Developing a Model Incorporating Green HRMP and Environmental Awareness for Sustainable Performance in Malaysian Logistics Companies: Conceptual Paper

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Abstract

This conceptual paper emphasizes the need for sustainable practices in the Malaysian logistics industry to mitigate its environmental impact. It proposes an integrated model to examine the relationship between Green Human Resource Management Practices (G-HRMP), environmental awareness, and sustainable performance. As well as to explore the role of environmental awareness as a mediating between (G-HRMP), and sustainable performance. This proposed paper (a research agenda) aims to provide insights into how logistics companies can reduce their environmental footprint while improving overall performance. It will adopt a quantitative method approach, where data will be collected from logistics companies in Klang Valley, Malaysia. The research seeks to offer practical guidance for companies in adopting sustainable practices and inform policymakers about the importance of green policies and regulations in the logistics sector. Ultimately, the study aims to contribute to the literature on sustainability management and environmental awareness in the logistics industry, fostering a more sustainable future for the industry in Malaysia and beyond

Keywords   Green HRMP, Environment, Awareness, Sustainability, Performance, logistics companies

Introduction

In recent days, climate change has become a global concern, and many researchers all over the world are paying attention to this critical matter. Logistics companies worldwide are a significant contributor to its negative effects. Therefore, there is a real need for logistics companies to adopt sustainable practices to reduce their environmental impact which negatively affects the environment. Shafie and Mahmud (2020) stated that the Malaysian government require to implement various strategies to lower emissions from the transportation sector in urban areas to enhance the quality of the environment, and the well-being of the urban community.

Recently, many studies in the Malaysian context confirm that the government increasing concern in all industrial sectors to improve social and economic performance and enhance environmental awareness, and this came to response the government's commitment to the climate change issue (Noor Ullah Khan, 2019). Another study added that green human resources management practices become necessary in the organization to integrate sustainability (Mishra, 2017). In the meantime, Al Doghan, Abdelwahed, Soomro, and Ali Alayis (2022) showed that organizations should adopt GHRMP to achieve environmentally friendly strategies and long-term plans, as well as adapt them actively until it is established as an organizational culture. Thus, implementing such strategies can lead to increased employee awareness and participation in sustainability practices, at the same time will help to reduce waste and energy consumption, and improve operational efficiency.

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Problem Statement

The logistics industry as it is known, plays a crucial role in the global economy, providing goods and services to consumers worldwide(Aziz, Jaafar, & Tajuddin, 2016; Bakar & Jaafar, 2016). However, the industry's rapid growth has also resulted in increased carbon emissions and environmental impact, contributing to climate change (Cheng, Han, & Ren, 2023). Moreover, transportation and various logistics emissions contribute to domestic air pollution, climate change, human health issues, and ground-level ozone formation, as reported (Azam, Othman, Begum, Abdullah, & Nor, 2016; Kapatsila, Palacios, Grisé, & El-Geneidy, 2023). In the Malaysian context, according to Aziz et al. (2016), the logistics industry is a significant contributor to the country's economy, however, the emission of carbon dioxide (CO_2) has significantly increased from 126.5 million tons in the year 2000 to 250.1 million tons in the year 2019, presenting a challenge to global sustainable development as espoused in the United Nations' Sustainable Development Goals (SDGs) or Global Goals (Zawawi et al., 2022).

Although the positive impact of green human resource management practices (GHRMP) on environmental performance is acknowledged by few researchers, (Chiappetta Jabbour, Mauricio, & Jabbour, 2017; Nejati, Rabiei, & Jabbour, 2017), there is still a lack of empirical research in this area for two reasons. Firstly, while researchers acknowledge the prominent role of GHRMP practices as an internal driver of green supply chain practices, sustainable performance and logistics, there is limited discussion on the "green version" of these concepts. Secondly, there is a recognized need for further studies to explore the potential economic, environmental, and social benefits that GHRMP practices can bring to companies (Zaid, Jaaron, & Bon, 2018).

To mitigate the industry's impact, sustainable practices need to be adopted, including integrating Green Human Resource Management Practices (HRMP) and environmental awareness. While Green HRMP has been explored in other industries, its application in the logistics industry in Malaysia is relatively unexplored.

While there have been some studies exploring the implementation of green HRM plans in the logistics sector of Malaysia,(Abbas, Sarwar, Rehman, Zámečník, & Shoaib, 2022; Al Doghan et al., 2022), there remains a significant need for further investigation into the sustainability performance of such plans, particularly given the sector's substantial contribution to CO_2 emissions.

Up to that, the study problem statement is the need to explore the effective role of the Green HRMP in promoting sustainable performance including (economic, environmental, and social sustainability) in the logistics industry and to integrate environmental awareness into the practices of this sustainability, specifically in the context of Malaysian logistics companies. This in-depth study aims to develop and validate a model that can guide logistics companies and policymakers towards sustainable practices that can reduce environmental impact while improving overall performance.

Literature Review

According to the literature, logistics sustainability is a growing importance in today's world (Al Doghan et al., 2022; Metcalf & Benn, 2013; Naidoo & Verma, 2019). Existing research on this topic covers various aspects and themes, providing insights into different areas of logistics. One key area of research is environmental sustainability in logistics and freight transportation. A literature review identified five key themes in this area, including sustainability initiatives, reasons for adoption, benefits achieved following adoption, critical issues and barriers to adoption, and the evaluation and measurement of environmental initiatives. This research highlights the importance of adopting sustainable practices in logistics and offers directions for future research in this field (Marchet, Melacini, & Perotti, 2014).

Green HRMP and environmental awareness can impact sustainability in the logistics sector in several ways. Firstly, it can lead to better sustainability reporting in the sector, which is crucial for achieving materiality in the sector's efforts towards sustainability reporting. Secondly, it can lead to implementing green supply chain management practices, which can impact sustainable business and supply chain performance. Thirdly, it can lead to the developing green logistics practices, which can contribute to environmental sustainability in the logistics sector. Lastly, it can impact organizational

sustainability in the logistics sector, as green management activities have a significant positive impact on organizational sustainability in the tourism sector in Bangladesh (Amir & Salehin, 2022; Lambrechts, Son-Turan, Reis, & Semeijn, 2019; Trivellas, Malindretos, & Reklitis, 2020). Reducing road accidents can positively impact sustainability and the environment, particularly in the transportation hazard goods (Al-Mekhlafi et al., 2023). This can lead to reduced carbon emissions, conservation of natural resources, improved air quality, and preservation of ecosystems (Al-Mekhlafi, Isha, Abdulrab, Ajmal, & Kanwal, 2022). To achieve this, the industry can invest in infrastructure, enforce traffic laws, promote public transportation and alternative modes of transport, and implement advanced safety technologies. The industry can contribute to a more sustainable future by prioritising road safety, especially as the world's population grows and consumption levels increase (Al-Mekhlafi et al., 2021).

Implementing significant changes in a complex context like the logistics industry requires a transformational leadership style., transformational leaders play a crucial role in increasing employees' readiness for change As stated by (Al-Tahitah, Abdulrab, Alwaheeb, Al-Mamary, & Ibrahim, 2020; Al-Tahitah, Muthaliff, Abdulrab, & Al-Maamari, 2018; Al-Tahitah, Muthaliff, Sammari, & Abdulrab, 2021). They inspire and motivate their workforce to embrace change, fostering a culture of openness, adaptability, and innovation. In the logistics sector, where sustainability practices are vital for long-term success, readiness for change becomes paramount. The industry operates in dynamic and ever-changing environments, necessitating the adoption of sustainable practices. Without a high level of readiness for change, employees may resist or hesitate to embrace sustainability initiatives, impeding the successful implementation of green HRMP and environmental awareness programs. Therefore, nurturing a culture of readiness for change through transformational leadership is essential for successfully integrating sustainable practices in the logistics industry.

Overall, green HRMP and environmental awareness can lead to implementing sustainable practices in the logistics sector, which can contribute to environmental and organizational sustainability. Consequently, this study developed the conceptual framework as you can see in Figure 1.
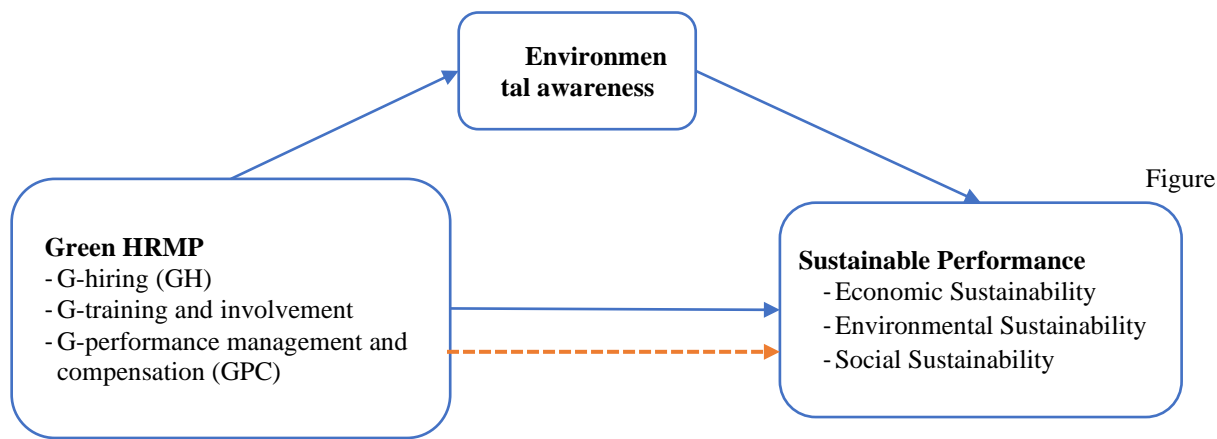
Figure 1: Conceptual Framework

Model Implications

In the current proposed project, the study is focused on the practical and theoretical contributions it can make to the Malaysian logistics industry and the body of literature as well. Malaysian's government has articulated concerns about the impact of climate change, and the logistics industry's contribution to carbon emissions is a significant challenge that needs to be addressed. This study aims to address this issue by proposing a model that integrates Green HRMP practices and environmental awareness into the logistics industry's operations.

The proposed model can help logistics companies in Malaysia reduce their negative impact on the environment while attempting to improve their overall performance. By adopting sustainable practices, logistics companies can reduce costs, improve their efficiency, and enhance their competitiveness in the industry. The model can also provide a framework for government policies and regulations to promote sustainability in the logistics industry.

Furthermore, this study's theoretical significance lies in its contribution to the body of literature on the integration of Green HRMP and environmental awareness into sustainability practices in the logistics industry. This study can provide valuable insights and real evidence into the relationship between Green HRMP and sustainable performance in the logistics industry, contributing to the development of sustainability management theory.

The study's focus on the Malaysian logistics industry is crucial as it addresses the government's concerns and contributes to reducing emissions by activating the policy of Green HRMP in Malaysia's transportation and logistics

industry. Malaysia is uniquely positioned as a developing country to balance economic growth and environmental sustainability. The study's findings can provide valuable insights into how developing countries can promote sustainability in their industries while maintaining economic growth.

In summary, the study's practical significance lies in its potential to reduce the environmental impact of the Malaysian logistics industry, while its theoretical significance lies in its contribution to the literature on the integration of Green HRMP and environmental awareness into sustainability practices. Additionally, the study's relevance to the government's concerns about climate change demonstrates its importance in promoting sustainability in Malaysia's logistics industry.

Research Methodology

The potential research methodology for this proposed study will adopt a quantitative method approach, which allows for a comprehensive analysis of the research questions, providing numerical data and in-depth insights into the participants' experiences and perceptions.

The population for the proposed study will consist of logistics and big transporter companies in Klang Valley, Malaysia. Those companies will be selected based on their size and their level of involvement in logistics and transportation operations. The researchers will utilize a list of registered logistics and transportation companies gained from relevant government agencies as a basis for the population.

The study focuses on Klang Valley, the largest metropolitan area in Malaysia and a hub for international trade and transportation (Makmom Abdullah, Armi Abu Samah, & Yee Jun, 2012). This region has a high concentration of logistics and transportation companies, making it a suitable population for the study. Additionally, the region's high urbanization and industrialization increase the likelihood of environmental challenges and emissions of greenhouse gases, providing insights into specific challenges faced by logistics companies (Mohd Shafie et al., 2022). Finally, focusing on Klang Valley is practical and feasible for the study due to the researcher's access to companies in the region and efficient data collection.

The quantitative sample will be obtained through simple random sampling. A sample size will be calculated using a formula to ensure that the sample is representative of the population. Furthermore, the study will adopt validated and reliable measurements from previous studies related to Green HRMP, environmental awareness, and sustainable performance. The data collection instruments, such as surveys and interview guides, will undergo pilot testing to ensure their reliability and validity. The researchers will use appropriate statistical techniques to analyze the quantitative data, such as descriptive statistics and employ Structural Equation Modeling (SEM). Smart-PLS approach to test the proposed hypotheses.

Conclusion

The current study's insights the rapid growth of the logistics sector has led to increased carbon emissions and environmental impact, contributing to climate change and ecological challenges. However, to improve the sustainable performance of those companies and the industrial sector in general, the logistics companies in critical need to integrate Green Human Resource Management Practices (HRMP) and environmental awareness.

The current proposed model aims to highlight the impact of green human resource management practices, environmental awareness, and sustainable performance. Thus, investigating the impact of Green HRMP on sustainable performance and exploring the potential mediating role of environmental awareness will help researchers gain valuable insights into how logistics companies can reduce their environmental impact while enhancing overall performance.

As well as the significance of the current study lies in its practical and theoretical contributions to the Malaysian logistics industry and sustainability management. The model proposed in this paper can guide logistics companies in adopting sustainable practices and reducing their environmental footprint. Additionally, the study can offer valuable insights to policymakers on promoting sustainability in the logistics industry through the implementation of green policies and regulations.

Overall, the paper highlights the urgent need for the logistics industry to embrace sustainability and underscores the potential benefits of Green HRMP and environmental awareness in enhancing sustainable performance. By conducting empirical research and validating the integrated model, this study aims to contribute to the existing literature on sustainability management, human resource practices, and environmental awareness in the logistics sector.

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