriate transitional term to better reflect the continuity of the argument. These revisions improve conceptual clarity and narrative flow.

Comment 4

Again, in the same section, you argue that GSL's "focus on addressing the unique needs of employees..." connects with G-HCM, but you haven't supported that unique focus when you introduced GSL earlier. Moreover, I cannot find where you have linked G-HCM directly to "capabilities," and "skills and motivation." However, later in section 2.2, you assign those variables to GIC (see lines 20-21). I recommend you move the sentence around page 4 lines 7-9 that clearly shows these variables linked to G-HCM.

Response

Thank you for this comment. Section 2.1 has been revised to more explicitly support GSL's focus on addressing employees' unique needs at its initial introduction. In addition, the linkage between G-HCM and the dimensions of capabilities and skills and motivation has been clarified by repositioning the relevant sentence (previously on page 4, lines 7–9) to Section 2.1. These revisions strengthen conceptual consistency across Sections 2.1 and 2.2.

Comment 5 (Definitions of main concepts)

Finally, in section 2.1, you posit that GSL assumes a crucial role vis a vis G_HCM. I found myself seeking a definition of the main concepts at this point. I recommend you add a section

Measuring Business Excellence

to the literature review to simply define the terms, then use subsequent sections to give evidence to the relationships.

Response

Thank you for this comment. The Literature Review has been revised to improve conceptual clarity. Key constructs are now more clearly defined at the onset of their mention, while subsequent part of the text focus on developing and supporting the hypothesized relationships. This revision enhances the logical structure of the literature review.

Comment 6 (Section 2.2 – G-HCM and GIC)

In section 2.2, it is difficult to draw a straight line in the evidence presented between G-HCM and GIC. Moreover, around line 22, the sentence beginning with "Jyoti and Bhau (2015)..." is worded awkwardly.

Response

Thank you for this comment. Section 2.2 has been revised to strengthen the logical linkage between G-HCM and GIC by improving the alignment of supporting evidence. In addition, the sentence beginning with "Jyoti and Bhau (2015)…" has been reworded for clarity and readability.

Comment 7 (Sections 2.3 and 2.4 – transitions and clarity)

In section 2.3, the evidentiary line is clearer, but it could be improved by connecting EVP to organizational success.

Response

Thank you for this positive comment. Section 2.3 has been revised to more explicitly link environmental performance (EVP) with organizational success by strengthening the supporting discussion. We believe this has improved the coherence and explanatory power of the section.

Comment 8 (Section 2.5 – hypotheses H8 and H9)

In section 2.4, line 42, you begin the second sentence with "Conversely..." This transition does not fit with the flow. I recommend "Moreover..." Additionally, I recommend you move from general to particular concerning the relationship between servant leadership and performance in lines 44-46 on page 3. Also, I was curious what the literature concluded about the relationships, not just the evidence that they are related. How does GSL relate to EVP according to Siddiquei et al (2021)? The sentence in lines 54-56 on page 3 seems to be missing a full in text citation.

Response

Thank you for this comment. Section 2.4 has been revised by replacing the transition term to better reflect the logical flow and by restructuring the discussion from general to more specific findings. In addition, the discussion of Siddiquei et al. (2021) has been expanded to clarify the

Measuring Business Excellence

nature of the GSL–EVP relationship, and the incomplete in-text citation has been corrected. These revisions improve clarity and scholarly rigor.

Comment 9

Section 2.5 does not provide a clear line for evidence leading to H8 and H9. After line 10, the author takes a leap from tight definitions of GIC to generalities about human performance. I recommend strengthening the evidence by keeping it within GIC literature.

Response

Thank you for this comment. Section 2.5 has been revised to strengthen the evidentiary linkage supporting H8 and H9 by grounding the discussion more firmly within the green intellectual capital (GIC) literature. The argument has been refocused to maintain conceptual consistency and to provide a clearer logical progression toward the proposed hypotheses.

Comment 10

In section 4.1, the demographics would be more readable in table or (better) graphical format or both. The conclusion appears circular and could better emphasize practical implications…

Response

Thank you for this comment. The presentation of the demographic information in Section 4.1 has been revised to improve readability by reorganizing the data into a clearer tabular format titled as "Table 1. Demographic characteristics of respondents".

Comment 11

In section 4.2, the PLS measurement model is not introduced in long form.

Response

Thank you for this comment. Section 4.2 has been revised to include the full-term introduction of Partial Least Squares Structural Equation Modeling (PLS-SEM) at its first mention to enhance clarity and methodological transparency.

Comment 12

In section 5, around line 35, the wording in the sentence beginning with "This specify that..." is grammatically incorrect (verb form).

Response

Thank you for noting this issue. The sentence beginning with "This specify that…" has been revised to correct the verb form and improve grammatical accuracy.

Comment 13

ON page 7 in lines 8 the sentence beginning with "While there are some..." has a capitalization error.

Response

Measuring Business Excellence

Thank you for noting this issue. The capitalization error in the sentence beginning with "While there are some…" has been corrected.

Comment 14

In section 7, the author's first conclusion's support seems circular. I recommend the author repeat the conclusion that there are relationships. If moving towards practical application, one conclusion is that using GSL improves G-HCM's abilities to improve GIC and thus, EVP. One might argue that hiring for GSL is of utmost importance.

Response

Thank you for this insightful comment. We revised the opening of Section 7 to avoid circular reasoning by restating the conclusions in terms of empirically supported relationships and by emphasizing the practical implication that adopting and hiring for green servant leadership enhances G-HCM capabilities, green intellectual capital, and ultimately environmental performance.

Additional Questions:

1. Originality: Does the paper contain new and significant information adequate to justify publication?: Yes, limited to rural banks in Indonesia. Additionally, it claims to add to the literature by studying the relationship of two mediating variables that have been omitted in previous work.

Response

Thank you for this positive comment.

2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: I make recommendations for revisions in this area to the author. At times, the author's line from concept to hypothesis in the literature review needs additional work. In most cases, my recommendations are simply to rearrange the evidence.

Response

Thank you for this insightful comment. The literature review has been revised carefully to strengthen the conceptual flow from key constructs to hypotheses development. In line with the reviewer's recommendations, we have also rearranged and reorganized the supporting evidence.

3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: The methodology is clear and appropriate. The theoretical bases for the study appear to be solid and appropriate.

Response

Thank you for this positive feedback.

Measuring Business Excellence

4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: The results are presented clearly, however the conclusions seem to race to an end and read more like practical applications.

Response

Thank you for this positive feedback. In addition, the conclusion section has been revised to improve its balance and coherence

5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: This paper has some implications for research and practice. First, it adds to the literature by extending theories into a specific industry sector and type (rural banks in Indonesia). It does an adequate job of bridging theory and practice. In practice, its conclusions may be used to improve organizational performance limited to environmental performance. There are some limits as identified (rural banks), but the conclusions should discuss limitations more extensively, including the study's locum in Indonesia.

Response

Thank you for this positive feedback.

6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: Generally, yes, but this is where some improvement is in order. See my specific comments to the author on the introduction section to improve the reader's grasp for the concepts and constructs more immediately.

Response

Thank you for this positive feedback. We have also revised the manuscript in accordance with specific comments by the reviewer to improve the reader's grasp for the concepts and constructs.

For Peer Review Measuring Business Excellence

Referee: 2

Recommendation: Major Revision

Comments:

The Author is strongly advised to take the proposed suggestions into careful consideration.

Response to Reviewer 2 (Referee 2)

Thank you for the time invested to review our manuscript. We have carefully considered all the suggestions by the reviewer and have revised the manuscript accordingly.

Additional Questions:

1. Originality: Does the paper contain new and significant information adequate to justify publication?: Originality and Scope The manuscript presents noteworthy elements of originality. It clearly outlines—albeit with some room for improvement—the enhancement processes regarding both leadership models in rural banks and the management innovation processes currently taking place in Indonesia. These processes constitute significant indicators of a transition toward a sustainable future, particularly concerning environmental sustainability and human resource management.

Response

Thank you for this positive feedback. We appreciate the recognition of the manuscript originality by the reviewer.

2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: Literature Review Green Servant Leadership is a topic of substantial interest with high potential impact, not only on local rural banks but also on communities and territories. Therefore, it is advisable to expand the bibliography, primarily by citing Greenleaf on servant leadership and Teece on dynamic capabilities. Furthermore, it would be valuable to investigate within the literature whether and how green servant leadership constitutes an innovation with respect to the existing values and/or managerial culture of the country under investigation. Finally, the authors should explore the literature regarding the differences and points of convergence with the concept of "purpose."

Response

Thank you for this suggestion. We have substantially strengthened the literature to better demonstrate engagement with the relevant scholarly works. In addition, the bibliography has been expanded to include seminal works by Greenleaf on servant leadership and Teece on dynamic capabilities. We believe these additions have strengthened the theoretical foundation of the study.

3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: Methodology and Data Analysis It

appears that the study relies exclusively on quantitative data derived from the survey. Although the authors state that "the researchers met with the general manager, human resources (HR) manager, and operations manager," it is advisable to conduct qualitative analyses on themes such as leadership, skills, motivation, and human capital. This would allow the researchers to gain direct insight from those invited to participate in the survey. Listening to managers is of paramount importance for identifying further issues, aspects, and factors that were not covered by the survey instrument.

Furthermore, it is recommended to perform more granular analyses on the survey data provided. For example:

• Is it possible to distinguish between rural banks of different sizes (by turnover or number of employees)?

• Can differences be identified between various geographic regions of the country?

• Are there distinct patterns between male and female respondents, between HR managers and business managers, or among different age groups?

These analyses could highlight aspects of significant interest that have not been sufficiently considered in the paper. Additionally, the context in which the research was conducted is not entirely clear; for instance, is this paper the result of research following a change management project promoted at a national level?

Response

Thank you for this detailed and constructive feedback. We have addressed each of these comments as follows:

First, Given the quantitative explanatory design of the current study, we did not collect additional qualitative data. Though we have met with the managers during the data collection process, we have specifically clarified in the methodology section that the meetings with the general manager, HR manager, and operations manager were conducted to contextualize the study and refine the survey instrument rather than to serve as a formal qualitative data source. However, we explicitly acknowledge this limitation and outline qualitative extensions as a promising avenue for future research. Thus, the exclusive reliance on quantitative survey data by this study is still valid in line with many similar preceding studies in this area (e.g., Pontillo et al., 2025; Pangarso et al., 2024).

Second, we appreciate the reviewer's suggestion to conduct more granular analyses. However, the current study objective was designed to test a theoretically grounded mediation model rather than to perform subgroup comparisons. Moreover, further segmentation of the sample may reduce the statistical power. We also conducted preliminary descriptive checks across respondent roles, which indicated no dominant response pattern attributable to a single managerial group. Consequently, future research directions now explicitly propose multi-group and mixed-method analyses across organizational size, geographic regions, and respondent characteristics.

Third, the methodology and context sections have clearly described the research setting, as well as the institutional and organizational context of rural banks in Indonesia. The manuscript also clarify that the study was not conducted as part of a nationally mandated change management project, but rather as an independent academic investigation into ongoing leadership and management innovation practices.

4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: The results are presented clearly but incompletely. The incompleteness pertains to the practical implementation of green servant leadership. Specifically:

• If present, what were the sources of resistance?

• What actions were necessary to overcome implementation difficulties?

• Which entities were responsible for developing the rural bank employees' competencies required by green servant leadership?

• Did the bank customers perceive the change resulting from the diffusion of green servant leadership?

Response

Thank you for highlighting the importance of practical implementation issues. As the present study relies on survey data collected from internal organizational respondents, it does not directly capture sources of resistance, implementation actions, or customer perceptions. We have therefore expanded the practical implications section to discuss likely implementation challenges, managerial actions, and responsible actors based on the study's findings and existing literature, and we explicitly propose these issues as directions for future research.

5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: The research impact could be significantly enhanced by bridging the gap between theory and practice. For example, this gap could be narrowed if the paper is enriched with the themes indicated in Point 3. Moreover, it would be appropriate to augment the research—and consequently the paper—with an assessment of customer/stakeholder satisfaction to ascertain if there was an actual impact on clients. This assessment could be conducted, for example, through focus groups or interviews with opinion leaders.

Response

Thank you for this comment. We appreciate the reviewer's suggestion. We have explicitly linked the findings to practical applications in rural banks, highlighting how leadership behaviors influence green human resource management practices, intellectual capabilities, and

environmental performance. Moreover, as the present study examines internal leadership and human capital mechanisms, customer and stakeholder satisfaction were beyond its empirical scope. We have explicitly acknowledged this limitation and proposed qualitative and mixed-method approaches, such as focus groups and interviews with opinion leaders, as a direction for future research.

6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: The communication is clear. Specifically, the section regarding the quantitative analysis (the measurement and structural model) is well-presented. The language appears appropriate and clear, and the use of acronyms is limited to the essentials.

Response

Thank you for this positive assessment. We appreciate the reviewer's recognition of the clarity of the communication and the presentation of the quantitative analysis.

Thank you once again, for the thorough review and constructive feedback. We believe that your comments and suggestions have substantially improved our manuscript and hope that it is now suitable for publication.

Measuring Business Excellence

Measuring Business Exce

Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital

Journal:	*Measuring Business Excellence*
Manuscript ID	MBE-09-2025-0189.R1
Manuscript Type:	Research Paper
Keywords:	Green servant leadership, environmental performance, green human capital management practices, green intellectual capital

SCHOLARONE™
Manuscripts

Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital

Abstract

Purpose – This paper explores the connections between Green Servant Leadership (GSL), Green Human Capital Management (G-HCM) practices, Green Intellectual Capital (GIC), and the Environmental Performance (EVP) of firms. Specifically, the mediating effect of G-HCM practices between green servant leadership and green intellectual capital relationship, as well as the mediating effect of green intellectual capital on the G-HCM and environmental performance relationships were investigated.

Design/methodology/approach – Data were collected through a cross-sectional survey questionnaire from 203 rural banks in Indonesian banking sector. The study used partial least squares structural equation modeling to test the hypotheses.

Findings – The findings indicate that G-HCM practices act as a mediator between green servant leadership and green intellectual capital. Furthermore, the research highlights that G-HCM practices, via its impact on green intellectual capital, indirectly influences environmental performance. The results confirm that all direct and indirect effects hypothesized in the study were supported.

Research limitations/implications – Findings are limited to rural banks; cross-industry samples are encouraged in future studies.

Practical implications – GSL and G-HCM practices must be enhanced by managers to improve GIC and environmental performance.

Social implications – The findings promote sustainable banking practices that contribute to environmental protection and ecological responsibility.

Originality/value – The study makes a meaningful contribution to advancing current theories by suggesting that the connection between G-HCM practices and environment performance is not solely determined by the additive effects of green servant leadership and green intellectual capital nor by their interactive effects, but a combination of both.

Keywords: Green servant leadership, environmental performance, green human capital management practices, green intellectual capital

JEL: M12, M19, O15, Q59

Paper type Research paper

Introduction

The existing literature on business sustainability, particularly focusing on ecological utilization, predominantly emphasizes general banks rather than rural banking (Heikkurinen *et al.*, 2019). Rural banking greatly contributes to commercial activities environmentally, yet it has received insufficient attention in academic research (Naidoo and Gasparatos, 2018; Mas *et al.*, 2021). It is becoming common practice for businesses across industries to produce greener processes and products in response to rising stakeholder demands for implementing environmental management measures (Shahzad *et al.*, 2020; Baaha *et al.*, 2020). To address the complex sustainability issues and satisfy the demands of many stakeholders, businesses are encouraged to leverage intangible resources (Oprean-stan *et al.*, 2020; Panda and Sangle, 2019). Previous studies have demonstrated that environmental performance is significantly affected by personnel at all levels and activities of a business (Hameed and Naeem, 2020; Singh *et al.*, 2022). According to Hayton (2004) and (Štaffenová and Kucharčíková, 2024), leadership and human capital management (HCM) are integral in building essential internal competencies and capabilities for human resource management in rural banking. Furthermore, prior studies

Measuring Business Excellence

indicate that corporate culture, self-efficacy, and factors influencing employee work motivation also affect the environmental performance (Camilleri *et al.*, 2023; Blankenship *et al.*, 2021). According to Mansoor *et al.* (2021) and Wei *et al.* (2023), leadership behavior can affect green intellectual capital (GIC) and environmental performance (EVP).

Organizational capabilities are pivotal in developing and sustaining effective environmental management systems (Asiaei *et al.*, 2021; Longoni *et al.*, 2016; Baumgartner and Winter, 2014). However, existing studies have primarily focused on manufacturing or general banking contexts, leaving rural banks largely underexplored. Rural banks face distinctive challenges, including limited resources, lack of employee capability and motivation, and underdeveloped environmental governance (Lam *et al.*, 2021). These characteristics raise questions about whether existing theories of green leadership and organizational capabilities fully account for this context. By examining rural banks in Indonesia, this study extends prior theory by testing a dual-mediation model in which green servant leadership fosters environmental performance through green human capital management and green intellectual capital. In doing so, the study contributes to the literature by (1) addressing an under- researched organizational setting, (2) refining the resource-based view (RBV) and the ability–motivation–opportunity (AMO) theory to explain environmental performance in resource-constrained financial institutions. The RBV posits that firms achieve sustainable performance by leveraging valuable, rare, inimitable, and non-substitutable internal resources (Barney, 2001), while the AMO theory explains how employee abilities, motivation, and opportunities to participate jointly shape organizational outcomes (Appelbaum *et al.*, 2000). Building on these perspectives, AMO explains how leadership attributes such as capabilities, knowledge, skills, and motivation operate through ability, motivation, and opportunity mechanisms to shape green human capital management (G-HCM), whereas RBV provides the theoretical rationale for viewing these attributes as strategic intangible resources that support sustainable competitive advantage (Munawar *et al.*, 2022). From a dynamic capabilities perspective, organizational performance is driven by the firm's ability to integrate, build, and reconfigure internal competencies in response to environmental challenges (Teece *et al.*, 1997). In this study, G-HCM and GIC can be understood as dynamic capabilities that enable rural banks to translate green leadership into sustained environmental performance. (3) providing empirical evidence that the connection between G-HCM and EVP is not simply additive but emerges from the combined and mediated effects of leadership and intellectual capital.

Executives have a pivotal role in the rural banking environment because of the considerable influence they have over rural banks' performance (Latan *et al.*, 2018; Shahab *et al.*, 2019). Aboramadan *et al.* (2020) and Tuan (2019) argue that executives in rural banking need to adopt a green servant leadership (GSL) approach as well as implement environmentally oriented human capital management practices. The aim is to encourage and support the development of internal competencies required for GIC as well as improve EVP (Jirakraisiri *et al.*, 2021; Wang, 2019; Asiaei *et al.*, 2022). This study aims to address two significant questions: (1) Does G-HCM impact GIC? (2) Does GSL contribute to implementing G-HCM practices linked to GIC and EVP? We use the ability–motivation–opportunity (AMO) theory (Appelbaum *et al.*, 2000) and the resource-based view (RBV) framework (Barney, 2001) as the overarching theoretical foundation.

Literature review

2.1 Relationship between Green Servant Leadership (GSL) and G-HCM (CAP and SAM)

Servant leadership is a leadership approach that prioritizes serving employees by fostering their development, well-being, and empowerment in order to enhance organizational outcomes (Greenleaf, 1998; Yukl and Gardner, 2019). Building on this perspective, green servant leadership (GSL) extends servant leadership principles by explicitly integrating environmental

values into leadership behaviors. The concept of servant leadership originates from the seminal work of Greenleaf (1998), which emphasizes leaders' moral responsibility to serve, empower, and develop followers. In the context of environmental management, this leadership philosophy provides a strong foundation for green servant leadership, where leaders prioritize environmental values while fostering employees' capabilities and motivation. GSL involves "providing direction, empowering, and developing individuals to become environmentally conscious citizens, while demonstrating humility, authenticity, interpersonal acceptance, and stewardship in relation to employees' pro-environmental contributions" (Tuan, 2019b). Importantly, GSL emphasizes addressing the unique needs of employees by aligning individual development, motivation, and empowerment with organizational environmental goals (Tuan, 2019b;.Elzek *et al.*, 2024) Elzek *et al.* (2024) further argue that GSL adopts a bottom-up approach that serves employees' green-related interests by providing the resources necessary for engagement in voluntary and creative green initiatives. Empirical evidence indicates that such leadership behavior enhances employee motivation, talent development, and workforce productivity, which are critical antecedents of environmental performance (Tuan, 2019b; Tang *et al.*, 2018).

Additionally, G-HCM is the environmental knowledge, skills, attitudes, and values accumulated by employees through organizational initiatives (Pontillo et al., 2025). Thus, G-HCM consist of capabilities, skills and motivation. Pangarso *et al.* (2024) and Dumont *et al.* (2016) state that G-HCM practices help them find, train, motivate, and retain environmentally conscious employees. To get a strong GSL and improve environmental performance, it is thought that the role of GSL within organizations is important for making G-HCM policies and practices that work well (Tang *et al.*, 2018). GSL's focus on addressing the unique needs of employees may lead to the development and implementation of G-HCM practices aimed at maintaining motivation and empowerment among their workforce (Elzek, *et al.*, 2024). Green human capital management (G-HCM) practices operationalize these leadership intentions by systematically developing employees' environmental capabilities, as well as their skills and motivation, through recruitment, training, performance management, and incentive systems (Dumont *et al.*, 2016; Pangarso *et al.*, 2024). In this study, G-HCM is conceptualized along two key dimensions: capabilities (CAP), referring to employees' environmental knowledge, competencies, and abilities, and skills and motivation (SAM), reflecting employees' willingness and readiness to apply such competencies in environmental practices (Munawar *et al.*, 2022). Therefore, GSL assumes a crucial role in ensuring the implementation of effective G-HCM practices. This includes hiring and firing, training and development, performance management and evaluation, as well as pay and incentive systems. Therefore, we predict that:

H1: GSL has a positive link to capabilities.

H2: GSL has a positive link to skills and motivation.

2.2 Relationship between G-HCM (CAP and SAM) and GIC

G-HCM is a strategy that can help businesses create and implement eco-friendly plans and procedures (Latan *et al.*, 2018). Roscoe *et al.* (2019) conclude that G-HCM procedures are in line with the purpose of environmental accountability. Renwick *et al.* (2016) state that G-HCM highlights the importance of human resources in reducing pollution and improving an organization's operational procedures. Asiaei *et al.* (2021) define GIC as "the total stock of all kinds of intangible assets, knowledge, capabilities, and relationships, etc. about environmental protection or green innovation of both the individual and organization levels within a company" (p.1587). According to Shahriari and Allameh (2020) and Yong and Fawehinmi (2019), the concept of GIC represents a resource that cannot be defined in financial terms and rather focuses on the ability, skills, and experience of human beings, which can generate a competitive edge and enhance growth. The implementation of G-HCM encompasses various employee traits, including "capabilities, wisdom, knowledge, commitments, skills, attitudes, experiences,

and creativity" (Munawar *et al.*, 2022, p. 142). Supporting this linkage, Jyoti and Bhau (2015) argue that organizations recruit employees who are active on green initiatives, offer skills and motivation, and compensate; such G-HCM practices improve environmental performance. Accordingly, prior research conceptualizes GIC as a strategic resource derived from the effective deployment of green human capital, which subsequently enhances organizational competitiveness and sustainable growth (Shahriari and Allameh, 2020; Yong and Fawehinmi, 2019). In alignments, the G-HCM capabilities component (CAP) and skills and motivation (SAM) components are projected to influence the GIC.

Thus, we postulate the following hypothesis.

H3: Capabilities are positively linked to GIC.

H4: Skills and motivation are positively linked to GIC.

2.3 GIC and EVP relationship

GIC enhances organizational performance by equipping individuals with the necessary knowledge, abilities, skills, and competencies. This proficiency enables better performance, which in turn contributes to overall organizational success (Roscoe *et al.*, 2019; Shahriari and Allameh, 2020; Yong and Fawehinmi, 2019). EVP is an organization's efforts to meet and go beyond what society expects of them when it comes to caring for the environment, going beyond just following the rules and regulations (Chen *et al.*, 2005). Importantly, strong environmental performance has been shown to contribute to organizational success by enhancing operational efficiency, reputation, and long-term competitiveness (Hart, 1995; Roscoe *et al.*, 2019). Consequently, GIC is a factor in enhancing EVP. Consequently, GIC is a factor in enhancing EVP. Based on the provided explanation, we postulate the following hypothesis.

H5: GIC is positively linked to EVP.

2.4 Mediating effect of G-HCM (CAP and SAM) on the GSL and GIC relationship

An approach to leadership known as "servant leadership" prioritizes the development and well-being of subordinates (Yukl and Gardner, 2019). Moreover, G-HCM emphasizes sustainability and monitors the functioning of organizations and the impact of their systems and processes on employees, typically on a broader level (Lewis *et al.*, 2014). Siddiquei *et al.* (2021) conclude that GSL positively influences EVP by fostering pro-environmental values and behaviors among employees. Building on this foundation, subsequent studies indicate that servant leadership also enhances organizational performance by strengthening intellectual capital and knowledge-based resources (Yu *et al.*, 2024). Elzek *et al.* (2024) state that GIC (capabilities, skill and motivation) moderates the connection between servant leadership and firm performance, particularly in the tourism sector. Servant leaders enhance intellectual capital within organizations and contribute to the success of products and services in the market by employing inspirational motivation and intellectual stimulation (Khatri *et al.*, 2023; Khan *et al.*, 2025). Furthermore, to foster intellectual capital, servant leadership allows employees the autonomy to select their tasks and determine the means to accomplish their objectives (Soomro and Soomro, 2024). GSL fully supports "the protection of the natural environment and translates this vision into employees through the enhancement of environmental performance" (Greenleaf, 1998, p. 5), significantly influencing firms' G-HCM practices (Renwick *et al.*, 2016; Mansoor *et al.*, 2021). Pangarso *et al.* (2024) proposed that G-HCM mediate the connection between GSL and GIC. Thus, we propose a hypothesis as follows.

H6: Capabilities mediate the association between GSL and GIC.

H7: Skills and motivation mediate the association between GSL and GIC.

2.5 Mediating effect of GIC on the G-HCM (CAP and SAM) and EVP relationship

Prior studies (Khatri *et al.*, 2023; Tran *et al.*, 2022) indicate that G-HCM methods affect GIC and the EVP. Green intellectual capital represents the accumulation of environmentally related knowledge, capabilities, skills, and relational assets embedded at both individual and

organizational levels (Asiaei *et al.*, 2021). As a strategic intangible resource, GIC enables organizations to transform employees' green capabilities (CAP) and skills and motivation (SAM) into environmentally responsible behaviors and practices that support superior environmental outcomes (Yong *et al.*, 2019; Shahriari and Allameh, 2020). Firms with well-developed GIC are better positioned to internalize environmental knowledge, foster green innovation, and coordinate environmentally sustainable activities, all of which contribute directly to improved EVP (Roscoe *et al.*, 2019; Soomro and Shah, 2019). Empirical evidence further suggests that the impact of G-HCM on EVP is not purely direct but operates through the development of GIC. Specifically, G-HCM capabilities enhance employees' environmental expertise and problem-solving capacity, which become embedded within GIC and facilitate environmentally efficient processes and reduced ecological impact (Asiaei *et al.*, 2021; Noor *et al.*, 2023). Similarly, employees' green skills and motivation strengthen GIC by promoting knowledge sharing, continuous learning, and proactive engagement in environmental initiatives, which in turn improve EVP (Teferaa and Hunsake, 2021; Mansoor *et al.*, 2021; Li *et al.*, 2023).

Therefore, we suggest that:

H8: GIC mediates the link between capabilities and EVP.

H9: GIC mediates the link between skills and motivation and EVP.

The research framework is presented in Figure 1, based on a thorough literature analysis of the proposed hypotheses.

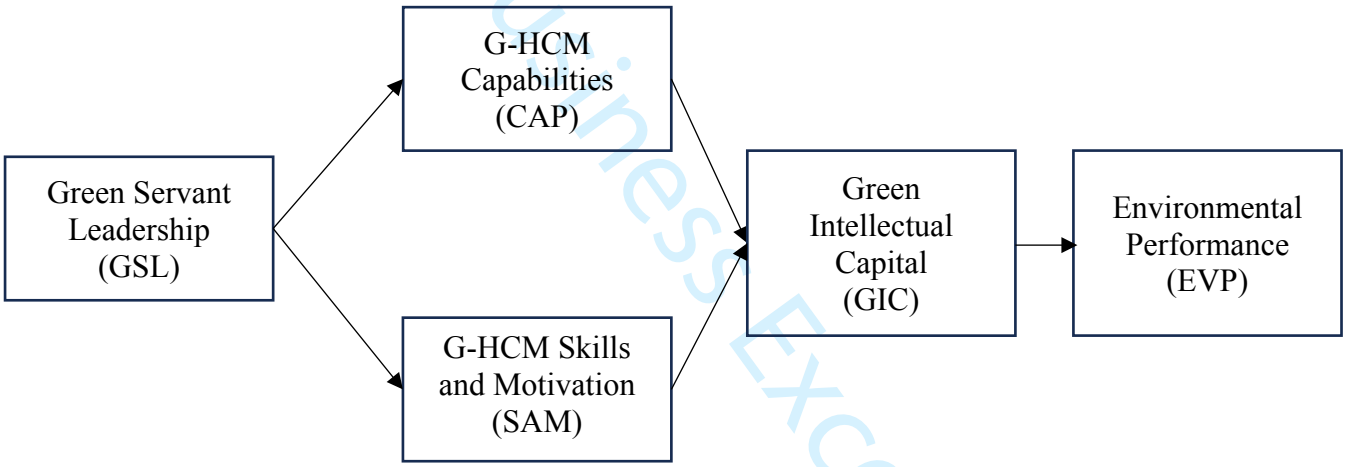


Figure 1. Research framework.

3. Methodology

3.1 Sample and procedure

Consistent with preceding researches that used similar data collection and analysis methods, this study used the cross-sectional quantitative survey design (Shoaib *et al.*, 2021; Mahmoud *et al.*, 2025). A total of 203 Indonesian rural banks were contacted, the researchers personally met with the general manager, human resources (HR) manager, and operations manager for contextual clarifications. These individuals from different rural banks completed the questionnaire and returned it as reported in table 1. General managers filled out questionnaires related to GSL and EVP, while HR managers and operations managers completed questionnaires on G-HCM and GIC. All respondents rated the items on a five-point Likert scale, ranging from "1 (strongly disagree)" to "5 (strongly agree)". For this study, we employed the back-translation method, translating the questionnaire from English to Indonesian and then back to English, following the guidelines of Brislin (1986), as the majority of the respondents

Measuring Business Excellence

were Indonesian speakers. It is important to note that this study is an independent academic investigation into ongoing leadership and management innovation practices, rather than a nationally mandated change management project.

3.2 Measurement of constructs

Based on a five-point Likert scale, the green servant leadership was assessed based on a 12-item scale (Tuan, 2019a). Sample items include, "My manager emphasizes the importance of contributing to the environmental improvement." G-HCM was measure using six items adapted from Singh *et al.* (2020). Sample items for G-HCM capabilities include "Recruiting only those who possess environmental values". The example for item of skills and motivation includes "Employees should use environmental training in their jobs". The GIC was measured by the seven-item framework from Asiaei *et al.* (2021). The sample item includes, "Managers in our organization can fully support their employees in achieving the goals of environmental protection". The scale measures environmental performance (EVP) was adapted from a 5-item scale, drawing inspiration from Boiral and Paille (2012) and Singh *et al.* (2020b).

4 Results

4.1 Demographic background

In this survey, 203 participants, including general managers, HR managers, and operations managers, were involved. There were 77.30% male and 22.70% female among general managers, with about 87% possessing at least bachelor's degree in law, engineering, and management respectively. Also, for HR managers, 64.60% of the respondents are males and 35.40% females, while 74.87% have at least a bachelor's degree in management, technology, and law. In the same way, of the operational managers, 85.30% were males and 14.70% were females, while 76.01% had bachelor's degrees in management and engineering. Finally, throughout the period, more than 55% of the rural banks had forty or more employees. Table 1 presents the demographic characteristics of the respondents. The sample consisted of general managers, HR managers, and operations managers from 203 rural banks. Overall, the respondents were predominantly male and held at least a bachelor's degree. More than half of the participating rural banks employed 40 or more employees.

Table 1. Demographic characteristics of respondents

4.2 Measurement model

In Partial Least Squares Structural Equation Modeling (PLS-SEM), the evaluation of the measurement model is a crucial preliminary step prior to assessing the structural relationships among variables. The purpose of the measurement model assessment is to ensure that the latent variables are measured reliably and validly by their observed indicators (Hair *et al.*, 2019).

The PLS measurement model involves the assessment of item and construct reliability, as well as the convergent and discriminant validity of variables (Mahmoud and Mahmoud, 2025; Mahmoud, Umar, *et al.*, 2025; Mahmoud, Ma'aji, *et al.*, 2025). Item reliability result shows that all the items have a sufficient item reliability value above 0.70 (Hair *et al.*, 2017). The threshold of the reliability coefficient used in this study was determined Hair et al. (2019) which argues that values >0.70 are sufficient to portray construct reliability for both the Cronbach alpha and Composite Reliability techniques. Table 2 displays the Cronbach alpha and Composite reliability values, which shows that all the values are greater than 0.70 indicating sufficient variable reliability. The variable convergent and discriminant validity were portrayed in Table 2 and Table 3. A variable is considered to have convergent validity when the Average Variance Extracted (AVE) is greater than 0.50 (Hair *et al.*, 2017). All the AVE values in this study are between 0.624 and 0.724 and item loadings range is from 0.782 to 0.864, indicating that each construct demonstrated an impressive level of convergent validity (see Table 2). To

ascertain the discriminant validity, Fornell and Larcker (1981) Fornell and Larcker (1981) discriminant validity criteria was engaged; which requires that the AVE square root values for each variable must be larger than values within the same line of the correlation matrix to guarantee discriminant validity as portrayed in Table 3

Table 2. Convergent Validity results

Table 3. Discriminant Validity results

4.3 Structural model

Table 4 shows the results of the direct and indirect impacts tested using PLS-SEM modeling. According to Table 4, both H1 [GSL → CAP] and H2 [GSL → SAM] are supported by the are supported by the data, with β values of 0.756 and 0.235, respectively, and t values of 18.568 and 4.761, respectively, and p-values that are less than or equal to 0.01. GSL positively and significantly impacts G-HCM, including green recruitment and skills and motivation. Furthermore, Table 4 also shows that H3 [CAP → GIC], H4 [SAM → GIC], and H5 [GIC → EVP] are supported with values of ($\beta = 0.545$; $t = 7.267$, $p \leq 0.01$), ($\beta = 0.351$; $t = 6.722$, $p \leq 0.01$), and ($\beta = 0.568$; $t = 9.528$, $p \leq 0.01$). This indicates that green intellectual capital (GIC) is positively and significantly predicted by G-HCM, like capabilities and skills and motivation. This research has not disproved any direct hypothesis. The hypotheses H6 [GSL → CAP → GIC], H7 [GSL → SAM → GIC], H8 [CAP → GIC → EVP], and H9 [SAM → GIC → EVP] are all supported by β values of (0.412, $t = 7.267$, $p \leq 0.01$), (0.211, $t = 3.541$, $p \leq 0.01$), (0.320, $t = 4.558$, $p \leq 0.01$), and (0.198, $t = 3.021$, $p \leq 0.01$), respectively. These findings suggest that green servant leadership (GSL) positively influences GIC. Table 5 also thus confirmed all four of the study's indirect hypotheses (H6, H7, and H9) were accepted.

Table 4. The results of direct and indirect influences

5. Discussion

This study explores the connection between GSL, green human capital management (G-HCM) dimensions of capability and skills and motivation, GIC, and EVP. In line with the findings of H1 and H2 which shows a significant positive impact of GSL on G-HCM (CAP and SAM), a number of studies have shown a consistent result, with the most recent studies focusing on the retail industry (Yukl and Gardner, 2019; Renwick *et al.*, 2016; Mansoor *et al.*, 2021). Our research supplements and expands upon these findings by proving the positive role of GSL in enhancing G-HCM (CAP and SAM) among Indonesian rural banks. Likewise, the result approved the direct positive relationship between G-HCM (CAP and SAM) and GIC as described by H3 and H4. This indicates that employees with G-HCM (CAP and SAM) are more plausible to generate, share, and execute green ideas and practices, that strengthens the organization's GIC. H5 is the last direct hypothesis of the study, which validates the positive link between GIC and EVP. According to this finding, the GIC will increase the EVP. This adds to the existing literature in this field by indicating that GIC has the potential to enhance EVP of rural banks (Pangarso *et al.*, 2024).

In addition, this study lends credence to the idea that G-HCM practices mediate the relationship between GSL and GIC as denoted by H6 and H7. This specifies that green servant leaders, who give priority to environmental values and the development of employees, inspire and execute G-HCM practices like green training, empowerment, and motivation (Tan *et al.*, 2020). These practices, will consequently improve the environmental capabilities of employees, the sharing of knowledge, and innovation which are the essential elements of GIC (Chen, 2008). G-HCM therefore serves as the conduit through which GSL drives the green knowledge assets

Measuring Business Excellence

development within organizations. Prior studies (Elzek *et al.*, 2024; Khatri *et al.*, 2023) find that leadership plays a significant role in shaping G-HCM, which in turn contribute to GIC in firms. Moreover, the study validates the indirect influence of G-HCM practices (CAP and SAM) on EVP through the GIC mediation as presented by H6 and H7. This finding serves as an important knowledge-based asset that could transmute green oriented human resource practices into sustainable results. G-HCM practices therefore nurture environmentally conscious capabilities, skills and motivation among the workforce (Jabbour and Jabbour, 2016) which improve the GIC development to consequently facilitate the EVP (Chen, 2008).

6. Study Implications

6.1 Theory implication

The findings have important theoretical and practical ramifications and provide credence to all theories, both direct and indirect. Among the important theoretical ramifications is the mediating effect of GIC on the G-HCM practices (CAP and SAM) and EVP relationship which proves the theoretical support for the Resource-Based View (RBV), presenting the GIC as an important intangible and strategic resource that transforms G-HCM capabilities, skills and motivations into environmental performance at the organizational level (Hart, 1995). Preceding empirical studies proved that firms that leverage GIC as a mediating mechanism benefit from increased environmental efficiency and competitive advantage (Del Brío *et al.*, 2007; Pham *et al.*, 2020). Another important theoretical ramification is that very few studies have analyzed the indirect impact of GSL on EVP by including two mediating variables. While there are some previous arguments linking GSL to environmental performance (Ha *et al.*, 2023), this study delineates the fundamental relationship between two mediating variables and furnishes empirical proof of GSL's impact on EVP. As such, this study presents a comprehensive framework for understanding how GSL influences EVP through mediation processes. Furthermore, by focusing on environmental performance in the retail business, this study significantly contributes to the existing literature, particularly in the context of the rural banking that face various challenges. While there are a number of studies on G- HCM (Yusoff *et al.*, 2020), most of them tend to view them as crucial elements for sustainable performance (Yusoff *et al.*, 2020; Yong *et al.*, 2019). This study goes beyond only looking at G-HCM activities through the lens of environmental management; it also helps us better understand how these method works, rather than just increasing EVP, contribute to the growth of GIC.

In practical sense, this study suggests that in order to increase environmental performance, rural banks must recruit environmentally conscious employees, and design appropriate selection methods that will ensure the prospective employees' understanding and concern for environmental matters. The study also suggests that managers implement green policies, which include promoting enhanced capabilities, skills, and motivation for staff members who do adhere to relevant environmental regulations, in light of the growing emphasis on environmental concerns in rural banks.

6.2 Practical implications

The findings provide several practical insights for rural banks seeking to adopt this leadership approach. Prior research suggests that resistance to green leadership initiatives may stem from limited environmental awareness, entrenched routines, or perceptions of increased workload among employees. To mitigate such challenges, managers can emphasize continuous communication, role modeling, and incentive alignment to reinforce green values and behaviors.

The development of competencies required for green servant leadership is primarily the responsibility of top management and human resource units, particularly through targeted training, coaching, and leadership development programs. By strengthening employees' green-related capabilities, skills, and motivation, rural banks can enhance the effectiveness of G-

HCM practices and support the diffusion of green servant leadership across organizational levels.

While this study focuses on internal organizational outcomes, prior studies indicate that the diffusion of green leadership practices may also influence external stakeholders, including customers, through improved environmental performance and organizational reputation. Future research could therefore examine customer perceptions and behavioral responses to green servant leadership initiatives in the rural banking sector.

7. Conclusion

Our study proposes a number of conclusions for the rural banks. This study concludes that green servant leadership (GSL) plays a central role in enhancing environmental performance (EVP) through a sequential mechanism involving green human capital management (G-HCM) and green intellectual capital (GIC). Specifically, the findings demonstrate that GSL strengthens G-HCM capabilities and employees' skills and motivation, which subsequently foster the development of GIC and, in turn, improve environmental performance. Rather than operating in isolation, these relationships highlight the importance of leadership-driven human capital practices in translating green-oriented values into tangible environmental outcomes. That is why it is imperative that rural banks educate their staff on environmental practices and initiatives through formal training programs. Additionally, making sure employees can put what they have learned in training to use is of the utmost importance. Because of this, bank employees will be able to advance their environmental literacy, which will boost the effectiveness of G-HCM practices and EVP. Moreover, from a practical perspective, managers who want to promote G-HCM practices can learn a lot from this study, which provides strong evidence of the positive impacts of green servant leadership on G-HCM. One important implication is that rural banks should prioritize the selection, development, and retention of leaders who exhibit green servant leadership behaviors, as hiring for GSL can significantly enhance G-HCM capabilities, GIC, and ultimately EVP. The findings also help managers recognize practices that can encourage the development of green intellectual capital among employees to improve environmental performance. It is important for the rural bank to recruit individuals who are environmentally conscious. To that end, recruiters can design appropriate selection methods, such as conducting tests to assess prospective employees' understanding and concern for environmental issues. Given the increasing attention to environmental issues in the rural banks, this study recommends that managers adopt green policies, including encouraging improved capabilities, skills, and motivation for employees who do comply with applicable environmental policies. Future research is therefore encouraged to adopt qualitative or mixed-method approaches to gain richer insights into how green servant leadership and G-HCM practices are perceived and enacted within organizations.

Acknowledgment

This research was conducted with the invaluable support of the Faculty of Business and Economics at La Tansa Mashiro University. The authors express their heartfelt thanks to the leadership within the faculty for their essential guidance and unwavering support, which were pivotal to the successful completion of this study.

References

Aboramadan, M., Albashiti, B., Alharazin, H. and Dahleez, K.A. (2020), "Human resources management practices and organizational commitment in higher education: The mediating role of work engagement", *International Journal of Educational Management*, Vol. 34 No. 1, pp. 154–174.

Appelbaum, E., Bailey, T.R., Berg, P. and Kalleberg, A.L. (2000), *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*, Ithaca: ILR Press.

Asiaei, K., Bontis, N., Alizadeh, R. and Yaghoubi, M. (2021), "Green intellectual capital and environmental management accounting : Natural resource orchestration in favor of environmental performance", *Business Strategy and the Environment*, Vol. 31 No. 1, pp. 76–93.

Asiaei, K., Jusoh, R. and Barani, O. (2022), "How does green intellectual capital boost performance ? The mediating role of environmental performance measurement systems", *Business Stategy and Environment*, Vol. 31 No. 4, pp. 1587–1606.

Baaha, C., Opoku-Agyemanb, D., Acquahc, I.S.K., Agyabeng-Mensaha, Y., Afuma, E., Faibild, D. and Abdoulayea, F.A.M. (2020), "Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: Evidence from manufacturing SMEs", *Sustainable Production and Consumption*, Elsevier B.V., Vol. 27, pp. 100–114.

Barney, J.B. (2001), "Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view", *Journal of Management*, Vol. 27 No. 6, pp. 643–650.

Baumgartner, R.J. and Winter, T. (2014), "The sustainability manager: A tool for education and training on sustainability management", *Corporate Social Responsibility and Environmental Management*, Vol. 21 No. 3, pp. 167–174.

Blankenship, J.C., Riffe, D. and Blankenship, J.C. (2021), "Follow the Leader?: Optimism and Efficacy on Solo Journalism of Local Television Journalists and News Directors", *Journalism Practice*, Taylor & Francis, Vol. 15 No. 1, pp. 1–22.

Boiral, O. and Paille, P. (2012), "Organizational Citizenship Behaviour for the Environment: Measurement and Validation", *Journal of Business Ethics*, Vol. 109 No. 4, pp. 431–445.

Del Brío, J.Á., Fernández, E. and Junquera, B. (2007), *Management and Employee Involvement in Achieving an Environmental Action-Based Competitive Advanrage: An Empirical Study*, *International Journal of Human Resource Management*, Vol. 18, available at:https://doi.org/10.1080/09585190601178687.

Brislin, R. (1986), "The Wording and Translation of Research Instruments", in Lonner, W.J. and Berr, J.W. (Eds.), *Field Methods in Cross-Cultural Research*, SAGE Publications, pp. 137–164.

Camilleri, M.A., Troise, C. and Morrison, A.M. (2023), "Motivations and commitment to work in the hospitality industry: investigating employee psychology and responsible organizational behaviors", *Tourism Review*, Vol. 79 No. 1, pp. 85–103.

Chen, Y.-S. (2008), "The Positive Effect of Green Intellectual Capital on Competitive Advantages of Firms", *Journal of Business Ethics*, Vol. 77, pp. 271–286.

Chen, Z.X., Aryee, S. and Lee, C. (2005), "Test of a mediation model of perceived organizational support", *Journal of Vocational Behavior*, Vol. 66 No. 3, pp. 457–470.

Dumont, J., Shen, J. and Deng, X. (2016), "Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values", *Human Resource Management*, Vol. 56 No. 4, pp. 613–627.

Elzek, Y.S., Soliman, M., Riyami, H. Al and Scott, N. (2024), "Talent management and sustainable performance in travel agents: do green intellectual capital and green servant leadership matter?", *Current Issues in Tourism ISSN:*, Vol. 27 No. 19, pp. 3115–3130.

Fornell, C. and Larcker, D.F. (1981), "Unobservable Variables and Measurement Error : Algebra and Statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382–388.

Greenleaf, R.K. (1998), *The Power of Servant-Leadership*, edited by SPEARS, L.C., Berrett-Koehler Publishers, Inc, San Francisco, California

Ha, N.M., Nguyen, P.A., Luan, N.V. and Tam, N.M. (2023), "Impact of green innovation on

For Peer Review

environmental performance and financial performance", *Environment, Development and Sustainability*, Vol. 26, pp. 17083–17104.

Hair, J.F., Babin, B.J. and Krey, N. (2017), "Covariance-Based Structural Equation Modeling in the Journal of Advertising: Review and Recommendations", *Journal of Advertising*, Vol. 46 No. 1, pp. 163–177.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2–24.

Hameed, Z. and Naeem, R.M. (2020), "Do green HRM practices influence employees ' environmental performance ?", *International Journal of Manpower*, Vol. 41 No. 7, pp. 1061–1079.

Hart, S.L. (1995), "A natural-resource-based view of the firm", *Academy of Management*, Vol. 20 No. 4, pp. 115–135.

Hayton, J.C. (2004), "Strategic human capital management in SMEs: An empirical study of entrepreneurial performance", *Human Resource Management*, Vol. 42 No. 4, pp. 375–391.

Heikkurinen, P., Young, C.W. and Morgan, E. (2019), "Business for sustainable change : Extending eco-efficiency and eco-sufficiency strategies to consumers", *Journal of Cleaner Production*, Vol. 218, pp. 656–664.

Jabbour, C.J. and Jabbour, D.S. (2016), "Green Human Resource Management and Green Supply Chain Management: Linking two emerging agendas", *Journal of Cleaner Production*, Vol. 112, pp. 1824–1833.

Jirakraisiri, J., Badir, Y.F. and Frank, B. (2021), "Translating green strategic intent into green process innovation performance: the role of green intellectual capital", *Journal of Intellectual Capital*, Vol. 22 No. 7, pp. 43–67.

Jyoti, J. and Bhau, S. (2015), "Impact of Transformational Leadership on Job Performance: Mediating Role of Leader–Member Exchange and Relational Identification", *SAGE Open*, Vol. 5 No. 4, pp. 1–13.

Khan, A.N., Khan, N.A. and Mehmood, K. (2025), "Management of green innovation: the influence of digital leadership on employee behavior in an empirical investigation", *Baltic Journal of Management*, Vol. 25 No. 5, pp. 675–694.

Khatri, P., Dutta, S., Kumari, P., Duggal, H.K., Thomas, A., Cristillo, I. and Nobi, S. (2023), "Modeling intellectual capital-based intrapreneurial ability of working professionals through servant leadership and self-efficacy", *Journal of Intellectual Capital*, Vol. 24 No. 6, pp. 1485–1505.

Lam, L., Nguyen, P., Le, N. and Tran, K. (2021), "The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation", *Journal of Open Innovation: Technology, Market, and Complexity*, Vol. 7 No. 1, pp. 1–16.

Latan, H., Jose, C., Jabbour, C., Beatriz, A., Sousa, L. De, Fosso, S. and Shahbaz, M. (2018), "Effects of environmental strategy, environmental uncertainty and top management's commitment on corporate environmental performance: The role of environmental management accounting", *Journal of Cleaner Production*, Elsevier Ltd, Vol. 180 No. 4, pp. 297–306.

Lewis, B.W., Walls, J.L. and Dowell, G.W.S. (2014), "Difference in Degrees: Ceo Characteristics and Firm Environmental Disclosure", *Strategic Management Journal*, Vol. 35 No. 5, pp. 712–722.

Li, W., Abdalla, A.A., Mohammad, T., Khassawneh, O. and Parveen, M. (2023), "Towards Examining the Link Between Green HRM Practices and Employee Green in-Role Behavior: Spiritual Leadership as a Moderator", *Psychology Research and Behavior Management ISSN:*, Vol. 16, pp. 383–396.

For Peer Review - Measuring Business Excellence

Longoni, A., Luzzini, D. and Guerci, M. (2016), "Deploying Environmental Management Across Functions : The Relationship Between Green Human Resource Management and Green Supply Chain Management", *Journal of Business Ethics*, Springer Netherlands, Vol. 151, pp. 1081–1095.

Mahmoud, M.A., Ma'aji, M.M., Abdullahi, M.S. and Karaye, A.B. (2025), "Factors influencing the Islamic Fintech acceptance: moderating role of Islamic financial literacy", *Journal of Islamic Accounting and Business Research*, available at:https://doi.org/doi.org/10.1108/JIABR-08- 2024-0322.

Mahmoud, M.A. and Mahmoud, A. (2025), "Government support and SMEs' dimensional performance during the COVID-19 crises: Does disruption orientation matter?", *International Journal of Productivity and Performance Management*, Vol. 74 No. 7, pp. 2471–2498.

Mahmoud, M.A., Umar, U.H., Danlami, M.R. and Ado, M.B. (2025), "An analysis of Islamic financing access in Nigeria: perspectives of MSME owners", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 18 No. 1, pp. 49–67.

Mansoor, A., Jahan, S. and Riaz, M. (2021), "Does green intellectual capital spur corporate environmental performance through green workforce?", *Journal of Intellectual Capital*, Vol. 22 No. 5, pp. 823–839.

Mas, F.D., Tucker, W., Massaro, M. and Bagnoli, C. (2021), "Corporate social responsibility in the retail business : A case study", *Corporate Social Responsibility and Environmental Management.*, Vol. 29 No. 1, pp. 223–232.

Munawar, S., Yousaf, H.Q., Ahmed, M. and Rehman, S. (2022), "Effects of green human resource management on green innovation through green human capital, environmental knowledge, and managerial environmental concern", *Journal of Hospitality and Tourism Management*, Elsevier Ltd, Vol. 52 No. 3, pp. 141–150.

Naidoo, M. and Gasparatos, A. (2018), "Corporate Environmental Sustainability in the retail sector: Drivers, strategies and performance measurement", *Journal of Cleaner Production*, Elsevier B.V., Vol. 203 No. 12, pp. 125–142.

Noor, J., Tunnufus, Z., Handrian, V.Y. and Yumhi, Y. (2023), "Green human resources management practices , leadership style and employee engagement : Green banking context", *Heliyon*, Elsevier Ltd, Vol. 9 No. 12, pp. 1–10.

Oprean-stan, C., Stan, S. and Br, V. (2020), "Corporate Sustainability and Intangible Resources Binomial : New Proposal on Intangible Resources Recognition and Evaluation", *Sustainability*, Vol. 12 No. 10, pp. 1–23.

Panda, S.S. and Sangle, S. (2019), "Stakeholder engagement as a dynamic capability", *Business Strategy and Developmentdeve*, Vol. 3 No. 2, pp. 204–212.

Pangarso, A., Setyorini, R., Umbara, T. and Latan, H. (2024), "Green Organizational Culture and Competitive Advantage in Indonesian Higher Education: The Mediation Roles of Green Human Capital Management and Absorptive Capacity", edited by Yusliza, M.Y. and Renwick, D.W.S.*Green Human Resource Management: A View from Global South Countries*, Springer International Publishing, pp. 139–161.

Pham, N.T., Hoang, H.T. and Phan, Q.P.T. (2020), "Green human resource management : a comprehensive review and future research agenda", *International Journal of Manpower*, Vol. 47 No. 1, pp. 845–878.

Pontillo, H. R., Dominguez, S. M., Bustamante, A. R., Genodiala, A., Gahum, S., Pontillo, V. A. R., ... & Villaluz, F. (2025), "The Mediating Role of Green Human Capital in the Relationship Between Green Human Resource Management Practices and Green Employee Behavior for a Sustainable Future", *Sustainability*, Vol. 17 No. 23, 10767.

Renwick, D.W.S., Jabbour, C.J.C., Muller-Camen, M., Redman, T. and Wilkinson, A. (2016), "Contemporary developments in Green (environmental) HRM scholarship", *International*

Measuring Business Excellence

Journal of Human Resource Management, Vol. 27 No. 2, pp. 114–128.

Roscoe, S., Subramanian, N., Jabbour, C.J.C. and 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*, Vol. 28 No. 5, pp. 737–749.

Shahab, Y., Ntim, C.G., Chen, Y., Ullah, F., Li, H.-X. and Ye, Z. (2019), "Chief executive officer attributes , sustainable performance , environmental performance , and environmental reporting : New insights from upper echelons perspective", *Business Strategy and Development*, Vol. 29 No. 1, pp. 1–16.

Shahriari, M. and Allameh, S.M. (2020), "Organizational culture and organizational learning : does high performance work systems mediate ?", *Journal of Workplace Learning*, Vol. 32 No. 8, pp. 583–597.

Shahzad, M., Qu, Y., Ullah, A., Ding, X. and Ur, S. (2020), "Translating stakeholders ' pressure into environmental practicese The mediating role of knowledge management", *Journal of Cleaner Production*, Elsevier Ltd, Vol. 275, available at:https://doi.org/10.1016/j.jclepro.2020.124163.

Shoaib, M., Abbas, Z., Yousaf, M., Zámečník, R., Ahmed, J., Saqib, S., Shoaib, M., *et al.* (2021), "The role of GHRM practices towards organizational commitment : A mediation analysis of green human capital The role of GHRM practices towards organizational commitment : A mediation analysis of green human capital", *Cogent Business & Management*, Cogent, Vol. 8 No. 1, p. 1870798.

Siddiquei, A., Asmi, F., Asadullah, M.A. and Mir, F. (2021), "Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: a case of China", *International Journal of Manpower*, Vol. 42 No. 7, pp. 1161–1182.

Singh, S.K., Del Giudice, M., Chiappetta Jabbour, C.J., Latan, H. and Sohal, A.S. (2022), "Stakeholder pressure, green innovation, and performance in small and medium-sized enterprises: The role of green dynamic capabilities", *Business Strategy and the Environment*, Vol. 31 No. 1, pp. 500–514.

Singh, S.K., Giudice, M. Del, Chierici, R. and Graziano, D. (2020a), "Green innovation and environmental performance: The role of green transformational leadership and green human resource management", *Technological Forecasting and Social Change*, Elsevier, Vol. 150 No. 1, pp. 1–12.

Singh, S.K., Giudice, M. Del, Chierici, R. and Graziano, D. (2020b), "Green innovation and environmental performance : The role of green transformational leadership and green human resource management", *Technological Forecasting & Social Change*, Elsevier, Vol. 150 No. 1, pp. 1–23.

Soomro, B.A. and Shah, N. (2019), "Determining the impact of entrepreneurial orientation and organizational culture on job satisfaction, organizational commitment, and employee's performance", *South Asian Journal of Business Studies*, Vol. 8 No. 3, pp. 266-282.

Soomro, S.A. and Soomro, S.A. (2024), "Green intellectual capital and employee environmental citizenship behavior : the mediating role of organizational agility and green creativity", *Journal of Intellectual Capital*, Vol. 25 No. 4, pp. 822–840.

Štaffenová, N. and Kucharčíková, A. (2024), "Human capital management – values , competencies , and motivation – concerning Industry 4 . 0", *Economic Research-Ekonomska Istraživanja*, Routledge, Vol. 37 No. 1, pp. 1–22.

Tan, N., Vo-thanh, T., Shahbaz, M., Luu, T., Huynh, D. and Usman, M. (2020), "Managing environmental challenges : Training as a solution to improve employee green performance", *Journal of Environmental Management*, Elsevier Ltd, Vol. 269 No. 3, pp. 1–8.

Tang, G., Chen, Y., Jiang, Y. and Jia, J. (2018), "Green human resource management practices :

Measuring Business Excellence

scale development and validity", *Asia Pacific Journal of Human Resources*, Vol. 56 No. 1, pp. 31–55.

Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic Capabilities and Strategic Management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509–533.

Teferaa, C.A. and Hunsake, W.D. (2021), "Intangible assets and organizational citizenship behavior: A conceptual model", *Heliyon*, Vol. 6 No. 7, pp. 1–11.

Tran, N.P., Dinh, C.T.H., Hoang, H.T.T. and Vo, D.H. (2022), "Intellectual Capital and Firm Performance in Vietnam : The Moderating Role of Corporate Social Responsibility", *Sustainability*, Vol. 14 No. 19, pp. 1–13.

Tuan, L.T. (2019a), "Effects of environmentally-specific servant leadership on green performance via green climate and green crafting", *Asia Pacific Journal of Management*, Asia Pacific Journal of Management, Vol. 38 No. 9, pp. 925–953.

Tuan, L.T. (2019b), "Environmentally-specific servant leadership and green creativity among tourism employees : dual mediation paths", *Journal of Sustainable Tourism*, Routledge, Vol. 28 No. 1, pp. 1–24.

Wang, C. (2019), "How organizational green culture influences green performance and competitive advantage The mediating role of green innovation", *Journal of Manufacturing Technology Management*, Vol. 30 No. 4, pp. 666–683.

Wei, F., Abbas, J., Alarifi, G., Zhang, Z., Adam, N.A. and Queiroz, M.J. de. (2023), "Role of green intellectual capital and top management commitment in organizational environmental performance and reputation: Moderating role of pro-environmental behavior", *Journal of Cleaner Production*, Vol. 405, available at:https://doi.org/https://doi.org/10.1016/j.jclepro.2023.13684.

Yong, J.Y. and Fawehinmi, O.O. (2019), "Green human resource management: A systematic literature review from 2007 to 2019", *Benchmarking: An International JournaL*, Vol. 27 No. 7, pp. 2005–2027.

Yong, J.Y., Yusliza, M., Ramayah, T. and Fawehinmi, O. (2019), "Nexus Between Green Intellectual Capital and Green Human Resource Management", *Journal of Cleaner Production*, Elsevier Ltd, available at:https://doi.org/10.1016/j.jclepro.2018.12.306.

Yu, T., Abbas, J., Abbas, R. and Hina, R. (2024), "Role of environment‐driven CSR, green servant leadership, and green dynamic capabilities in firm green innovation: Evidence from manufacturing industry", *Environment, Development and Sustainability*, Springer Netherlands, Vol. 26 No. 11, pp. 24521–24568.

Yukl, G. and Gardner, W.L. (2019), *Leadership in Organizations*, 9th eds., Pearson Education Limited, Essex:United Kingdom.

Yusoff, Y.M., Nejati, M., Kee, D.M.H. and Amran, A. (2020), "Linking Green Human Resource Management Practices to Environmental Performance in Hotel Industry", *Global Business Review*, Vol. 21 No. 3, pp. 663–680.

Measuring Business Excellence

Table 1. Demographic characteristics of respondents

Characteristic	Category	Frequency (n=203)	Percentage (%)
Gender (General Managers)	Male	157	77.30
	Female	46	22.70
Gender (HR Managers)	Male	131	64.60
	Female	72	35.40
Gender (Operations Managers)	Male	173	85.30
	Female	30	14.70
Education (General Managers)	Bachelor's degree or higher	177	87.00
	Below Bachelor's degree	26	13.00
Education (HR Managers)	Bachelor's degree or higher	152	74.87
	Below Bachelor's degree	51	25.13
Education (Operations Managers)	Bachelor's degree or higher	154	76.01
	Below Bachelor's degree	49	23.99
Bank Size (Number of Employees)	Fewer than 40 employees	91	44.83
	40 employees or more	112	55.17

*Each rural bank was represented by three respondents (general manager, HR manager, and operations manager).
Source(s): Authors' own work

Measuring Business Excellence

Table 2. Convergent validity results

Variables	Item	Loading	Alpha	CR	AVE
Green Servant Leadership	GSL1	0.722			
	GSL2	0.734			
	GLS3	0.855			
	GLS4	0.873			
	GLS5	0.812			
	GLS6	0.712			
	GLS7	0.762	0.841	0.864	0.699
	GLS8	0.803			
	GLS9	0.765			
	GLS10	0.823			
	GLS11	0.861			
	GLS12	0.792			
Capabilities	CAP1	0.829			
	CAP2	0.819	0.803	0.861	0.624
	CAP3	0.802			
Skills and motivation	SAM1	0.793			
	SAM2	0.901	0.796	0.782	0.724
	SAM3	0.817			
Green Intellectual Capital	GIC1	0.750			
	GIC2	0.788			
	GIC3	0.849			
	GIC4	0.860	0.817	0.812	0.654
	GIC5	0.768			
	GIC6	0.874			
	GIC7	0.798			
Environmental performance	EVP1	0.849			
	EVP2	0.865			
	EVP3	0.765	0.798	0.801	0.723
	EVP4	0.789			
	EVP5	0.801			

Note: AVE-Average Variance Extracted; CR-Composite Reliability
Source(s): Authors' own work

Tabel 3. Discriminant validity result

Variables	GSL	CAP	SAM	GIC	EVP
GSL	**0.775**				
CAP	0.756	**0.851**			
SAM	0.751	0.801	**0.862**		
GIC	0.729	0.786	0.761	**0.790**	
EK	0.567	0.756	0.643	0.701	**0.818**

Note: GSL= green servant leadership; CAP= capabilities; SAM= skills and motivation; GIC= green intellectual capital; EVP= environmental performance.
Source(s): Authors' own work

Measuring Business Excellence

Table 4. The results of direct and indirect influences

Hypotheses	Relationships	beta	t-value	ρ-value	Discission
H1	GSL → CAP	0.756	18.568	0.000	Accepted
H2	GSL → SAM	0.235	4.761	0.001	Accepted
H3	CAP → GIC	0.545	7.267	0.000	Accepted
H4	SAM → GIC	0.351	6.722	0.000	Accepted
H5	GIC → EVP	0.568	9.528	0.000	Accepted
H6	GSL → CAP → GIC	0.412	4.123	0.000	Accepted
H7	GSL → SAM → GIC	0.211	3.541	0.005	Accepted
H8	CAP → GIC → EVP	0.320	4.558	0.000	Accepted
H9	SAM → GIC → EVP	0.198	3.021	0.002	Accepted

Note: GSL= green servant leadership; CAP= capabilities; SAM= skills and motivation; GIC= green intellectual capital; EF= environmental performance.
Source(s): Authors' own work

Measuring Business Excellence

Please click the "Return to Dashboard" button below to view your submitted manuscript OR click the link "Log Out" at the upper right side of the screen to log out of your account.

Submission Confirmation

Print

Thank you for your revision

Submitted to
Measuring Business Excellence

Manuscript ID
MBE-09-2025-0189.R1

Title
Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital

Authors
Noor, Juliansyah
Mahmoud, Mahmoud
Poespowidjojo, Donny
Soleh (has only first name), Soleh

Date Submitted
15-Jan-2026

Author Dashboard

4. Bukti Konfirmasi Artikel Accepted

(10 Agustus 2026)

UNIVERSITAS LA TANSA MASHIRO
جامعة لا تنس مهيرا

Juliansyah Noor <juliansyah.noor@unilam.ac.id>

Measuring Business Excellence - Decision on Manuscript ID MBE-09-2025-0189.R1

1 pesan

Measuring Business Excellence <onbehalfof@manuscriptcentral.com> 10 Agustus 2026 pukul 02.26
Balas Ke: josvaniwaarden.MBE@gmail.com
Kepada: juliansyah.noor@unilam.ac.id, elmahmuud@yahoo.com, elmahmuud88@gmail.com, dpoespowidjojo@gmail.com, soleh@unilam.ac.id

09-Aug-2026

Dear Noor, Juliansyah; Mahmoud, Mahmoud; Poespowidjojo, Donny; Soleh (has only first name), Soleh

It is a pleasure to accept your manuscript MBE-09-2025-0189.R1, entitled "Green Servant Leadership and Environmental Performance: The Mediating effect of Green Human Capital Management Practices and Green Intellectual Capital" in its current form for publication in Measuring Business Excellence. Please note, no further changes can be made to your manuscript.

This email will be followed by a second message containing a copy of your author accepted manuscript (AAM) which is the version that we will typeset and publish in the journal.

Your article will now go through editorial checks by Emerald's editorial team to ensure it meets our publication standards. These checks can take up to five days; we'll be in touch if we have any queries at this stage. Once this step has been completed you will receive an email directing you to Emerald Submit to select your publishing licence and submit your article to production. If you are publishing in one of our subscription journals and wish to make your article open access you can choose this option in Emerald Submit. Please note, when creating an account to sign your license in Submit, you must use the same email address that is linked to your ScholarOne account. If you use a different email, you will not be able to see your accepted manuscript in the Submit platform.

If you have not received an email with editorial queries or an invitation to complete licensing on Emerald Submit within 10 working days of acceptance, please do contact the JEO (Journal Editorial Office), you can find their details on the journal homepage:

https://www.emerald.com/mbe

Please note that it is the corresponding author who must sign the publishing licence on behalf of all authors of your article.

Once you have completed licensing on Emerald Submit, your article will enter the production process and you'll be provided with a proof. You will need to approve your proof before your article is published. If you have any queries about the proofing system you can contact the journal's Supplier Project Manager (SPM) whose contact details are on the journal homepage: https://www.emerald.com/mbe.

By publishing in this journal your work will benefit from Emerald EarlyCite. Once the above steps are completed your article will be published online in EarlyCite. EarlyCite is the author proofed, typeset version of record, fully citable by DOI. The EarlyCite article sits outside of a journal issue and is paginated in isolation. The EarlyCite article will later be collated into a journal issue according to the journals' publication schedule.

Thank you for your contribution. On behalf of the Editors of Measuring Business Excellence, we look forward to your continued contributions to the Journal.

Yours sincerely
Dr. Jos van Iwaarden
Editor, Measuring Business Excellence
josvaniwaarden.MBE@gmail.com

5. Bukti Artikel Published Online
(30 Oktober 2026)

Green servant leadership and environmental performance: the mediating effect of green human capital management practices and green intellectual capital

Juliansyah Noor, Mahmoud Ahmad Mahmoud, Donny Abdul Latief Poespowidjojo and Soleh

Abstract

Purpose – *This paper aims to explore the connections between green servant leadership (GSL), green human capital management (G-HCM) practices, green intellectual capital (GIC) and the environmental performance (EVP) of firms. Specifically, the mediating effect of G-HCM practices between GSL and GIC relationship, as well as the mediating effect of GIC on the G-HCM and EVP relationships were investigated.*

Design/methodology/approach – *Data were collected through a cross-sectional survey questionnaire from 203 rural banks in Indonesian banking sector. The study used partial least squares structural equation modeling to test the hypotheses.*

Findings – *The findings indicate that G-HCM practices act as a mediator between GSL and GIC. Furthermore, the research highlights that G-HCM practices, via its impact on GIC, indirectly influences EVP. The results confirm that all direct and indirect effects hypothesized in the study were supported.*

Research limitations/implications – *Findings are limited to rural banks; cross-industry samples are encouraged in future studies.*

Practical implications – *GSL and G-HCM practices must be enhanced by managers to improve GIC and EVP.*

Social implications – *The findings promote sustainable banking practices that contribute to environmental protection and ecological responsibility.*

Originality/value – *The study makes a meaningful contribution to advancing current theories by suggesting that the connection between G-HCM practices and environment performance is not solely determined by the additive effects of GSL and GIC nor by their interactive effects, but a combination of both.*

Keywords *Green servant leadership, Environmental performance, Green human capital management practices, Green intellectual capital*

Paper type *Research paper*

Juliansyah Noor is based at the Department of Management, University of La Tansa Mashiro, Banten, Indonesia. Mahmoud Ahmad Mahmoud is based at School of Business Management, Universiti Utara Malaysia, Sintok, Malaysia, and Department of Management, University of Nizwa, Nizwa, Oman. Donny Abdul Latief Poespowidjojo is based at Faculty of Economics and Business, Muhammadiyah University Riau, Pekanbaru, Indonesia. Soleh is based at the Department of Management, University of La Tansa Mashiro, Banten, Indonesia.

1. Introduction

The existing literature on business sustainability, particularly focusing on ecological utilization, predominantly emphasizes general banks rather than rural banking (Heikkurinen *et al.*, 2019). Rural banking greatly contributes to commercial activities environmentally, yet it has received insufficient attention in academic research (Naidoo and Gasparatos, 2018; Mas *et al.*, 2021). It is becoming common practice for businesses across industries to produce greener processes and products in response to rising stakeholder demands for implementing environmental management measures (Shahzad *et al.*, 2020; Baaha *et al.*, 2020). To address the complex sustainability issues and satisfy the demands of many

JEL classification – M12, M19, O15, Q59

Received 6 September 2025
Revised 15 January 2026
Accepted 9 August 2026

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

stakeholders, businesses are encouraged to leverage intangible resources (Oprean-stan *et al.*, 2020; Panda and Sangle, 2019). Previous studies have demonstrated that environmental performance (EVP) is significantly affected by personnel at all levels and activities of a business (Hameed and Naeem, 2020; Singh *et al.*, 2022). According to Hayton (2004) and (Štaffenová and Kucharčíková, 2024), leadership and human capital management (HCM) are integral in building essential internal competencies and capabilities for human resource management in rural banking. Furthermore, prior studies indicate that corporate culture, self-efficacy and factors influencing employee work motivation also affect the EVP (Camilleri *et al.*, 2023; Blankenship *et al.*, 2021). According to Mansoor *et al.* (2021) and Wei *et al.* (2023), leadership behavior can affect green intellectual capital (GIC) and EVP.

Organizational capabilities are pivotal in developing and sustaining effective environmental management systems (Asiaei *et al.*, 2021; Longoni *et al.*, 2016; Baumgartner and Winter, 2014). However, existing studies have primarily focused on manufacturing or general banking contexts, leaving rural banks largely underexplored. Rural banks face distinctive challenges, including limited resources, lack of employee capability and motivation and underdeveloped environmental governance (Lam *et al.*, 2021). These characteristics raise questions about whether existing theories of green leadership and organizational capabilities fully account for this context. By examining rural banks in Indonesia, this study extends prior theory by testing a dual-mediation model in which green servant leadership (GSL) fosters EVP through green human capital management (G-HCM) and GIC. In doing so, the study contributes to the literature by (1) addressing an under-researched organizational setting, (2) refining the resource-based view (RBV) and the ability–motivation–opportunity (AMO) theory to explain EVP in resource-constrained financial institutions. The RBV posits that firms achieve sustainable performance by leveraging valuable, rare, inimitable and nonsubstitutable internal resources (Barney, 2001), while the AMO theory explains how employee abilities, motivation and opportunities to participate jointly shape organizational outcomes (Appelbaum *et al.*, 2000). Building on these perspectives, AMO explains how leadership attributes such as capabilities, knowledge, skills and motivation operate through ability, motivation and opportunity mechanisms to shape G-HCM, whereas RBV provides the theoretical rationale for viewing these attributes as strategic intangible resources that support sustainable competitive advantage (Munawar *et al.*, 2022). From a dynamic capabilities perspective, organizational performance is driven by the firm's ability to integrate, build and reconfigure internal competencies in response to environmental challenges (Teece *et al.*, 1997). In this study, G-HCM and GIC can be understood as dynamic capabilities that enable rural banks to translate green leadership into sustained EVP. (3) providing empirical evidence that the connection between G-HCM and EVP is not simply additive but emerges from the combined and mediated effects of leadership and intellectual capital.

Executives have a pivotal role in the rural banking environment because of the considerable influence they have over rural banks' performance (Latan *et al.*, 2018; Shahab *et al.*, 2019). Aboramadan *et al.* (2020) and (Tuan, 2019a, 2019b) argue that executives in rural banking need to adopt a GSL approach as well as implement environmentally oriented HCM practices. The aim is to encourage and support the development of internal competencies required for GIC as well as improve EVP (Jirakraisiri *et al.*, 2021; Wang, 2019; Asiaei *et al.*, 2022). This study aims to address two significant questions: (1) Does G-HCM impact GIC? (2) Does GSL contribute to implementing G-HCM practices linked to GIC and EVP? We use the AMO theory (Appelbaum *et al.*, 2000) and the RBV framework (Barney, 2001) as the overarching theoretical foundation.

2. Literature review

2.1 Relationship between green servant leadership and G-HCM (CAP and SAM)

Servant leadership is a leadership approach that prioritizes serving employees by fostering their development, well-being and empowerment to enhance organizational outcomes

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

(Greenleaf, 1998; Yukl and Gardner, 2019). Building on this perspective, GSL extends servant leadership principles by explicitly integrating environmental values into leadership behaviors. The concept of servant leadership originates from the seminal work of Greenleaf (1998), which emphasizes leaders' moral responsibility to serve, empower and develop followers. In the context of environmental management, this leadership philosophy provides a strong foundation for GSL, where leaders prioritize environmental values while fostering employees' capabilities and motivation. GSL involves "providing direction, empowering and developing individuals to become environmentally conscious citizens, while demonstrating humility, authenticity, interpersonal acceptance and stewardship in relation to employees' pro-environmental contributions" (Tuan, 2019b). Importantly, GSL emphasizes addressing the unique needs of employees by aligning individual development, motivation and empowerment with organizational environmental goals (Tuan, 2019b; Elzek *et al.*, 2024) Elzek *et al.* (2024) further argue that GSL adopts a bottom-up approach that serves employees' green-related interests by providing the resources necessary for engagement in voluntary and creative green initiatives. Empirical evidence indicates that such leadership behavior enhances employee motivation, talent development and workforce productivity, which are critical antecedents of EVP (Tuan, 2019b; Tang *et al.*, 2018).

In addition, G-HCM is the environmental knowledge, skills, attitudes and values accumulated by employees through organizational initiatives (Pontillo *et al.*, 2025). Thus, G-HCM consists of capabilities, skills and motivation. Pangarso *et al.* (2024) and Dumont *et al.* (2016) state that G-HCM practices help them find, train, motivate and retain environmentally conscious employees. To get a strong GSL and improve EVP, it is thought that the role of GSL within organizations is important for making G-HCM policies and practices that work well (Tang *et al.*, 2018). GSL's focus on addressing the unique needs of employees may lead to the development and implementation of G-HCM practices aimed at maintaining motivation and empowerment among their workforce (Elzek *et al.*, 2024). G-HCM practices operationalize these leadership intentions by systematically developing employees' environmental capabilities, as well as their skills and motivation, through recruitment, training, performance management and incentive systems (Dumont *et al.*, 2016; Pangarso *et al.*, 2024). In this study, G-HCM is conceptualized along two key dimensions: capabilities (CAP), referring to employees' environmental knowledge, competencies and abilities and skills and motivation (SAM), reflecting employees' willingness and readiness to apply such competencies in environmental practices (Munawar *et al.*, 2022). Therefore, GSL assumes a crucial role in ensuring the implementation of effective G-HCM practices. This includes hiring and firing, training and development, performance management and evaluation, as well as pay and incentive systems. Therefore, we predict that:

H1. GSL has a positive link to capabilities.

H2. GSL has a positive link to skills and motivation.

2.2 Relationship between G-HCM (CAP and SAM) and GIC

G-HCM is a strategy that can help businesses create and implement eco-friendly plans and procedures (Latan *et al.*, 2018). Roscoe *et al.* (2019) conclude that G-HCM procedures are in line with the purpose of environmental accountability. Renwick *et al.* (2016) state that G-HCM highlights the importance of human resources in reducing pollution and improving an organization's operational procedures. Asiaei *et al.* (2021) define GIC as "the total stock of all kinds of intangible assets, knowledge, capabilities and relationships. about environmental protection or green innovation of both the individual and organization levels within a company" (p. 1587). According to Shahriari and Allameh (2020) and Yong and Fawehinmi (2019), the concept of GIC represents a resource that cannot be defined in financial terms and rather focuses on the ability, skills and experience of human beings, which can generate a competitive edge and enhance growth. The implementation of

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

G-HCM encompasses various employee traits, including "capabilities, wisdom, knowledge, commitments, skills, attitudes, experiences and creativity" (Munawar *et al.*, 2022, p. 142). Supporting this linkage, Jyoti and Bhau (2015) argue that organizations recruit employees who are active on green initiatives, offer skills and motivation and compensate; such G-HCM practices improve EVP. Accordingly, prior research conceptualizes GIC as a strategic resource derived from the effective deployment of green human capital, which subsequently enhances organizational competitiveness and sustainable growth (Shahriari and Allameh, 2020; Yong and Fawehinmi, 2019). In alignments, the G-HCM capabilities component (CAP) and skills and motivation (SAM) components are projected to influence the GIC.

Thus, we postulate the following hypothesis:

H3. Capabilities are positively linked to GIC.

H4. Skills and motivation are positively linked to GIC.

2.3 Green intellectual capital environmental performance relationship

GIC enhances organizational performance by equipping individuals with the necessary knowledge, abilities, skills and competencies. This proficiency enables better performance, which in turn contributes to overall organizational success (Roscoe *et al.*, 2019; Shahriari and Allameh, 2020; Yong and Fawehinmi, 2019). EVP is an organization's efforts to meet and go beyond what society expects of them when it comes to caring for the environment, going beyond just following the rules and regulations (Chen *et al.*, 2005). Importantly, strong EVP has been shown to contribute to organizational success by enhancing operational efficiency, reputation and long-term competitiveness (Hart, 1995; Roscoe *et al.*, 2019). Consequently, GIC is a factor in enhancing EVP. Consequently, GIC is a factor in enhancing EVP. Based on the provided explanation, we postulate the following hypothesis:

H5. GIC is positively linked to EVP.

2.4 Mediating effect of G-HCM (CAP and SAM) on the GSL and GIC relationship

An approach to leadership known as "servant leadership" prioritizes the development and well-being of subordinates (Yukl and Gardner, 2019). Moreover, G-HCM emphasizes sustainability and monitors the functioning of organizations and the impact of their systems and processes on employees, typically on a broader level (Lewis *et al.*, 2014). Siddiquei *et al.* (2021) conclude that GSL positively influences EVP by fostering pro-environmental values and behaviors among employees. Building on this foundation, subsequent studies indicate that servant leadership also enhances organizational performance by strengthening intellectual capital and knowledge-based resources (Yu *et al.*, 2024). Elzek *et al.* (2024) state that GIC (capabilities, skill and motivation) moderates the connection between servant leadership and firm performance, particularly in the tourism sector. Servant leaders enhance intellectual capital within organizations and contribute to the success of products and services in the market by using inspirational motivation and intellectual stimulation (Khatri *et al.*, 2023; Khan *et al.*, 2025). Furthermore, to foster intellectual capital, servant leadership allows employees the autonomy to select their tasks and determine the means to accomplish their objectives (Soomro and Soomro, 2024). GSL fully supports "the protection of the natural environment and translates this vision into employees through the enhancement of EVP" (Greenleaf, 1998, p. 5), significantly influencing firms' G-HCM practices (Renwick *et al.*, 2016; Mansoor *et al.*, 2021). Pangarso *et al.* (2024) proposed that G-HCM mediate the connection between GSL and GIC. Thus, we propose a hypothesis as follows:

H6. Capabilities mediate the association between GSL and GIC.

H7. Skills and motivation mediate the association between GSL and GIC.

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

2.5 Mediating effect of GIC on the G-HCM (CAP and SAM) and EVP relationship

Prior studies (Khatri *et al.*, 2023; Tran *et al.*, 2022) indicate that G-HCM methods affect GIC and the EVP. GIC represents the accumulation of environmentally related knowledge, capabilities, skills and relational assets embedded at both individual and organizational levels (Asiaei *et al.*, 2021). As a strategic intangible resource, GIC enables organizations to transform employees' green capabilities (CAP) and skills and motivation (SAM) into environmentally responsible behaviors and practices that support superior environmental outcomes (Yong *et al.*, 2019; Shahriari and Allameh, 2020). Firms with well-developed GIC are better positioned to internalize environmental knowledge, foster green innovation and coordinate environmentally sustainable activities, all of which contribute directly to improved EVP (Roscoe *et al.*, 2019; Soomro and Shah, 2019). Empirical evidence further suggests that the impact of G-HCM on EVP is not purely direct but operates through the development of GIC. Specifically, G-HCM capabilities enhance employees' environmental expertise and problem-solving capacity, which become embedded within GIC and facilitate environmentally efficient processes and reduced ecological impact (Asiaei *et al.*, 2021; Noor *et al.*, 2023). Similarly, employees' green skills and motivation strengthen GIC by promoting knowledge sharing, continuous learning and proactive engagement in environmental initiatives, which in turn improve EVP (Teferaa and Hunsake, 2021; Mansoor *et al.*, 2021; Li *et al.*, 2023).

Therefore, we suggest that:

H8. GIC mediates the link between capabilities and EVP.

H9. GIC mediates the link between skills and motivation and EVP.

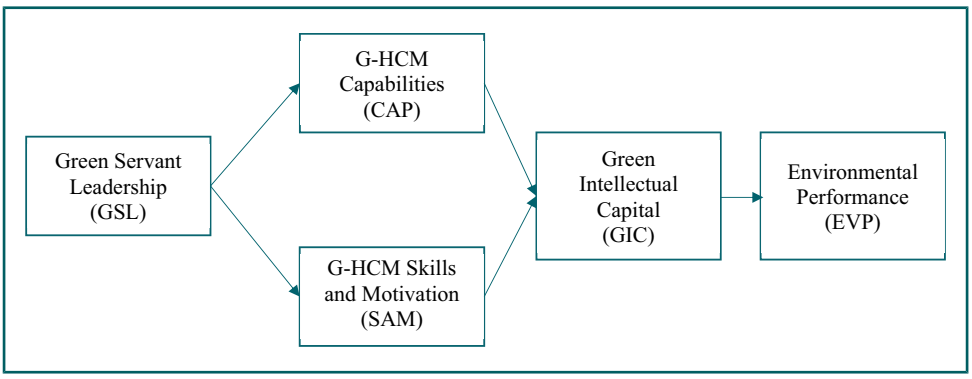
The research framework is presented in Figure 1, based on a thorough literature analysis of the proposed hypotheses.

3. Methodology

3.1 Sample and procedure

Consistent with preceding researches that used similar data collection and analysis methods, this study used the cross-sectional quantitative survey design (Shoaib *et al.*, 2021; Mahmoud *et al.*, 2025). A total of 203 Indonesian rural banks were contacted, the researchers personally met with the general manager, human resources (HR) manager and operations manager for contextual clarifications. These individuals from different rural banks completed the questionnaire and returned it as reported in Table 1. General managers filled out questionnaires related to GSL and EVP, while HR managers and operations managers completed questionnaires on G-HCM and GIC. All respondents rated the items on a

Figure 1 Research framework



Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

Table 1 Demographic characteristics of respondents

Characteristic	*Category*	*Frequency (n = 203)*	*%*
Gender (general managers)	Male	157	77.30
	Female	46	22.70
Gender (HR managers)	Male	131	64.60
	Female	72	35.40
Gender (operations managers)	Male	173	85.30
	Female	30	14.70
Education (general managers)	Bachelor's degree or higher	177	87.00
	Below bachelor's degree	26	13.00
Education (HR managers)	Bachelor's degree or higher	152	74.87
	Below bachelor's degree	51	25.13
Education (operations managers)	Bachelor's degree or higher	154	76.01
	Below bachelor's degree	49	23.99
Bank size (number of employees)	Fewer than 40 employees	91	44.83
	40 employees or more	112	55.17

Note(s): Each rural bank was represented by three respondents (general manager, HR manager and operations manager)
Source(s): Authors' own work

five-point Likert scale, ranging from "1 (strongly disagree)" to "5 (strongly agree)". For this study, we used the back-translation method, translating the questionnaire from English to Indonesian and then back to English, following the guidelines of Brislin (1986), as the majority of the respondents were Indonesian speakers. It is important to note that this study is an independent academic investigation into ongoing leadership and management innovation practices, rather than a nationally mandated change management project.

3.2 Measurement of constructs

Based on a five-point Likert scale, the GSL was assessed based on a 12-item scale (Tuan, 2019a). Sample items include, "My manager emphasizes the importance of contributing to the environmental improvement." G-HCM was measured using six items adapted from Singh *et al.* (2020). Sample items for G-HCM capabilities include "Recruiting only those who possess environmental values." The example for item of skills and motivation includes "Employees should use environmental training in their jobs." The GIC was measured by the seven-item framework from Asiaei *et al.* (2021). The sample item includes, "managers in our organization can fully support their employees in achieving the goals of environmental protection." The scale measures EVP was adapted from a five-item scale, drawing inspiration from Boiral and Paille (2012) and Singh *et al.* (2020).

4. Results

4.1 Demographic background

In this survey, 203 participants, including general managers, HR managers and operations managers, were involved. There were 77.30% male and 22.70% female among general managers, with about 87% possessing at least bachelor's degree in law, engineering and management respectively. Also, for HR managers, 64.60% of the respondents are males and 35.40% females, while 74.87% have at least a bachelor's degree in management, technology and law. In the same way, of the operational managers, 85.30% were males and 14.70% were females, while 76.01% had bachelor's degrees in management and engineering. Finally, throughout the period, more than 55% of the rural banks had 40 or more employees. Table 1 presents the demographic characteristics of the respondents. The sample consisted of general managers, HR managers and operations managers from 203 rural banks. Overall, the respondents were predominantly male and held at

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

least a bachelor's degree. More than half of the participating rural banks employed 40 or more employees.

4.2 Measurement model

In partial least squares structural equation modeling (PLS-SEM), the evaluation of the measurement model is a crucial preliminary step prior to assessing the structural relationships among variables. The purpose of the measurement model assessment is to ensure that the latent variables are measured reliably and validly by their observed indicators (Hair *et al.*, 2019).

The PLS measurement model involves the assessment of item and construct reliability, as well as the convergent and discriminant validity of variables (Mahmoud and Mahmoud, 2025; Mahmoud, Umar, *et al.*, 2025; Mahmoud, Ma'aji, *et al.*, 2025). Item reliability result shows that all the items have a sufficient item reliability value above 0.70 (Hair *et al.*, 2017). The threshold of the reliability coefficient used in this study was determined Hair *et al.* (2019) which argues that values > 0.70 are sufficient to portray construct reliability for both the Cronbach's alpha and Composite Reliability techniques. Table 2 displays the Cronbach's alpha and Composite reliability values, which shows that all the values are greater than 0.70 indicating sufficient variable reliability. The variable convergent and discriminant validity were portrayed in Tables 2 and 3. A variable is considered to have convergent validity when the average variance extracted (AVE) is greater than 0.50

Table 2 Convergent validity results

Variables	*Item*	*Loading*	*Alpha*	*CR*	*AVE*
Green servant leadership	GSL1	0.722	0.841	0.864	0.699
	GSL2	0.734			
	GLS3	0.855			
	GLS4	0.873			
	GLS5	0.812			
	GLS6	0.712			
	GLS7	0.762			
	GLS8	0.803			
	GLS9	0.765			
	GLS10	0.823			
	GLS11	0.861			
	GLS12	0.792			
Capabilities	CAP1	0.829	0.803	0.861	0.624
	CAP2	0.819			
	CAP3	0.802			
Skills and motivation	SAM1	0.793	0.796	0.782	0.724
	SAM2	0.901			
	SAM3	0.817			
Green intellectual capital	GIC1	0.750	0.817	0.812	0.654
	GIC2	0.788			
	GIC3	0.849			
	GIC4	0.860			
	GIC5	0.768			
	GIC6	0.874			
	GIC7	0.798			
Environmental performance	EVP1	0.849	0.798	0.801	0.723
	EVP2	0.865			
	EVP3	0.765			
	EVP4	0.789			
	EVP5	0.801			

Note(s): AVE = average variance extracted; CR = composite reliability
Source(s): Authors' own work

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

Table 3 Discriminant validity result

Variables	*GSL*	*CAP*	*SAM*	*GIC*	*EVP*
GSL	*0.775*				
CAP	0.756	*0.851*			
SAM	0.751	0.801	*0.862*		
GIC	0.729	0.786	0.761	*0.790*	
EK	0.567	0.756	0.643	0.701	*0.818*

Note(s): GSL = green servant leadership; CAP = capabilities; SAM = skills and motivation; GIC = green intellectual capital; EVP = environmental performance
Source(s): Authors' own work

(Hair *et al.*, 2017). All the AVE values in this study are between 0.624 and 0.724 and item loadings range is from 0.782 to 0.864, indicating that each construct demonstrated an impressive level of convergent validity (see Table 2). To ascertain the discriminant validity, Fornell and Larcker (1981) Fornell and Larcker (1981) discriminant validity criteria was engaged; which requires that the AVE square root values for each variable must be larger than values within the same line of the correlation matrix to guarantee discriminant validity as portrayed in Table 3.

4.3 Structural model

Table 4 shows the results of the direct and indirect impacts tested using PLS-SEM modeling. According to Table 4, both *H1* [GSL → CAP] and *H2* [GSL → SAM] are supported by the are supported by the data, with β values of 0.756 and 0.235, respectively, and *t*-values of 18.568 and 4.761, respectively, and *p*-values that are less than or equal to 0.01. GSL positively and significantly impacts G-HCM, including green recruitment and skills and motivation. Furthermore, Table 4 also shows that *H3* [CAP → GIC], *H4* [SAM → GIC], and *H5* [GIC → EVP] are supported with values of ($\beta = 0.545$; $t = 7.267$, $p \leq 0.01$), ($\beta = 0.351$; $t = 6.722$, $p \leq 0.01$) and ($\beta = 0.568$; $t = 9.528$, $p \leq 0.01$). This indicates that GIC is positively and significantly predicted by G-HCM, like capabilities and skills and motivation. This research has not disproved any direct hypothesis. The hypotheses *H6* [GSL → CAP → GIC], *H7* [GSL → SAM → GIC], *H8* [CAP → GIC → EVP] and *H9* [SAM → GIC → EVP] are all supported by β values of (0.412, $t = 7.267$, $p \leq 0.01$), (0.211, $t = 3.541$, $p \leq 0.01$), (0.320, $t = 4.558$, $p \leq 0.01$) and (0.198, $t = 3.021$, $p \leq 0.01$), respectively. These findings suggest that GSL positively influences GIC. Table 4 also thus confirmed all four of the study's indirect hypotheses (*H6*, *H7* and *H9*) were accepted.

Table 4 The results of direct and indirect influences

Hypotheses	*Relationships*	β	t-*value*	p-*value*	*Discission*
H1	GSL → CAP	0.756	18.568	0.000	Accepted
H2	GSL → SAM	0.235	4.761	0.001	Accepted
H3	CAP → GIC	0.545	7.267	0.000	Accepted
H4	SAM → GIC	0.351	6.722	0.000	Accepted
H5	GIC → EVP	0.568	9.528	0.000	Accepted
H6	GSL → CAP → GIC	0.412	4.123	0.000	Accepted
H7	GSL → SAM → GIC	0.211	3.541	0.005	Accepted
H8	CAP → GIC → EVP	0.320	4.558	0.000	Accepted
H9	SAM → GIC → EVP	0.198	3.021	0.002	Accepted

Note(s): GSL = green servant leadership; CAP = capabilities; SAM = skills and motivation; GIC = green intellectual capital; EF = environmental performance
Source(s): Authors' own work

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

5. Discussion

This study explores the connection between GSL, G-HCM dimensions of capability and skills and motivation, GIC and EVP. In line with the findings of *H1* and *H2* which shows a significant positive impact of GSL on G-HCM (CAP and SAM), a number of studies have shown a consistent result, with the most recent studies focusing on the retail industry (Yukl and Gardner, 2019; Renwick *et al.*, 2016; Mansoor *et al.*, 2021). Our research supplements and expands upon these findings by proving the positive role of GSL in enhancing G-HCM (CAP and SAM) among Indonesian rural banks. Likewise, the result approved the direct positive relationship between G-HCM (CAP and SAM) and GIC as described by *H3* and *H4*. This indicates that employees with G-HCM (CAP and SAM) are more plausible to generate, share and execute green ideas and practices, that strengthens the organization's GIC. *H5* is the last direct hypothesis of the study, which validates the positive link between GIC and EVP. According to this finding, the GIC will increase the EVP. This adds to the existing literature in this field by indicating that GIC has the potential to enhance EVP of rural banks (Pangarso *et al.*, 2024).

In addition, this study lends credence to the idea that G-HCM practices mediate the relationship between GSL and GIC as denoted by *H6* and *H7*. This specifies that green servant leaders, who give priority to environmental values and the development of employees, inspire and execute G-HCM practices like green training, empowerment and motivation (Tan *et al.*, 2020). These practices will consequently improve the environmental capabilities of employees, the sharing of knowledge and innovation which are the essential elements of GIC (Chen, 2008). G-HCM therefore serves as the conduit through which GSL drives the green knowledge assets development within organizations. Prior studies (Elzek *et al.*, 2024; Khatri *et al.*, 2023) find that leadership plays a significant role in shaping G-HCM, which in turn contribute to GIC in firms. Moreover, the study validates the indirect influence of G-HCM practices (CAP and SAM) on EVP through the GIC mediation as presented by *H6* and *H7*. This finding serves as an important knowledge-based asset that could transmute green oriented human resource practices into sustainable results. G-HCM practices therefore nurture environmentally conscious capabilities, skills and motivation among the workforce (Jabbour and Jabbour, 2016) which improve the GIC development to consequently facilitate the EVP (Chen, 2008).

6. Study implications

6.1 Theory implication

The findings have important theoretical and practical ramifications and provide credence to all theories, both direct and indirect. Among the important theoretical ramifications is the mediating effect of GIC on the G-HCM practices (CAP and SAM) and EVP relationship which proves the theoretical support for the RBV, presenting the GIC as an important intangible and strategic resource that transforms G-HCM capabilities, skills and motivations into EVP at the organizational level (Hart, 1995). Preceding empirical studies proved that firms that leverage GIC as a mediating mechanism benefit from increased environmental efficiency and competitive advantage (Del Brío *et al.*, 2007; Pham *et al.*, 2020). Another important theoretical ramification is that very few studies have analyzed the indirect impact of GSL on EVP by including two mediating variables. While there are some previous arguments linking GSL to EVP (Ha *et al.*, 2023), this study delineates the fundamental relationship between two mediating variables and furnishes empirical proof of GSL's impact on EVP. As such, this study presents a comprehensive framework for understanding how GSL influences EVP through mediation processes. Furthermore, by focusing on EVP in the retail business, this study significantly contributes to the existing literature, particularly in the context of the rural banking that face various challenges. While there are a number of studies on G-HCM (Yusoff *et al.*, 2020), most of them tend to view them as crucial elements for sustainable performance (Yusoff *et al.*, 2020; Yong *et al.*, 2019). This study goes beyond

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

only looking at G-HCM activities through the lens of environmental management; it also helps us better understand how these method works, rather than just increasing EVP, contribute to the growth of GIC.

In practical sense, this study suggests that to increase EVP, rural banks must recruit environmentally conscious employees, and design appropriate selection methods that will ensure the prospective employees' understanding and concern for environmental matters. The study also suggests that managers implement green policies, which include promoting enhanced capabilities, skills and motivation for staff members who do adhere to relevant environmental regulations, in light of the growing emphasis on environmental concerns in rural banks.

6.2 Practical implications

The findings provide several practical insights for rural banks seeking to adopt this leadership approach. Prior research suggests that resistance to green leadership initiatives may stem from limited environmental awareness, entrenched routines or perceptions of increased workload among employees. To mitigate such challenges, managers can emphasize continuous communication, role modeling and incentive alignment to reinforce green values and behaviors.

The development of competencies required for GSL is primarily the responsibility of top management and human resource units, particularly through targeted training, coaching and leadership development programs. By strengthening employees' green-related capabilities, skills and motivation, rural banks can enhance the effectiveness of G-HCM practices and support the diffusion of GSL across organizational levels.

While this study focuses on internal organizational outcomes, prior studies indicate that the diffusion of green leadership practices may also influence external stakeholders, including customers, through improved EVP and organizational reputation. Future research could therefore examine customer perceptions and behavioral responses to GSL initiatives in the rural banking sector.

7. Conclusion

Our study proposes a number of conclusions for the rural banks. This study concludes that GSL plays a central role in enhancing EVP through a sequential mechanism involving G-HCM and GIC. Specifically, the findings demonstrate that GSL strengthens G-HCM capabilities and employees' skills and motivation, which subsequently fosters the development of GIC and, in turn, improve EVP. Rather than operating in isolation, these relationships highlight the importance of leadership-driven human capital practices in translating green-oriented values into tangible environmental outcomes. That is why it is imperative that rural banks educate their staff on environmental practices and initiatives through formal training programs. In addition, making sure employees can put what they have learned in training to use is of the utmost importance. Because of this, bank employees will be able to advance their environmental literacy, which will boost the effectiveness of G-HCM practices and EVP. Moreover, from a practical perspective, managers who want to promote G-HCM practices can learn a lot from this study, which provides strong evidence of the positive impacts of GSL on G-HCM. One important implication is that rural banks should prioritize the selection, development and retention of leaders who exhibit GSL behaviors, as hiring for GSL can significantly enhance G-HCM capabilities, GIC and ultimately EVP. The findings also help managers recognize practices that can encourage the development of GIC among employees to improve EVP. It is important for the rural bank to recruit individuals who are environmentally conscious. To that end, recruiters can design appropriate selection methods, such as conducting tests to assess prospective employees' understanding and concern for environmental issues.

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

Given the increasing attention to environmental issues in the rural banks, this study recommends that managers adopt green policies, including encouraging improved capabilities, skills and motivation for employees who do comply with applicable environmental policies. Future research is therefore encouraged to adopt qualitative or mixed-method approaches to gain richer insights into how GSL and G-HCM practices are perceived and enacted within organizations.

Acknowledgements

This research was conducted with the invaluable support of the Faculty of Business and Economics at La Tansa Mashiro University. The authors express their heartfelt thanks to the leadership within the faculty for their essential guidance and unwavering support, which were pivotal to the successful completion of this study.

References

Aboramadan, M., Albashiti, B., Alharazin, H. and Dahleez, K.A. (2020), "Human resources management practices and organizational commitment in higher education: the mediating role of work engagement", *International Journal of Educational Management*, Vol. 34 No. 1, pp. 154-174.

Appelbaum, E., Bailey, T.R., Berg, P. and Kalleberg, A.L. (2000), *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*, ILR Press, Ithaca.

Asiaei, K., Bontis, N., Alizadeh, R. and Yaghoubi, M. (2021), "Green intellectual capital and environmental management accounting: natural resource orchestration in favor of environmental performance", *Business Strategy and the Environment*, Vol. 31 No. 1, pp. 76-93.

Asiaei, K., Jusoh, R. and Barani, O. (2022), "How does green intellectual capital boost performance? The mediating role of environmental performance measurement systems", *Business Strategy and the Environment*, Vol. 31 No. 4, pp. 1587-1606.

Baaha, C., Opoku-Agyemanb, D., Acquahc, I.S.K., Agyabeng-Mensaha, Y., Afuma, E., Faibild, D. and Abdoulayea, F.A.M. (2020), "Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: evidence from manufacturing SMEs", *Sustainable Production and Consumption*, Vol. 27, pp. 100-114.

Barney, J.B. (2001), "Resource-based theories of competitive advantage: a ten-year retrospective on the resource-based view", *Journal of Management*, Vol. 27 No. 6, pp. 643-650.

Baumgartner, R.J. and Winter, T. (2014), "The sustainability manager: a tool for education and training on sustainability management", *Corporate Social Responsibility and Environmental Management*, Vol. 21 No. 3, pp. 167-174.

Blankenship, J.C., Riffe, D. and Blankenship, J.C. (2021), "Follow the leader? Optimism and efficacy on solo journalism of local television journalists and news directors", *Journalism Practice*, Taylor & Francis, Vol. 15 No. 1, pp. 1-22.

Boiral, O. and Paille, P. (2012), "Organizational citizenship behaviour for the environment: measurement and validation", *Journal of Business Ethics*, Vol. 109 No. 4, pp. 431-445.

Brislin, R. (1986), "The wording and translation of research instruments", in Lonner, W.J. and Berr, J.W. (Eds), *Field Methods in Cross-Cultural Research*, SAGE Publications, Thousand Oaks, CA, pp. 137-164.

Camilleri, M.A., Troise, C. and Morrison, A.M. (2023), "Motivations and commitment to work in the hospitality industry: investigating employee psychology and responsible organizational behaviors", *Tourism Review*, Vol. 79 No. 1, pp. 85-103.

Chen, Y.-S. (2008), "The positive effect of green intellectual capital on competitive advantages of firms", *Journal of Business Ethics*, Vol. 77 No. 3, pp. 271-286.

Chen, Z.X., Aryee, S. and Lee, C. (2005), "Test of a mediation model of perceived organizational support", *Journal of Vocational Behavior*, Vol. 66 No. 3, pp. 457-470.

Del Brío, J.Á., Fernández, E. and Junquera, B. (2007), "Management and employee involvement in achieving an environmental action-based competitive advantage: an empirical study", *International Journal of Human Resource Management*, Vol. 18, doi: 10.1080/09585190601178687.

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

Dumont, J., Shen, J. and Deng, X. (2016), "Effects of green HRM practices on employee workplace green behavior: the role of psychological green climate and employee green values", *Human Resource Management*, Vol. 56 No. 4, pp. 613-627.

Elzek, Y.S., Soliman, M., Riyami, H., Al and Scott, N. (2024), "Talent management and sustainable performance in travel agents: do green intellectual capital and green servant leadership matter?", *Current Issues in Tourism*, Vol. 27 No. 19, pp. 3115-3130.

Fornell, C. and Larcker, D.F. (1981), "Unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382-388.

Greenleaf, R.K. (1998), *The Power of Servant-Leadership*, Spears, L.C. (Ed.), Berrett-Koehler Publishers, Inc, San Francisco, CA.

Ha, N.M., Nguyen, P.A., Luan, N.V. and Tam, N.M. (2023), "Impact of green innovation on environmental performance and financial performance", *Environment, Development and Sustainability*, Vol. 26 No. 7, pp. 17083-17104.

Hair, J.F., Babin, B.J. and Krey, N. (2017), "Covariance-based structural equation modeling in the journal of advertising: review and recommendations", *Journal of Advertising*, Vol. 46 No. 1, pp. 163-177.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24.

Hameed, Z. and Naeem, R.M. (2020), "Do green HRM practices influence employees' environmental performance?", *International Journal of Manpower*, Vol. 41 No. 7, pp. 1061-1079.

Hart, S.L. (1995), "A natural-resource-based view of the firm", *Academy of Management*, Vol. 20 No. 4, pp. 115-135.

Hayton, J.C. (2004), "Strategic human capital management in SMEs: an empirical study of entrepreneurial performance", *Human Resource Management*, Vol. 42 No. 4, pp. 375-391.

Heikkurinen, P., Young, C.W. and Morgan, E. (2019), "Business for sustainable change: extending eco-efficiency and eco-sufficiency strategies to consumers", *Journal of Cleaner Production*, Vol. 218, pp. 656-664.

Jabbour, C.J. and Jabbour, D.S. (2016), "Green human resource management and green supply chain management: linking two emerging agendas", *Journal of Cleaner Production*, Vol. 112, pp. 1824-1833.

Jirakraisiri, J., Badir, Y.F. and Frank, B. (2021), "Translating green strategic intent into green process innovation performance: the role of green intellectual capital", *Journal of Intellectual Capital*, Vol. 22 No. 7, pp. 43-67.

Jyoti, J. and Bhau, S. (2015), "Impact of transformational leadership on job performance: mediating role of leader–member exchange and relational identification", *Sage Open*, Vol. 5 No. 4, pp. 1-13.

Khan, A.N., Khan, N.A. and Mehmood, K. (2025), "Management of green innovation: the influence of digital leadership on employee behavior in an empirical investigation", *Baltic Journal of Management*, Vol. 20 No. 5, pp. 675-694.

Khatri, P., Dutta, S., Kumari, P., Duggal, H.K., Thomas, A., Cristillo, I. and Nobi, S. (2023), "Modeling intellectual capital-based intrapreneurial ability of working professionals through servant leadership and self-efficacy", *Journal of Intellectual Capital*, Vol. 24 No. 6, pp. 1485-1505.

Lam, L., Nguyen, P., Le, N. and Tran, K. (2021), "The relation among organizational culture, knowledge management, and innovation capability: its implication for open innovation", *Journal of Open Innovation: Technology, Market, and Complexity*, Vol. 7 No. 1, pp. 1-16.

Latan, H., Jose, C., Jabbour, C., Beatriz, A., Sousa, L., De, Fosso, S. and Shahbaz, M. (2018), "Effects of environmental strategy, environmental uncertainty and top management's commitment on corporate environmental performance: the role of environmental management accounting", *Journal of Cleaner Production*, Vol. 180 No. 4, pp. 297-306.

Lewis, B.W., Walls, J.L. and Dowell, G.W.S. (2014), "Difference in degrees: CEO characteristics and firm environmental disclosure", *Strategic Management Journal*, Vol. 35 No. 5, pp. 712-722.

Li, W., Abdalla, A.A., Mohammad, T., Khassawneh, O. and Parveen, M. (2023), "Towards examining the link between green HRM practices and employee green in-role behavior: spiritual leadership as a moderator", *Psychology Research and Behavior Management*, Vol. 16, pp. 383-396.

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

Longoni, A., Luzzini, D. and Guerci, M. (2016), "Deploying environmental management across functions: the relationship between green human resource management and green supply chain management", *Journal of Business Ethics*, Vol. 151 No. 4, pp. 1081-1095.

Mahmoud, M.A. and Mahmoud, A. (2025), "Government support and SMEs' dimensional performance during the COVID-19 crises: does disruption orientation matter?", *International Journal of Productivity and Performance Management*, Vol. 74 No. 7, pp. 2471-2498.

Mahmoud, M.A., Ma'aji, M.M., Abdullahi, M.S. and Karaye, A.B. (2025), "Factors influencing the Islamic fintech acceptance: moderating role of Islamic financial literacy", *Journal of Islamic Accounting and Business Research*, doi: 10.1108/JIABR-08-2024-0322.

Mahmoud, M.A., Umar, U.H., Danlami, M.R. and Ado, M.B. (2025), "An analysis of Islamic financing access in Nigeria: perspectives of MSME owners", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 18 No. 1, pp. 49-67.

Mansoor, A., Jahan, S. and Riaz, M. (2021), "Does green intellectual capital spur corporate environmental performance through green workforce?", *Journal of Intellectual Capital*, Vol. 22 No. 5, pp. 823-839.

Mas, F.D., Tucker, W., Massaro, M. and Bagnoli, C. (2021), "Corporate social responsibility in the retail business: a case study", *Corporate Social Responsibility and Environmental Management*, Vol. 29 No. 1, pp. 223-232.

Munawar, S., Yousaf, H.Q., Ahmed, M. and Rehman, S. (2022), "Effects of green human resource management on green innovation through green human capital, environmental knowledge, and managerial environmental concern", *Journal of Hospitality and Tourism Management*, Vol. 52 No. 3, pp. 141-150.

Naidoo, M. and Gasparatos, A. (2018), "Corporate environmental sustainability in the retail sector: drivers, strategies and performance measurement", *Journal of Cleaner Production*, Vol. 203 No. 12, pp. 125-142.

Noor, J., Tunnufus, Z., Handrian, V.Y. and Yumhi, Y. (2023), "Green human resources management practices, leadership style and employee engagement: green banking context", *Heliyon*, Vol. 9 No. 12, pp. 1-10.

Oprean-Stan, C., Stan, S. and Br, V. (2020), "Corporate sustainability and intangible resources binomial: new proposal on intangible resources recognition and evaluation", *Sustainability*, Vol. 12 No. 10, pp. 1-23.

Panda, S.S. and Sangle, S. (2019), "Stakeholder engagement as a dynamic capability", *Business Strategy & Development*, Vol. 3 No. 2, pp. 204-212.

Pangarso, A., Setyorini, R., Umbara, T. and Latan, H. (2024), "Green organizational culture and competitive advantage in Indonesian higher education: the mediation roles of green human capital management and absorptive capacity", in Yusliza, M.Y. and Renwick, D.W.S. (Eds), *Green Human Resource Management: A View from Global South Countries*, Springer International Publishing, Singapore, pp. 139-161.

Pham, N.T., Hoang, H.T. and Phan, Q.P.T. (2020), "Green human resource management: a comprehensive review and future research agenda", *International Journal of Manpower*, Vol. 41 No. 7, pp. 845-878.

Pontillo, H.R., Dominguez, S.M., Bustamante, A.R., Genodiala, A., Gahum, S., Pontillo, V.A.R., Pontioso, E.J. and Villaluz, F. (2025), "The mediating role of green human capital in the relationship between green human resource management practices and green employee behavior for a sustainable future", *Sustainability*, Vol. 17 No. 23, p. 10767.

Renwick, D.W.S., Jabbour, C.J.C., Muller-Camen, M., Redman, T. and Wilkinson, A. (2016), "Contemporary developments in green (environmental) HRM scholarship", *The International Journal of Human Resource Management*, Vol. 27 No. 2, pp. 114-128.

Roscoe, S., Subramanian, N., Jabbour, C.J.C. and 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*, Vol. 28 No. 5, pp. 737-749.

Shahab, Y., Ntim, C.G., Chen, Y., Ullah, F., Li, H.-X. and Ye, Z. (2019), "Chief executive officer attributes, sustainable performance, environmental performance, and environmental reporting: new insights from upper echelons perspective", *Business Strategy and the Environment*, Vol. 29 No. 1, pp. 1-16.

Shahriari, M. and Allameh, S.M. (2020), "Organizational culture and organizational learning: does high performance work systems mediate?", *Journal of Workplace Learning*, Vol. 32 No. 8, pp. 583-597.

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

Shahzad, M., Qu, Y., Ullah, A., Ding, X. and Ur, S. (2020), "Translating stakeholders' pressure into environmental practices the mediating role of knowledge management", *Journal of Cleaner Production*, Vol. 275, doi: 10.1016/j.jclepro.2020.124163.

Shoaib, M., Abbas, Z., Yousaf, M., Zámečník, R., Ahmed, J. and Saqib, S. (2021), "The role of GHRM practices towards organizational commitment: a mediation analysis of green human capital", *Cogent Business & Management*, Vol. 8 No. 1, p. 1870798.

Siddiquei, A., Asmi, F., Asadullah, M.A. and Mir, F. (2021), "Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: a case of China", *International Journal of Manpower*, Vol. 42 No. 7, pp. 1161-1182.

Singh, S.K., Del Giudice, M., Chiappetta Jabbour, C.J., Latan, H. and Sohal, A.S. (2022), "Stakeholder pressure, green innovation, and performance in small and medium-sized enterprises: the role of green dynamic capabilities", *Business Strategy and the Environment*, Vol. 31 No. 1, pp. 500-514.

Singh, S.K., Giudice, M.D., Chierici, R. and Graziano, D. (2020), "Green innovation and environmental performance: the role of green transformational leadership and green human resource management", *Technological Forecasting and Social Change*, Vol. 150 No. 1, pp. 1-12.

Soomro, B.A. and Shah, N. (2019), "Determining the impact of entrepreneurial orientation and organizational culture on job satisfaction, organizational commitment, and employee's performance", *South Asian Journal of Business Studies*, Vol. 8 No. 3, pp. 266-282.

Soomro, S.A. and Soomro, S.A. (2024), "Green intellectual capital and employee environmental citizenship behavior: the mediating role of organizational agility and green creativity", *Journal of Intellectual Capital*, Vol. 25 No. 4, pp. 822-840.

Štaffenová, N. and Kucharčíková, A. (2024), "Human capital management – values, competencies and motivation – concerning industry 4. 0", *Economic Research-Ekonomska Istraživanja*, Vol. 37 No. 1, pp. 1-22.

Tan, N., Vo-Thanh, T., Shahbaz, M., Luu, T., Huynh, D. and Usman, M. (2020), "Managing environmental challenges: training as a solution to improve employee green performance", *Journal of Environmental Management*, Vol. 269 No. 3 pp. 1-8.

Tang, G., Chen, Y., Jiang, Y. and Jia, J. (2018), "Green human resource management practices: scale development and validity", *Asia Pacific Journal of Human Resources*, Vol. 56 No. 1, pp. 31-55.

Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533.

Teferaa, C.A. and Hunsake, W.D. (2021), "Intangible assets and organizational citizenship behavior: a conceptual model", *Heliyon*, Vol. 6 No. 7, pp. 1-11.

Tran, N.P., Dinh, C.T.H., Hoang, H.T.T. and Vo, D.H. (2022), "*Intellectual Capital and Firm Performance in Vietnam: The Moderating Role of Corporate Social Responsibility", Sustainability*, Vol. 14 No. 19, pp. 1-13.

Tuan, L.T. (2019a), "Effects of environmentally-specific servant leadership on green performance via green climate and green crafting", *Asia Pacific Journal of Management, Asia Pacific Journal of Management*, Vol. 38 No. 3, pp. 925-953.

Tuan, L.T. (2019b), "Environmentally-specific servant leadership and green creativity among tourism employees: dual mediation paths", *Journal of Sustainable Tourism, Routledge*, Vol. 28 No. 1, pp. 1-24.

Wang, C. (2019), "How organizational green culture influences green performance and competitive advantage the mediating role of green innovation", *Journal of Manufacturing Technology Management*, Vol. 30 No. 4, pp. 666-683.

Wei, F., Abbas, J., Alarifi, G., Zhang, Z., Adam, N.A. and Queiroz, M.J D (2023), "Role of green intellectual capital and top management commitment in organizational environmental performance and reputation: moderating role of pro-environmental behavior", *Journal of Cleaner Production*, Vol. 405, doi: 10.1016/j.jclepro.2023.136847.

Yong, J.Y. and Fawehinmi, O.O. (2019), "Green human resource management: a systematic literature review from 2007 to 2019", *Benchmarking: An International Journal*, Vol. 27 No. 7, pp. 2005-2027.

Yong, J.Y., Yusliza, M., Ramayah, T. and Fawehinmi, O. (2019), "Nexus between green intellectual capital and green human resource management", *Journal of Cleaner Production*, Vol. 215, pp. 364-374, doi: 10.1016/j.jclepro.2018.12.306.

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026

Yu, T., Abbas, J., Abbas, R. and Hina, R. (2024), "Role of environment-driven CSR, green servant leadership, and green dynamic capabilities in firm green innovation: evidence from manufacturing industry", *Environment, Development and Sustainability*, Vol. 26 No. 11, pp. 24521-24568.

Yukl, G. and Gardner, W.L. (2019), *Leadership in Organizations*, 9th ed., Pearson Education Limited, Essex, United Kingdom.

Yusoff, Y.M., Nejati, M., Kee, D.M.H. and Amran, A. (2020), "Linking green human resource management practices to environmental performance in hotel industry", *Global Business Review*, Vol. 21 No. 3, pp. 663-680.

Corresponding author

Mahmoud Ahmad Mahmoud can be contacted at: elmahmuud@yahoo.com

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com

Downloaded from www.emerald.com/mbe/article-pdf/30/4/599/11826481/mbe-09-2025-0189en.pdf by . Soleh on 02 November 2026