

Integrating Green HRM and Green Intellectual Capital for Sustainable Organizational Performance: A Review of Emerging Perspectives

Singhal A^{1*}, Rana N²

DOI:10.54741/MJAR/6.3.2026.314

^{1*} Aashi Singhal, Research Scholar, School of Management, Gautam Buddha University, Greater Noida, Uttar Pradesh, India.


² Neeti Rana, Associate Professor, School of Management, Gautam Buddha University, Greater Noida, Uttar Pradesh, India.

In the modern business ecosystem, rising environmental concerns and growing stakeholder expectations have persuaded organizations to incorporate sustainable practices for holistic growth and competitiveness advantage. In this context, GHRM and GIC have emerged as key determinants of sustainable organizational performance. The segments of GIC, namely Green Human Capital (GHC), Green Structural Capital (GSC) and Green Relational Capital (GRC) have emerged as key determinants of eco-friendly and green performance. This study adopts a descriptive and review-based research design, relying on secondary data collected from reputed journals and databases such as Scopus and Web of Science. The review covers literature published between 2019 and 2026, examines the key practices of GHRM and the effect of GIC on sustainability results. The study is grounded in theoretical perspectives such as the AMO framework which has three elements namely- Ability, Motivation and Opportunity. All the three elements defines that how GHRM practices develops employee’s thought process in the direction of sustainability. Social cognitive theory (SCT) explains how human competencies, motivation, opportunities and knowledge -based resources contributes to environmental performance.

The review reveals that effective implementation of GHRM practices significantly enhances employees’ environmental awareness, attitudes, and behaviors, thereby improving sustainability performance. Additionally, GIC plays a key role in encouraging creativity, knowledge sharing, and organizational efficiency, which are crucial for long-term sustainability. The integration of GHRM and GIC creates a synergistic effect that strengthens competitive advantage and supports sustainable development.

The study concludes that organizations must move beyond traditional approaches and strategically integrate GHRM and GIC into their core operations. This integration not only improves ecological performance along with builds long-term organizational adaptability, capacity and competitiveness in a rapidly evolving global environment.

Keywords: green human resource management practices, employee green behaviour, sustainable organization performance, green intellectual capital

Corresponding Author	How to Cite this Article	To Browse
Aashi Singhal, Research Scholar, School of Management, Gautam Buddha University, Greater Noida, Uttar Pradesh, India. Email: aashisinghal15@gmail.com	Singhal A, Rana N, Integrating Green HRM and Green Intellectual Capital for Sustainable Organizational Performance: A Review of Emerging Perspectives. Manag J Adv Res. 2026;6(3):49-53. Available From https://mjar.singhpublication.com/index.php/ojs/article/view/314	

Manuscript Received 2026-05-07	Review Round 1 2026-05-23	Review Round 2	Review Round 3	Accepted 2026-06-13
Conflict of Interest None	Funding Nil	Ethical Approval Yes	Plagiarism X-checker 5.42	Note



1. Introduction

In recent times, environmental concerns has become prominent for organizations for long term sustainability in the future across the globe. Considering this, the integration of GHRM & GIC has gained importance for gaining sustainable performance (Isola et al., 2023., Elnagar & Aljuwaiber 2025). The term Environmental HRM is described by the principles, practices, system and structure which results in guiding the workforce of the workplace green for the benefit of the individual, environment and the organisation (Ahmad, 2015). The author's (Li et al., 2025; Isola et al., 2023) highlighted that GHRM is linked to many factors such as environmental aspects, green supply chain management, corporate social responsibility, stakeholder pressure, HR factors, performance and competitive advantage. The term Green Intellectual capital comprises of the non physical assets such as knowledge, skills etc so as to enhance environmental sustainability and to gain market advantage (Akter et al., 2025., Elnagar & Aljuwaiber 2025). GIC have three main dimensions i.e. Green Human, Structural and Relational capital. All these components builds positive and proactive employee attitude towards environment greening and boosts inclination for green targeting aspirations (Ghosh & Haque 2023., Akter et al., 2025., Elnagar & Aljuwaiber 2025., Shahbaz & Malik 2026).

According to (Akter et al., 2025) GHC is explained as employee's knowledge, skills, dedication and creativity towards environment safeguarding whereas GSC is referred to as non-human, intangible organizational resources and GRC consists of intellectual property depends upon the relations with suppliers, creditors and stakeholder's. Hence, the objectives of the review include the following:

1. To explore the key practices of GHRM.
2. To study the impact of GIC on sustainability outcomes.
3. To review the relationship between GHRM and GIC.

2. Theoretical Background

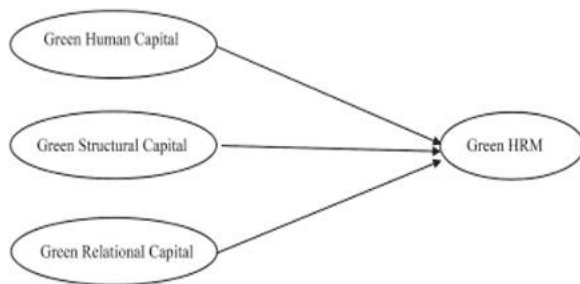
Prior research highlights that GHRM and GIC are the core factors of long term organizational performance. Abbas et al., (2023) points out that,

organizations are subject to external pressure from consumers, government and other stakeholder's to demonstrate green practices this leads to reducing difficulty for them to implement green activities to meet the needs of the stakeholder's, hence improving the market position and boosting competitive strength. Companies should holistically integrate sustainability into main business activities, employ resource optimization tools, execute environmental initiatives and to invest in building digital competencies to strengthen sustainability practices (Akter et al., 2025). Authors have mentioned various theories which helps in understanding the integration of GHRM and GIC that justifies how organizations are able to attain sustainable performance through human and knowledge based resources. Leadership plays the major role in building strong foundation for sustainability in the organizational culture and motivate employee's to adopt green practices whereas knowledge sharing is one of the useful factor for enhancing the GIC (Elnagar & Aljuwaiber 2025).

3. Green Intellectual Capital

This term is first coined by Chen (2008) as an addition to IC (Srouji et al., 2025., Ghosh & Haque 2023). GIC is defined just as the combination of intangible assests and has gained importance in the 21st century observing the concerns for preserving the environment (Ghosh & Haque 2023., Ahmed et al., 2023., Akter et al., 2025). Similarly IC has been classified into three primary components namely GHC, GSC and GRC (Niaves et al., 2025., Ghosh & Haque 2023., Srouji et al., 2025., Akter et al., 2025). Dimensions of Green Intellectual capital integrates employee's knowledge, skills, expertise, attitudes (GHC), databases, green values (GSC) and managing external relationships (GRC). The structural dimension of GIC was given by Barney in the year 1991 (Al et al., 2023). Each dimension plays a vital role in fostering environmental preservation and to gain the competitive edge in the market (Srouji et al., 2025., Gidage & Bhide 2025., Mansoor et al., 2021).

Green Intellectual Capital



Source: Jing et al., (2019)

4. Green Human Resource Management

As (Niaves et al.,2025., Shahbaz & Malik 2025) highlighted that GHRM practices combines environment sustainability into HR functions covering recruitment, training, rewards that aligns with the environment and also the financial objectives of the organization. The literature has suggested that within the intersection of HRM and ecological balance, leading to the evolution of GHRM. Combining GHRM with green innovation helps the organizations to have a competitive edge (Shahbaz & Malik 2025).

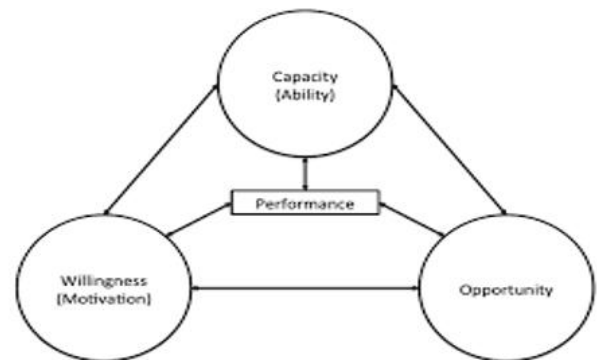
5. GIC & GHRM

Ahmed et al., (2023)., Shahbaz & Malik (2025) mentioned that GIC can only be achieved when the organizations works responsibly towards environment that could only be enhanced by practising GHRM practices. Furthermore the strategic integration of both leads to the achievement of eco-conscious results (Shahbaz & Malik 2025).

6. AMO Framework

Niaves et al., (2025) highlighted that if the foundation of all the factors are build effectively, it encourages pro environmental -conscious behaviour among employee's. The AMO framework, states that employee's way of doing things and there workplace behaviour originates from the collaboration of three components namely – Abilities, Motivation and Opportunities. In relation to environmental preservation, these components defines that how Green management practices frame staff perceptions and practices in the direction of sustainability (Sharif & Malik 2025).

Abilities refers to the building of the employee's competencies such as skills, knowledge and expertise with the help of green training programs. Motivation is defined as encouraging employee's such as for giving eco-friendly suggestions. Opportunities integrate the organizational frameworks and structures that inspires employee's to be responsible towards environment. Sharif & Malik (2025) states that as per this framework GHRM practices develops employee's capabilities through green training and development that motivates employee's to contribute and work in the direction of environment sustainability, also green compensation and reward system inspires them to align there personal goals with the organisation's green aims.



Source: Ashlea et al., (2019)

7. Social Cognitive Theory (SCT)

This theory was first coined by Albert Bandura's and focuses mainly on three components namely – Personal, Behavioral and Environmental). This is known as triadic reciprocal determinism (Ahmed et al., 2023). This theory connects a positive and practical mindset for sustainability (Ghosh & Haque 2023).

8. Methodology

This study is based on descriptive and review –based research design, aimed at understanding concepts, relationships and existing theoretical frameworks. Data is collected from secondary sources such as Web of Science, Scopus, Research articles from reputed journals etc. Relevant literature were chosen based on keywords such as GHRM, GIC, Sustainable performance and Green employee behavior. Data for the period 2015-2026 is analyzed.

9. Findings

Powerful effect of GHRM Practices on Sustainability

Sustainable practices like green hiring recruitment, virtual Learning and green training and education considerably upgrades sustainable organizational performance (Mahmood, & Nasir 2023., Yuzmazida et al., 2019). Sustainable innovation and environmental performance remarkably impact the firm's performance (Jitender et al., 2025).

Role of GIC

Maintaining a balance between the three dimensions of sustainability performance is a central objective of businesses. However, in the present competitive landscape, it is growing increasingly challenging for organizations to achieve sustainable results derived from traditional non-sustainable business strategies and capabilities. Hence, green intellectual capital is becoming an indispensable strategy for sustained long term growth in a fast-changing environment (Kumar et al., 2025; Isola et al., 2023). There exists a favourable relationship between GIC and organizational effectiveness across sectors showcasing its contribution to sustainability and profitability (Shahbaz & Malik 2026).

Integration Enhances Competitive Advantage

The collective integration of Green HRM and GIC creates a mutually beneficial effect, leading to innovation, enhanced environmental performance, and competitive advantage in the market (Shahbaz & Malik 2026).

Implications

From a practical standpoint, organizations can implement training programs, green recruitment practices, Execute green technological innovations which can boost green intellectual capital and enable long-term improvement in sustainability performance.

Policymakers and regulatory bodies should support and promote organizations to take green decisions by drafting policies which promotes environmental responsibility, sustainability reporting, and green innovation.

Managers should proactively execute GHRM practices such as environment awareness,

performance evaluation so as to boost environmentally conscious behavior among employee's.

10. Conclusion

This review shows that the existence of GIC has a productive impact on environment and business sustainability. The information highlights that combined approach of both brings more productivity and positive behaviour of employee's in terms of are better able to promote nature-friendly behaviour among employee's and improve overall productivity.

In today's dynamic corporate environment, institutions must evolve beyond traditional frameworks and adopt sustainable practices to remain competitive. Therefore, the addition of GHRM and GIC is not only useful but also a necessity for gaining long- term sustainability goals.

Moreover, GIC develop the organization's capability to attain sustainability by nurturing green intelligence, skills and competencies.

References

1. Shahbaz, M. H., & Malik, S. A. (2026). The role of green HRM and intellectual capital in firm performance: A mediated-moderated analysis. *Journal of Intellectual Capital*, 27(2), 413-439.
2. Ahmad, S. (2015). Green human resource management: Policies and practices. *Cogent Business & Management*, 2(1), 1030817.
3. San Román-Niaves, M., Morandini, S., Antonini, M., & Pietrantonio, L. (2025). Green human resource management and green psychological climate: A scoping review through the AMO framework. *Sustainability*, 17(6), 2535.
4. Sharif, S., & Malik, S. A. (2025). Does green HRM and intellectual capital strengthen psychological green climate, green behaviors and creativity? A step towards green textile manufacturing. *Journal of Intellectual Capital*, 26(3), 644-669.
5. Abbas, A., Luo, X., Shahzad, F., & Wattoo, M. U. (2023). Optimizing organizational performance in manufacturing: The role of IT capability, green supply chain integration, and green innovation. *Journal of Cleaner Production*, 423, 138848.

6. Akter, T., Al Masud, A., Chaity, N. S., Akhter, P., Emon, M., & Samir, M. M. H. (2025). Sustainability P., Emon, M., & Samir, M. M. H. (2025). Sustainability through green intellectual capital: the role of IT capability as a moderator in the service sector. *Discover Sustainability*, 6(1), 427.
7. Li, W., Bhutto, M. Y., Waris, I., & Hu, T. (2023). The nexus between environmental corporate social responsibility, green intellectual capital and green innovation towards business sustainability: An empirical analysis of Chinese automobile manufacturing firms. *International Journal of Environmental Research and Public Health*, 20(3), 1851.
8. Ali, M., Puah, C. H., Ali, A., Raza, S. A., & Ayob, N. (2022). Green intellectual capital, green HRM and green social identity toward sustainable environment: A new integrated framework for Islamic banks. *International Journal of Manpower*, 43(3), 614-638.
9. Srouji, A. F., Hamdallah, M. E., Moustaphe, K. S., & Elamer, A. A. (2025). The role of green intellectual capital and corporate social responsibility in driving environmental sustainability performance: Evidence from emerging markets. *Journal of Financial Reporting and Accounting*.
10. Gidage, M., & Bhide, S. (2025). Exploring the nexus between intellectual capital, green innovation, sustainability and financial performance in creative industry MSMEs. *Journal of Enterprising Communities: People and Places in the Global Economy*, 19(3), 457-484.
11. Kumar, J., Rani, V., Rani, M., & Rani, G. (2025). Linking green intellectual capital and firm performance through green innovation and environmental performance in small and medium-sized enterprises. *Journal of Intellectual Capital*, 26(3), 670-690.
12. Yusoff, Y. M., Omar, M. K., Zaman, M. D. K., & Samad, S. (2019). Do all elements of green intellectual capital contribute toward business sustainability? Evidence from the Malaysian context using the Partial Least Squares method. *Journal of Cleaner Production*, 234, 626-637.
13. Mansoor, A., Jahan, S., & Riaz, M. (2021). Does green intellectual capital spur corporate environmental performance through green workforce?. *Journal of Intellectual Capital*, 22(5), 823-839.
14. Olohunlana, A. O., Odeleye, A. T., & Isola, W. A. (2023). Determinants of the intellectual capital efficiency of listed banks in Nigeria: A DEA approach. *Journal of Business and Socio-economic Development*, 3(1), 86-96.
15. Ahmed, H., Nisar, Q. A., Khan, W., Patwary, A. K., & Zaman, S. (2023). Does green HRM really matter for sustainable performance? The role of environmental consciousness and green intellectual capital. *Environmental Science and Pollution Research*, 30(54), 115882-115895.
16. Ghosh, A., & Haque, S. (2023). Can the components of green intellectual capital influence employee green behavior? An empirical analysis on Indian energy sector using the partial least squares method. *Journal of Intellectual Capital*, 24(3), 632-652.
17. Elnagar, A. K., & Aljuwaiber, A. (2026). The nexus of green intellectual capital and sustainable performance: Leadership commitment and knowledge sharing as influences. *Journal of Intellectual Capital*, 27(1), 110-138.
18. Al Issa, H. E., Abdullatif, T. N., Ntayi, J., & Abdelsalam, M. K. (2023). Green intellectual capital for sustainable healthcare: Evidence from Iraq. *Journal of Intellectual Capital*, 24(4), 929-947.
19. Yong, J. Y., Yusliza, M.-Y., Ramayah, T., & Fawehinmi, O. (2019). Nexus between green intellectual capital and green human resource management. *Journal of Cleaner Production*, 215, 364-374.
20. Kellner, A., Cafferkey, K., & Townsend, K. (2019). Ability, Motivation and Opportunity theory: A formula for employee performance? In *Elgar Introduction to Theories of Human Resources and Employment Relations*. Edward Elgar Publishing.

Disclaimer / Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Journals and/or the editor(s). Journals and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.