

*Research article*

## **UNLOCKING SUSTAINABILITY THROUGH INNOVATION: A GREEN HR APPROACH FOR THE HOSPITALITY INDUSTRY**

*Ida Bagus Ketut Surya, Sebastian Kot, I Putu Astawa, I Gede Rihayana,  
and I Made Risma M Arsha*

**Abstract.** Bali's tourism industry faces a critical challenge: achieving sustainable growth without sacrificing the environment. While green practices are gaining traction in hotels, the specific factors driving environmental performance remain unclear, this study investigates these relationships within Bali's unique context, informed by the resource-based view and ability-motivation-opportunity theory. Unlike other Indonesian regions, Bali's deeply rooted *Tri Hita Karana* philosophy, emphasizing harmony with the environment, creates fertile ground for eco-innovation in hotels. Understanding these drivers is crucial given Bali's delicate ecosystem and booming tourism. A survey of 178 hotel employees reveals green innovation as the key mediator. Green transformational leadership and green HRM practices positively influence environmental performance through fostering eco-innovation. Notably, green HRM plays a critical role in this context due to the *Tri Hita Karana* Foundation. These findings offer valuable insights for hoteliers, policymakers, and researchers. By implementing strong green HRM practices and fostering eco-innovation, Balinese hotels can ensure long-term sustainability and preserve their cultural and environmental heritage for future generations. This ultimately contributes to a more sustainable tourism model for Bali.

**Keywords:** green transformational leadership; green innovation; environmental performance; AMO theory.

*Ida Bagus Ketut Surya, Sebastian Kot, I Putu Astawa, I Gede Rihayana,  
and I Made Risma M Arsha*

*Virtual Economics, Vol. 7, No. 2, 2024*

**Authors:****Ida Bagus Ketut Surya**

Universitas Udayana, Bali, Indonesia

E-mail: [idabgssurya@unud.ac.id](mailto:idabgssurya@unud.ac.id)

<https://orcid.org/0000-0002-6426-5302>

**Sebastian Kot**

Czestochowa University of Technology, Poland

North-West University, South Africa

E-mail: [sebastian.kot@pcz.pl](mailto:sebastian.kot@pcz.pl)

<https://orcid.org/0000-0002-8272-6918>

**I Putu Astawa**

Politeknik Negeri, Bali, Indonesia

E-mail: [putuastawal@pnb.ac.id](mailto:putuastawal@pnb.ac.id)

<https://orcid.org/0000-0002-8234-4813>

**I Gede Rihayana**

Universitas Mahasaraswati Denpasar, Bali, Indonesia

E-mail: [igederihayana@unmas.ac.id](mailto:igederihayana@unmas.ac.id)

<https://orcid.org/0000-0001-9499-7734>

**I Made Risma M Arsha**

Universitas Hindu Indonesia, Bali, Indonesia

E-mail: [risma@unhi.ac.id](mailto:risma@unhi.ac.id)

<https://orcid.org/0000-0002-3983-6062>

Corresponding author: Ida Bagus Ketut Surya, [idabgssurya@unud.ac.id](mailto:idabgssurya@unud.ac.id)

**Citation:** Surya, I. B. K., Kot, S., Astawa, I. P., Rihayana, I. G., & Arsha, I. M. R. M. (2024). Unlocking Sustainability through Innovation: A Green HR Approach for Hospitality Industry. *Virtual Economics*, 7(2), 50–62. [https://doi.org/10.34021/ve.2024.07.02\(3\)](https://doi.org/10.34021/ve.2024.07.02(3))

Received: October 3, 2023. Revised: March 27, 2024. Accepted: April 16, 2024.

© Author(s) 2024. Licensed under the [Creative Commons License - Attribution 4.0 International \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/)

*Ida Bagus Ketut Surya, Sebastian Kot, I Putu Astawa, I Gede Rihayana,  
and I Made Risma M Arsha  
Virtual Economics, Vol. 7, No. 2, 2024*

## 1. Introduction

The global hospitality industry faces a complex dichotomy: fostering economic growth and profitability while minimising environmental impact [1]. Hotels, with their substantial carbon footprint, are particularly scrutinised by stakeholders and environmentally conscious customers [2; 3]. Addressing this challenge requires integrating a green philosophy with innovative thinking and encouraging employee-driven initiatives toward eco-friendly solutions. In Bali, Indonesia, this challenge takes on a unique dimension. Tourists flock to the island, captivated by its cultural richness and pristine nature, yet their presence poses a potential threat to the elements that attract them [4; 5]. Central to this dynamic, the hospitality sector is increasingly called upon to adopt sustainable practices and embrace green innovation, encompassing eco-friendly products, processes, and services [6]. While green innovation is crucial for sustainable tourism [7], its adoption in Indonesian hotels faces unique challenges [8]. Indonesians prioritize tradition and proven effectiveness before embracing new practices [9]. Green Human Resource Management (GHRM) is known to support sustainability [10; 11]. However, the link between GHRM, green leadership [12], and green innovation in tourism remains unclear. This complexity is further heightened by Bali's unique cultural context, heavily influenced by the Tri Hata Karana philosophy [13; 4]. This philosophy emphasizes harmony between humans, the environment, and the divine. Understanding how leadership, human resource practices, and innovation intertwine within this holistic worldview is crucial.

This research endeavours to bridge this scholarly gap by scrutinising the complex interplay among these factors within Bali's hotel sector. Grounded in the resource-based view [14] and the ability-motivation-opportunity (AMO) theory [15], we delve into how GHRM practices mediate the impact of green transformational leadership on green innovation, ultimately influencing a hotel's environmental performance. This study examines how Green HR, green leadership, and innovation affect environmental performance in Bali hotels. Existing research offers conflicting views, so this study proposes a combined effect that considers Bali's unique culture (Tri Hata Karana) and its influence on hotel professionals. This will provide a clearer picture of sustainability practices in Bali's hotel industry.

## 2. Theoretical Background

Drawing on both the Resource-Based View (RBV) and Ability-Motivation-Opportunity (AMO) theory, the study argues that GHRM cultivates valuable human capital [16; 17] Through development, motivation, and empowerment [18], GHRM creates a pool of skilled and environmentally conscious employees [10]. This aligns with the RBV perspective, where such human capital becomes a source of competitive advantage [16] to enhance sustainable competitiveness [19]. The AMO theory further strengthens this notion by highlighting how GHRM practices (attraction, motivation, reward) directed toward green behaviours drive innovation and ultimately superior environmental performance [20]. Furthermore, GHRM is an overarching framework encompassing green recruitment, training, performance-based rewards, and employee empowerment [21]. This fosters the attraction, development, and retention of green human talent, enabling continuous innovation in processes, products, and services and ultimately leading to enhanced green firm performance.

Hotels seeking sustainability can benefit from green transformational leadership (GTFL) [22]. It inspires personnel to achieve environmental goals, surpassing traditional leadership [23]. This promotes environmental awareness and inspires employees to change through sustainability training [22]. GTFL also inspires employees to learn new skills and create eco-friendly products and services [24]. This improves the hotel's environmental performance [25]. The growing need for sustainable practices requires green innovation—creating eco-friendly products, processes, and services. GTFL helps green innovation thrive on this path. GTFL goes beyond standard leadership methods, inspiring people to support environmental goals. Empowered people actively seek knowledge, innovate green, and contribute to the company's eco-friendly change.

Empirical evidence confirms the impact of GTFL. Studies by [26] and [27] demonstrate increased green innovation and eco-friendly product development in hotels with GTFL, reducing environmental impact and attracting environmentally conscious customers. [28] further highlight how GTFL in hospitality industries fosters green innovation-driven solutions, enhancing environmental performance. Thus, it is hypothesised that:

**Hypothesis 1.** Green transformational leaders in hotels will hire more ecologically creative people, promoting green innovation.

As firms seek sustainability, green innovation—sustainable products and processes—is rising [29]. This includes adopting greener materials, eco-design to reduce material use, and lowering emissions, water use, and resource dependence [30]. Green innovation boosts organisational success, according to research. Companies benefit from green innovation in environmental performance, financial performance, brand reputation, and stakeholder satisfaction [31].

The field of Green Human Resource Management (GHRM) is promising for understanding how HR practices might generate innovation [32; 33]. GHRM can inspire and train personnel to create sustainable innovations by promoting environmental responsibility [34]. However, the relationship between HRM and innovation is complex [35], depending on the type of innovation, organisational setting, and HRM effectiveness. This calls for more research on using GHRM to foster green innovation. Using the Ability-Motivation-Opportunity (AMO) theory [20], we argue that companies that value and maximise human talent are more likely to adopt green innovation practices. Therefore, we hypothesise that:

**Hypothesis 2.** Individual green ability predicts green innovation in environmentally sensitive industries like hotels.

**Hypothesis 3.** Green innovation efforts in ecologically sensitive industries like hotels are considerably improved by employee green motivation.

**Hypothesis 4.** The availability of green opportunities within an organisation significantly facilitates the development and implementation of green innovation practices.

Environmental performance goes beyond following regulations. It reflects a company's commitment to minimizing its environmental impact and exceeding societal expectations [36]. This includes a firm's entire ecological footprint, from resource consumption to product design,

while still adhering to legal requirements [37]. Environmental performance is driven by green innovation and good environmental management [38]. Green efforts, employee involvement, and environmental strategies drive hotel environmental performance [39]. Beyond its environmental benefits, green innovation can improve financial and social performance by reducing waste and costs [40]. This requires rethinking green innovation as a proactive and planned sustainability strategy rather than a reactive response to stakeholder pressure [41]. Thus, we hypothesise that:

**Hypothesis 5.** Implementing green innovation practices within environmentally sensitive industries like hotels significantly improves environmental performance.

Existing research lacks clarity on how Green Transformational Leadership (GTFL) and Green Human Resource Management (GHRM) influence firm performance [42]. This gap is crucial in today's sustainability-driven environment [43]. While transformational leaders foster innovation [43], GTFL's emphasis on environmental values aligns with promoting eco-friendly behaviours [44; 45]. Building on this connection, research suggests green innovation mediates the link between leadership and positive environmental outcomes [46]. Therefore, we hypothesise that:

**Hypothesis 6.** Implementing GTFL practices within an organisation significantly improves its environmental performance, mediated by adopting green innovation practices.

Building on existing research [47–50], this study proposes that Green Human Resource Management (GHRM) practices indirectly influence environmental performance by fostering green processes and product innovation. GHRM's multifaceted impact on innovation, including overcoming resource constraints and fostering employee commitment, suggests its potential to drive environmentally friendly advancements.

**Hypothesis 7.** Individual green ability positively influences an organisation's environmental performance through the mediating mechanism of green innovation.

**Hypothesis 8.** Individual green motivation positively influences an organisation's environmental performance through the mediating mechanism of green innovation.

**Hypothesis 9.** The availability of green opportunities within an organisation positively influences its environmental performance through the mediating mechanism of green innovation.

### 3. Methodology

Data collection commenced on May 25th, 2023, and concluded on October 24th, 2023, spanning five months. This study used a web-based survey (cross-sectional design) to collect data from 200 Bali hotel employees (May 25th – Oct 24th, 2023). Snowball sampling was used due to difficulty reaching the target population. After data cleaning, 178 usable responses remained (89% completion rate). This study examined numerous contributing elements of Balinese hotel environmental performance [51] and measured how managers encourage staff to achieve environmental goals to evaluate green leadership approaches. An instrument derived from [52; 15] examined employees' green talents (skills and knowledge), green motivation

*Ida Bagus Ketut Surya, Sebastian Kot, I Putu Astawa, I Gede Rihayana,  
and I Made Risma M Arsha*

*Virtual Economics, Vol. 7, No. 2, 2024*

(attitudes and values), and green opportunity [47] and [53] analysed the hotel's eco-friendly innovative activities using a scale. Finally, a technique created by [54] and tested in Southeast Asia analysed the hotel's environmental impact.

The link was examined using SPSS Amos structural equation modelling. Each item was rated on a seven-point Likert scale (1—strongly disagree; 7—strongly agree). A thorough measurement supported the model's correlations. [54] found that the primary justification measures were Chi-square ( $\chi^2$ ), minimal sample discrepancy function ( $\chi^2/df$ ), goodness-of-fit index (GFI), modified GFI, CFI, and RMSEA. Direct and indirect effects on each path were examined to test hypotheses. A substantial effect requires a chance of  $\leq 0.05$  for each path. Only items with factor loading above 0.50 were kept in the model to assess discriminant validity [56]. To assess reliability, coefficient alpha values of 0.60 or above [57] were analysed.

This study examines the mediating effect of green innovation (GINOV) on the relationship between green transformational leadership (GTL), green HRM (GHRM), and environmental performance (EPERF). Two main mediation analysis methods exist, namely, implicit and explicit procedures. Implicit procedures are simpler and involve testing the significance of specific paths in the model [58]. However, they have limitations [59; 60]. Despite these limitations, the implicit approach was chosen due to its simplicity, suitability for this research question, and interpretability, aligning with the desire for clear results [9].

#### 4. Results and Discussion

A Bali five-star hotel study reveals a female-dominated workforce (65%) with a majority over 35 (52%) and high education (66% with degrees). Two employment patterns emerge, namely, long-term employees (57%) and a younger group with 5 years of experience (41.6%). This demographic profile (female, experienced, educated) provides a starting point, but further analysis is needed to understand their openness to sustainability practices. While high education suggests potential for green knowledge, it's unclear if it translates to action.

Assessing sustainability highlighted strengths and shortcomings. Employee skills (4.59) and resources (4.97) were strong, whereas green leadership had moderate influence (3.80). However, sustainability employee motivation (3.67) was lower. Interestingly, the hotel scored well in innovation (5.05) and environmental performance (5.47). Creative alternatives with favourable environmental effects are suggested. The review shows development opportunities, particularly in worker motivation, for a sustainable future.

Table 1 shows instrument implementation and confirmation. All items have CFA factor loadings above 0.50 [56]. Additionally, the Cronbach  $\alpha$  coefficient for each construct exceeds the 0.60 requirement, as reported by [57]. Therefore, validity and reliability are met. Table 2 shows structural equation modelling results. All paths are significant, as seen in the table. The full research model adheres to established model fit criteria according to [61]. The chi-square statistic ( $\chi^2$ ) falls below the threshold of 639,232, and the probability (P) is 0.05, indicating a good fit. Additionally, [54] confirm this positive assessment: the CMIN/DF ratio is 1.932 (ideally below 2), GFI is 0.987 (exceeding 0.90), AGFI is 0.993 (exceeding 0.90), CFI is 0.988 (exceeding 0.95), TLI is 0.982 (exceeding 0.95), and RMSEA is 0.089 (slightly above the 0.080 threshold). These collectively suggest a well-fitting model for further analysis.

*Ida Bagus Ketut Surya, Sebastian Kot, I Putu Astawa, I Gede Rihayana,  
and I Made Risma M Arsha*

*Virtual Economics, Vol. 7, No. 2, 2024*

**Table 1.** Factor Loading and Scale Reliabilities

Construct	Items	Factors Loading	Cronbach Alpha
	Organisational leadership promotes environmental sustainability by:		
Green Transformational Leadership (GTFL)	1. Implementing an environmental plan.	0.721	0.765
	2. Providing a clear environmental vision.	0.737	0.769
	3. Fostering environmental participation.	0.716	0.767
	4. Setting achievable environmental targets	0.724	0.763
	5. Encouraging decision-making through employee viewpoints.	0.726	0.765
	6. Empowering staff to promote green innovation.	0,750	0.766
Green Ability (GAB)	1. Selecting a green person requires considerable effort.	0.803	0.775
	2. Only environmentally conscious people work at the hotel.	0.788	0.776
	3. The green service procedure is emphasised.	0.698	0.777
	4. All personnel must complete environmental training.	0.766	0.778
	5. Environmental training aims to enhance employees' awareness.	0.653	0.779
Green Motivation (GMO)	1. The evaluation of performance records environmental performance.	0.774	0.766
	2. Performance assessments include environmental concerns.	0.725	0.781
	3. Employees receive environmental management rewards.	0.671	0.780
	4. Employees are rewarded for environmental competencies	0.686	0.780
Green Opportunity (GOP)	1. Employees make environmental efforts.	0.528	0.781
	2. Environmental issues are discussed through teamwork.	0.584	0.781
	3. Employees discuss environmental issues in team meetings.	0.580	0.783
Green Innovation (GINOV)	1. To reduce pollution, the company uses eco-friendly materials.	0.720	0.769
	2. Our company uses energy- and resource-efficient materials.	0.713	0.769
	3. My company uses safer ingredients to make eco-friendly items.	0.700	0.771
	4. My company uses recyclable, compostable, and reusable materials.	0.741	0.768
	The hotel's environmental management practices resulted in:		
Environmental Performance (EPERF)	1. Employees make environmental efforts.	0.633	0.776
	2. Environmental issues are discussed through teamwork.	0.560	0.778
	3. Optimised energy usage	0.572	0.780
	4. Reduced non-renewable resource	0.650	0.775
	5. Cost reductions	0.775	0.785
	6. Elevated industry standing	0.762	0.784
	7. Reputation enhancement	0.768	0.783

Source: Developed by the authors.

**Table 2.** Summary of path relationship among constructs

Constructs	Estimate	SE.	CR.	P.	Conclusion
GTFL → GINOV	0.134	0.061	2.217	0.00	Significant
GAB → GINOV	0.184	0.066	2.772	0.03	Significant
GMO → GINOV	0.238	0.065	3.671	0.01	Significant
GOP → GINOV	0.222	0.061	3.667	0.00	Significant
GINOV → EPERF	0.735	0.064	11.496	0.00	Significant

This study shows that Balinese hotels' Green HRM, GTFL, Innovation, and Environmental Performance are linked. All hypothesised links were substantial, indicating a common path to hospitality industry environmental improvement. GTFL is vital to employee environmental creativity and Green Innovation. Research supports leadership's impact on the sustainability of organisational culture [27–28]. Transformational leaders develop clear visions, foster cooperation, and support green innovation to show environmental commitment. Employees are inspired and empowered to create sustainable environmental solutions.

The study confirms that GTFL drives environmental performance in Balinese hotels. It resonates with the local Tri Hita Karana (THK) philosophy, emphasizing harmony with nature [4] GTFL leaders act as responsible stewards (Divine Resonance), empower employees for collaboration (Social Synergy), and translate vision into action (Nature in Action), aligning with THK principles. Furthermore, GHRM fosters green innovation through employee ability, motivation, and opportunity (AMO theory) [31; 32; 34; 46; 62–71]. This empowers hotels to achieve both economic success and environmental sustainability.

By impacting green ability, motivation, and opportunity in the workforce, GHRM practices can boost green process and product innovation and environmental performance. This theoretical foundation significantly supports the idea that GHRM indirectly improves environmental performance through green innovation, emphasising the strategic necessity of designing and implementing integrated GHRM practices to improve environmental results. Bundled HR practices promote GHRM's indirect impact on environmental performance through green innovation [15] and [72] show that coupled HR strategies can encourage green innovation even in resource-constrained contexts [48]. The study [49] also shows how HR practices boost employee commitment, supporting the study [50] claim that such practices boost internal creativity. Collaboration-oriented strategies that enable access to external information and resources foster green innovation. But why does GHRM work so well here? Its unique compatibility with Balinese culture's THK concept is the answer. GHRM practices inspire employees to serve the community and environment as their spiritual obligation. Environmental awareness and parahyangan (harmonious relationship with God) are linked by training programmes that include traditional wisdom and spiritual understanding of the land. The sense of responsibility beyond profit motivates employees to be environmental stewards. Green practices that recognise and safeguard sacred sites and natural wonders, typically with spiritual significance, motivate employees and fit with parahyangan. Green efforts help the local community and create shared wealth due to GHRM's focus on pawongan (harmonious relationship with humans). This GHRM-THK partnership boosts green innovation. GHRM helps hotels succeed economically and preserve Bali's natural beauty, cultural legacy, and spirituality by promoting environmental responsibility, community well-being, and spiritual awareness.

*Ida Bagus Ketut Surya, Sebastian Kot, I Putu Astawa, I Gede Rihayana,  
and I Made Risma M Arsha*

*Virtual Economics, Vol. 7, No. 2, 2024*



Embracing Bali's THK philosophy offers hotels a strategic edge in sustainability and competitive advantage. THK principles resonate with eco-conscious guests and employees, fostering a deeper connection and intrinsic motivation that surpasses mere compliance. This empowers hotels to move beyond isolated green practices. By involving local communities in environmental initiatives, hotels cultivate a sense of shared ownership and long-term sustainability. Furthermore, THK alignment positions hotels as leaders in responsible tourism, showcasing cultural understanding and a genuine commitment to the environment and community. This attracts environmentally conscious travellers and strengthens Bali's unique heritage.

## 5. Conclusions

This study examines the interplay between green human resource management, green transformational leadership, green innovation, and environmental performance in Bali's hotel industry. Unlike other Indonesian regions, Bali's deeply ingrained Tri Hita Karana philosophy, emphasizing environmental harmony, fosters a unique context for eco-innovation. Our findings reveal green innovation as a crucial mediator, bridging GTL and GHRM with improved environmental performance. GTL cultivates a culture of environmental responsibility and empowers employees to innovate, while GHRM equips them with the necessary skills and motivation. This highlights the underappreciated role of GHRM in fostering eco-innovation within Bali's unique cultural and environmental context. While limitations exist (self-reported data, specific sample region), this study offers valuable insights for hotels seeking to cultivate a "green workforce" and drive sustainable practices through a THK-aligned approach.

**Author Contributions:** Conceptualization, I.B.K.S and I.G.R.; methodology, I.P.A. and I.G.R.; software, I.G.R.; validation, S.K. and I.M.R.M.A; formal analysis, S.K. (Sebastian Kot); resources, I.M.R.M.A; data curation, I.B.K.S.; writing—original draft preparation, I.G.R.; writing—review and editing, S.K.; visualisation, I.G.R., I.P.A and S.K.; project administration, I.M.R.M.A; funding acquisition, I.B.K.S and I.G.R. All authors have read and agreed to the published version of the manuscript.

**Funding:** The research has not received any financial support

**Data Availability Statement:** Not applicable

**Acknowledgements:** Not applicable

**Conflicts of Interest:** All authors declare no conflict of interest in the manuscript

## References

1. Whalen, E., & Bowen, J. (2023). Novel trends challenging tourism. *Worldwide Hospitality and Tourism Themes*, 15(6), 608–616. <https://doi.org/10.1108/WHATT-09-2023-0109>.
2. Wu, H., Wang, W., Tao, Y., Shao, M., & Yu, C. (2024). Understand the Chinese Z Generation consumers' Green hotel visit intention: An Extended Theory of Planned Behavior Model. *Heliyon*, 10(3), Article e25067. <https://doi.org/10.1016/j.heliyon.2024.e25067>.
3. Kuokkanen, H., & Kirillova, K. (2024). Ethically transformative experiences in hotels. *Annals of Tourism Research*, 105, Article 103709. <https://doi.org/10.1016/j.annals.2023.103709>.

*Ida Bagus Ketut Surya, Sebastian Kot, I Putu Astawa, I Gede Rihayana,  
and I Made Risma M Arsha  
Virtual Economics, Vol. 7, No. 2, 2024*

4. Sukawati, T. G. R., Riana, I. G., Rajiani, I., & Abbas, E. W. (2020). Managing corporate sustainability by revitalizing Balinese cultural identity. *Polish Journal of Management Studies*, 21(1), 382–393. <https://doi.org/10.17512/pjms.2020.21.1.28>.
5. Tjiptono, F., Lin, Y., Setyawan, A., Permana, I. B. G. A., & Widahartana, I. P. E. (2022, January 1). Tourism Sustainability in Indonesia: Reflection and Reformulation. [https://doi.org/10.1007/978-981-16-5264-6\\_8](https://doi.org/10.1007/978-981-16-5264-6_8).
6. Widiatedja, I. G. N. P. (2022). The regulatory failure of spatial planning and its environmental impact: a case study of hotel projects in Bali, Indonesia. *Journal of Property, Planning and Environmental Law*, 14(1), 25–44. <https://doi.org/10.1108/JPEL-10-2021-0048>.
7. Saqib, N., Usman, M., Ozturk, I., & Sharif, A. (2024). Harnessing the synergistic impacts of environmental innovations, financial development, green growth, and ecological footprint through the lens of SDGs policies for countries exhibiting high ecological footprints. *Energy Policy*, 184, Article 113863. <https://doi.org/10.1016/j.enpol.2023.113863>.
8. Firman, A., Moslehpour, M., Qiu, R., Lin, P. K., Ismail, T., & Rahman, F. F. (2022). The impact of eco-innovation, ecotourism policy and social media on sustainable tourism development: evidence from the tourism sector of Indonesia. *Economic Research-Ekonomska Istraživanja*, 36(2). <https://doi.org/10.1080/1331677X.2022.2143847>.
9. Satispi, E., Rajiani, I., Murod, M., & Andriansyah, A. (2023). Human Resources Information System (HRIS) to Enhance Civil Servants' Innovation Outcomes: Compulsory or Complimentary? *Administrative Sciences*, 13(2), Article 32. <https://doi.org/10.3390/admsci13020032>.
10. Hariharasudan, A., & Kot, S. (2024). Research Trends in Green Human Resource Management: A Comprehensive Review of Bibliometric Data. *Green Human Resource Management*, 329–346. [https://doi.org/10.1007/978-981-99-7104-6\\_19](https://doi.org/10.1007/978-981-99-7104-6_19).
11. Al-Romeedy, B. S. (2024). Green Human Resource Management and Organizational Sustainability in Airlines—EgyptAir as a Case Study. *Green Human Resource Management*, 367–386. [https://doi.org/10.1007/978-981-99-7104-6\\_21](https://doi.org/10.1007/978-981-99-7104-6_21).
12. Begum, S., Ashfaq, M., Xia, E., & Awan, U. (2021). Does green transformational leadership lead to green innovation? The role of green thinking and creative process engagement. *Business Strategy and the Environment*, 31(1), 580–597. <https://doi.org/10.1002/bse.2911>.
13. Ayu Purnamawati, I. G., Yuniarta, G. A., & Jie, F. (2023). Strengthening the role of corporate social responsibility in the dimensions of sustainable village economic development. *Heliyon*, 9(4), Article e15115. <https://doi.org/10.1016/j.heliyon.2023.e15115>.
14. Barney, J. B., & Mackey, A. (2016). Text and metatext in the resource-based view. *Human Resource Management Journal*, 26(4), 369–378. <https://doi.org/10.1111/1748-8583.12123>.
15. Rajiani, I., Musa, H., & Hardjono, B. (2016). Ability, Motivation and Opportunity as Determinants of Green Human Resources Management Innovation. *Research Journal of Business Management*, 10(1–3), 51–57. <https://doi.org/10.3923/rjbm.2016.51.57>.
16. Thi, U. N., Van, M. H., Mahmud, I., & Thuy, L. V. T. (2023). Innovation and the Sustainable Competitive Advantage of Young Firms: A Strategy Implementation Approach. *Sustainability*, 15(13), Article 10555. <https://doi.org/10.3390/su151310555>.
17. Pham, C. V., Liu, S. F., & Chen, S. H. (2024). Corporate ESG performance and intellectual capital: International evidence. *Asia Pacific Management Review*. <https://doi.org/10.1016/j.apmr.2023.12.003>.
18. Faisal, S. (2023). Green Human Resource Management—A Synthesis. *Sustainability*, 15(3), Article 2259. <https://doi.org/10.3390/su15032259>.
19. Rihayana, I. G., Supartha, W. G., Sintaasih, D. K., & Surya, I. B. K. (2023). Rethinking Open Innovation from Resources Based View and Dynamic Capability Perspective: Determinants and Its Consequences. *Quality - Access to Success*, 24(192), 148–153. <https://doi.org/10.47750/QAS/24.192.17>.
20. Veerasamy, U., Joseph, M. S., & Parayitam, S. (2023). Green Human Resource Management and Employee Green Behaviour: Participation and Involvement, and Training and Development as Moderators. *South Asian Journal of Human Resources Management*, Article 232209372211443. <https://doi.org/10.1177/232209372211443>.
21. Zhou, S., Tiruneh, W. A., & Legese, M. A. (2023). The effect of corporate social responsibility on environmental performance: the mediating role of green innovation and green human resource management. *International Journal of Emerging Markets*. <https://doi.org/10.1108/ijoem-02-2022-0211>.
22. Suliman, M. A., Abdou, A. H., Ibrahim, M. F., Al-Khaldy, D. A. W., Anas, A. M., Alrefae, W. M. M., & Salama, W. (2023). Impact of Green Transformational Leadership on Employees' Environmental

- Performance in the Hotel Industry Context: Does Green Work Engagement Matter? *Sustainability*, 15(3), Article 2690. <https://doi.org/10.3390/su15032690>.
23. Priyadarshini, C., Chatterjee, N., Srivastava, N. K., & Dubey, R. K. (2023). Achieving organizational environmental citizenship behavior through green transformational leadership: a moderated mediation study. *Journal of Asia Business Studies*, 17(6), 1088–1109. <https://doi.org/10.1108/JABS-05-2022-0185>.
  24. Awan, F. H., Dunnan, L., Jamil, K., & Gul, R. F. (2022). Stimulating environmental performance via green human resource management, green transformational leadership, and green innovation: a mediation-moderation model. *Environmental Science and Pollution Research*, 30(2), 2958–2976. <https://doi.org/10.1007/s11356-022-22424-y>.
  25. Agrawal, S., & Pradhan, S. (2023). Employee green behavior in hotels: the role of green human resource management, green transformational leadership and value congruence. *Consumer Behavior in Tourism and Hospitality*, 18(2), 241–255. <https://doi.org/10.1108/CBTH-11-2022-0191>.
  26. Ali, B. (2023). What we know about transformational leadership in tourism and hospitality: a systematic review and future agenda. *The Service Industries Journal*, 44(1–2), 105–147. <https://doi.org/10.1080/02642069.2023.2250302>.
  27. Bakari, H., Patel, T., Habeeb, Y. O., & Metwally, D. (2024). Beware! Green skepticism hampers the effects of Green HRM on OCB environment and green hotel performance. *Current Psychology*. <https://doi.org/10.1007/s12144-024-05684-4>.
  28. Park, H., Lee, M., & Back, K. J. (2023). A critical review of technology-driven service innovation in hospitality and tourism: current discussions and future research agendas. *International Journal of Contemporary Hospitality Management*, 35(12), 4502–4534. <https://doi.org/10.1108/ijchm-07-2022-0875>.
  29. Kanan, M., Taha, B., Saleh, Y., Alsayed, M., Assaf, R., Ben Hassen, M., & Tunsu, W. (2023). Green Innovation as a Mediator between Green Human Resource Management Practices and Sustainable Performance in Palestinian Manufacturing Industries. *Sustainability*, 15(2), Article 1077. <https://doi.org/10.3390/su15021077>.
  30. Vásquez, P., Gallego, V., & Soto, J. D. (2024). Transforming MSMEs towards circularity: an attainable challenge with the appropriate technologies and approaches. *Environment Systems and Decisions*. <https://doi.org/10.1007/s10669-023-09961-8>.
  31. Rubel, M. R. B., & Rimi, N. N. (2024). Green Human Resource Management and Circular Economy Practices in Green Garment Organizations in Bangladesh: Mediating Effect of Green Innovation. *Green Human Resource Management*, 387–405. [https://doi.org/10.1007/978-981-99-7104-6\\_22](https://doi.org/10.1007/978-981-99-7104-6_22).
  32. Niazi, U. I., Nisar, Q. A., Nasir, N., Naz, S., Haider, S., & Khan, W. (2023). Green HRM, green innovation and environmental performance: the role of green transformational leadership and green corporate social responsibility. *Environmental Science and Pollution Research*, 30(15), 45353–45368. <https://doi.org/10.1007/s11356-023-25442-6>.
  33. Zhao, F., Wang, L., Chen, Y., Hu, W., & Zhu, H. (2023). Green human resource management and sustainable development performance: organizational ambidexterity and the role of responsible leadership. *Asia Pacific Journal of Human Resources*, 62(1). <https://doi.org/10.1111/1744-7941.12391>.
  34. Setyaningrum, R. P., & Muafi, M. (2023). Green Human Resources Management on Business Performance: The Mediating Role of Green Product Innovation and Environmental Commitment. *International Journal of Sustainable Development and Planning*, 18(1), 209–220. <https://doi.org/10.18280/ijstdp.180122>.
  35. Franco, C., & Landini, F. (2022). Organizational drivers of innovation: The role of workforce agility. *Research Policy*, 51(2), Article 104423. <https://doi.org/10.1016/j.respol.2021.104423>.
  36. Asiaei, K., O'Connor, N. G., Barani, O., & Joshi, M. (2022). Green intellectual capital and ambidextrous green innovation: The impact on environmental performance. *Business Strategy and the Environment*, 32(1), 369–386. <https://doi.org/10.1002/bse.3136>.
  37. Aggarwal, P., & Agarwala, T. (2022). Relationship of green human resource management with environmental performance: mediating effect of green organizational culture. *Benchmarking: An International Journal*, 30(7), 2351–2376. <https://doi.org/10.1108/BIJ-08-2021-0474>.
  38. Arilla-Llorente, R., Gavurova, B., Rigelsky, M., & Ribeiro-Soriano, D. (2024). Quantifying the dynamics of relationships between eco-innovations and SDG 8. *Energy Economics*, 130, Article 107280. <https://doi.org/10.1016/j.eneco.2023.107280>.
  39. Rehman, S. U., Elrehail, H., Alshwayat, D., Ibrahim, B., & Alami, R. (2023). Linking hotel environmental management initiatives and sustainable hotel performance through employees' eco-friendly behaviour and environmental strategies: a moderated-mediated model. *European Business Review*, 35(2), 184–201. <https://doi.org/10.1108/EBR-05-2022-0094>.

40. Jayaraman, K., Jayashree, S., & Dorasamy, M. (2023). The Effects of Green Innovations in Organizations: Influence of Stakeholders. *Sustainability*, 15(2), Article 1133. <https://doi.org/10.3390/su15021133>.
41. Chi, Y., Hu, N., Lu, D., & Yang, Y. (2023). Green investment funds and corporate green innovation: From the logic of social value. *Energy Economics*, 119, Article 106532. <https://doi.org/10.1016/j.eneco.2023.106532>.
42. Bhat, A. A., Mir, A. A., Allie, A. H., Ahmad Lone, M., Al-Adwan, A. S., Jamali, D., & Riyaz, I. (2024). Unlocking corporate social responsibility and environmental performance: Mediating role of green strategy, innovation, and leadership. *Innovation and Green Development*, 3(2), Article 100112. <https://doi.org/10.1016/j.igd.2023.100112>.
43. Schuster, T., Brunner, T. J. J., Schneider, M. H. G., Lehmann, C., & Kanbach, D. K. (2023). Leading In the Digital Age: Conceptualising Digital Leadership and Its Influence on Service Innovation Performance. *International Journal of Innovation Management*, 27(6), 1-57. <https://doi.org/10.1142/S1363919623500317>.
44. Nduneseokwu, C. K., & Harder, M. K. (2023). Developing environmental transformational leadership with training: Leaders and subordinates environmental behaviour outcomes. *Journal of Cleaner Production*, 403, Article 136790. <https://doi.org/10.1016/j.jclepro.2023.136790>.
45. Ahmed, F., Callaghan, D., & Arslan, A. (2023). A multilevel conceptual framework on green practices: Transforming policies into actionable leadership and employee behavior. *Scandinavian Journal of Psychology*. <https://doi.org/10.1111/sjop.12981>.
46. Zhao, W., & Huang, L. (2022). The impact of green transformational leadership, green HRM, green innovation and organizational support on the sustainable business performance: evidence from China. *Economic Research-Ekonomska Istraživanja*, 35(1), 6121–6141. <https://doi.org/10.1080/1331677X.2022.2047086>.
47. Rajiani, I., & Ismail, N. (2019). Management Innovation in Balancing Technology Innovation to Harness Universities Performance in the Era of Community 4.0. *Polish Journal of Management Studies*, 19(1), 309–321. <https://doi.org/10.17512/pjms.2019.19.1.24>.
48. Sahoo, M. (2023). Role of Human Resource Management Practices and HR Analytics in Start-Ups. *Innovation, Technology, and Knowledge Management*, <https://doi.org/109-118>. 10.1007/978-3-031-40324-8\_6.
49. Gomes, J. F. S., Sabino, A., & Antunes, V. (2023). The Effect of Green Human Resources Management Practices on Employees' Affective Commitment and Work Engagement: The Moderating Role of Employees' Biospheric Value. *Sustainability*, 15(3), Article 2190. <https://doi.org/10.3390/su15032190>.
50. Gede Riana, I., Suparna, G., Gusti Made Suwandana, I., Kot, S., & Rajiani, I. (2020). Human resource management in promoting innovation and organizational performance. *Problems and Perspectives in Management*, 18(1), 107–118. [http://dx.doi.org/10.21511/ppm.18\(1\).2020.10](http://dx.doi.org/10.21511/ppm.18(1).2020.10).
51. Singh, S. K., Giudice, M. D., Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, 150, Article 119762. <https://doi.org/10.1016/j.techfore.2019.119762>.
52. Renwick, D. W., Redman, T., & Maguire, S. (2012). Green Human Resource Management: A Review and Research Agenda. *International Journal of Management Reviews*, 15(1), 1–14. <https://doi.org/10.1111/j.1468-2370.2011.00328.x>.
53. Sobaih, A. E. E., Gharbi, H., Hasanein, A. M., & Elnasr, A. E. A. (2022). The Mediating Effects of Green Innovation and Corporate Social Responsibility on the Link between Transformational Leadership and Performance: An Examination Using SEM Analysis. *Mathematics*, 10(15), Article 2685. <https://doi.org/10.3390/math10152685>.
54. Kim, Y. J., Kim, W. G., Choi, H. M., & Phetvaroon, K. (2019). The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *International Journal of Hospitality Management*, 76, 83–93. <https://doi.org/10.1016/j.ijhm.2018.04.007>.
55. Wang, K., Xu, Y., Wang, C., Tan, M., & Chen, P. (2019). A Corrected Goodness-of-Fit Index (CGFI) for Model Evaluation in Structural Equation Modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 27(5), 735–749. <https://doi.org/10.1080/10705511.2019.1695213>.
56. Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>.

57. Kalkbrenner, M. T. (2021). Alpha, Omega, and H Internal Consistency Reliability Estimates: Reviewing These Options and When to Use Them. *Counseling Outcome Research and Evaluation*, 14(1), 77–88. <https://doi.org/10.1080/21501378.2021.1940118>.
58. Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037//0022-3514.51.6.1173>.
59. Bullock, J. G., & Green, D. P. (2021). The Failings of Conventional Mediation Analysis and a Design-Based Alternative. *Advances in Methods and Practices in Psychological Science*, 4(4), Article 251524592110472. <https://doi.org/10.1177/25152459211047227>.
60. Rasoolimanesh, S. M., Wang, M., Roldán, J. L., & Kunasekaran, P. (2021). Are we in right path for mediation analysis? Reviewing the literature and proposing robust guidelines. *Journal of Hospitality and Tourism Management*, 48, 395–405. <https://doi.org/10.1016/j.jhtm.2021.07.013>.
61. Shipley, B., & Douma, J. C. (2020). Generalized AIC and chi-squared statistics for path models consistent with directed acyclic graphs. *Ecology*, 101(3). <https://doi.org/10.1002/ecy.2960>.
62. Al-Janabi, S., Alkaim, A. F., & Adel, Z. (2020). An Innovative synthesis of deep learning techniques (DCapsNet & DCOM) for generation electrical renewable energy from wind energy. *Soft Computing*, 24(14), 10943–10962. <https://doi.org/10.1007/s00500-020-04905-9>.
63. Bahmani, S., Farmanesh, P., & Khademolomoom, A. H. (2023). Effects of green human resource management on innovation performance through green innovation: evidence from northern Cyprus on small island universities. *Sustainability*, 15(5), 4158. <https://doi.org/10.3390/su15054158>.
64. Szczepańska-Woszczyna, K., Vysochyna, A., & Kwilinski, A. (2024). Public Health Efficiency and Country Competitiveness: Empirical Study in Pre-Pandemic and Pandemic Periods. *Forum Scientiae Oeconomia*, 12(1), 151–166. [https://doi.org/10.23762/FSO\\_VOL12\\_NO1\\_8](https://doi.org/10.23762/FSO_VOL12_NO1_8).
65. Dacko-Pikiewicz, Z. (2019). Building a family business brand in the context of the concept of stakeholder-oriented value. *Forum Scientiae Oeconomia*, 7, 37–51. [https://doi.org/10.23762/FSO\\_VOL7\\_NO2\\_3](https://doi.org/10.23762/FSO_VOL7_NO2_3).
66. Letunovska, N., Abazov, R., & Chen, Y. (2022). Framing a Regional Spatial Development Perspective: The Relation between Health and Regional Performance. *Virtual Economics*, 5, 87–99. [https://doi.org/10.34021/ve.2022.05.04\(5\)](https://doi.org/10.34021/ve.2022.05.04(5)).
67. Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). The Role of Country's Green Brand and Digitalization in Enhancing Environmental, Social, and Governance Performance. *Economics and Environment*, 87(4), 613. <https://doi.org/10.34659/eis.2023.87.4.613>.
68. Moskalenko, B., Lyulyov, O., & Pimonenko, T. (2022). The investment attractiveness of countries: coupling between core dimensions. *Forum Scientiae Oeconomia*, 10(2), 153–172. [https://doi.org/10.23762/FSO\\_VOL10\\_NO2\\_8](https://doi.org/10.23762/FSO_VOL10_NO2_8).
69. Wróblewski, Ł., & Lis, M. (2021). Marketing Mix of Cultural Institutions on the Cross-Border Market of a City Divided by a Border – An Analysis and Evaluation. *Polish Journal of Management Studies*, 23(2), 555–572. <https://doi.org/10.17512/pjms.2021.23.2.33>.
70. Dacko-Pikiewicz, Z. (2019). The Selected Aspects of Strategic Management in the City Divided by the Border in the Context of the Development of the Cross-Border Market of Cultural Services. *Polish Journal of Management Studies*, 19(1), 130–144. <https://doi.org/10.17512/pjms.2019.19.1.10>.
71. Krishnasamy, D., & Anandhan, H., & Dacko-Pikiewicz, Z., & Kot-Radojewska, M. (2023). Culture of Educational Institutions on Psychological Empowerment of Women Employees in Higher Education Institutions. *Cultural Management: Science and Education*, 7(2), 63–77. <https://doi.org/10.30819/cmse.7-2.04>.
72. Zirar, A., Trusson, C., & Choudhary, A. (2021). Towards a high-performance HR bundle process for lean service operations. *International Journal of Quality & Reliability Management*, 38(1), 25–45. <https://doi.org/10.1108/IJQRM-10-2019-0330>.