



## RESEARCH ARTICLE

# A Narrative Review of Theoretical Underpinnings on Employee Green Performance in GHRM-driven MNCs in Shanghai

Li Shuyi<sup>1</sup>, Jacqueline Tham<sup>2\*</sup>

<sup>1</sup> Graduate School of Management, Management and Science University, Shah Alam, Selangor, Malaysia

<sup>2</sup> Associate Professor, Management and Science University, Shah Alam, Selangor, Malaysia

ARTICLE INFO	ABSTRACT
Received: Oct 11, 2024	<p>This paper explores the theoretical foundations of employee green performance in multinational corporations (MNCs) in Shanghai, a city grappling with environmental challenges and strict regulations governing air pollution and waste management. Through focusing on green human resource management (GHRM), this paper utilises a narrative review approach to examine how stakeholder theory, the resource-based view (RBV) and the ability-motivation-opportunity (AMO) framework explain and shape these behaviours. The stakeholder theory highlights the role of employees as essential contributors to sustainability, influencing how their actions align organisational practices with broader environmental goals. RBV frames employees as valuable and unique resources whose skills and training enhance competitiveness and environmental performance. The AMO framework adds another dimension by showing how ability, motivation and opportunity combine to optimise employee engagement with green initiatives. The paper shows that GHRM practices such as targeted recruitment, sustainability training and employee engagement programmes would help to both improve organisational sustainability and establish a culture driven by innovation and sustainability, aiding the integration of employee contributions with global environmental standards and local regulations where MNCs in Shanghai can lead the way in sustainable business practices. This review highlights how a holistic approach to GHRM can drive meaningful green outcomes, helping Shanghai's businesses set a global benchmark for sustainability while contributing to the city's broader development goals, offering valuable insights for both researchers and practitioners looking to strengthen green behaviours within organisations.</p>
Accepted: Dec 17, 2024	
<b>Keywords</b>	
Green human resource management (GHRM);	
Employee green performance	
Shanghai MNCs	
Stakeholder theory	
Resource-based view theory	
Ability-motivation-Opportunity framework	
<b>*Corresponding Author:</b>	
jacqueline@msu.edu.my	

## INTRODUCTION

Empirical academic literature on the emergence and cultivation of employee green performance (EGP) within multinational corporations (MNCs) in Shanghai reflect an increasingly pivotal area of research, especially in relation to addressing global sustainability challenges (Zhao & Du, 2023). Given Shanghai's status as a global financial hub and its high concentration of MNCs with approximately 956 regional headquarters and 561 foreign-funded research and development centres (The State Council of The People's Republic of China, 2024), the city represents a microcosm where the impact of corporate sustainability efforts can be significantly amplified. The significance of EGP in Shanghai's MNCs is rooted in the city's unique environmental challenges and China's broader goals for sustainable development. As noted by Huo et al. (2020) Shanghai, being one of

China's largest cities, faces substantial environmental pressures and making the adoption of green behaviours by corporations becomes essential for the city's sustainable future. This necessity aligns with the Chinese government's increased emphasis on ecological civilisation, a policy aiming to balance economic growth with environmental health, which underscores the relevance of MNCs promoting EGP and green behaviours within their operations under the "Beautiful China" initiative (Tao & Xiang, 2022) and a "Corporate Green Transformation Movement" (Ding et al., 2023).

Additionally, empirical research has increasingly focused on the role of corporate leadership in fostering an organisational culture that supports sustainability, as Zhao et al. (2024) illustrate how the role of leadership in Shanghai's MNCs directly correlates with GHRM and sustainable development performance of both the organisation and its employees. It is found that leaders who demonstrate a commitment to sustainability principles influence their organisations profoundly, embedding environmental considerations into corporate strategies and daily practices. The role of leadership is thus of clear importance in fostering a workplace culture where green behaviours are valued and rewarded, contributing to the achievement of green creativity according to Huo et al.'s (2020) study. Furthermore, the implementation of GHRM practices has been increasingly studied for its effectiveness in promoting green behaviours and sustainable performances amongst employees in Shanghai and other major Chinese cities, as Ye et al., (2022) found that MNCs in both Shanghai and Chongqing that integrate environmental management into their HR practices such as eco-friendly recruitment, green training and sustainability performance metrics, significantly boost their overall environmental performance. These practices are found to encourage green behaviours and help in attracting and retaining talent who prioritise environmental ethics in their employment choices (Ye et al., 2022).

According to Jia et al. (2023), the promotion of employee green behaviours and related performances in Shanghai's multinational corporations (MNCs) holds distinct importance compared to other cities due to several key factors. Firstly, as a financial epicentre and a global business hub, Shanghai's environmental practices significantly impact global perceptions and standards, whereby the city's prominence in the international market means that sustainability initiatives adopted here can set trends and establish benchmarks for global corporate behaviour, amplifying the importance of MNCs leading in green practices and for the foreign businesses that are entering and currently operating in China (Jia et al., 2023). Secondly, MNCs in Shanghai are subject to both global scrutiny and the increasing environmental regulations of China, making them pivotal players in the integration of sustainable practices. Unlike local companies, MNC corporations often operate under corporate mandates that align with international environmental standards such as the Paris Agreement and the United Nations' Sustainable Development Goals (SDG) in their CSR reporting standards especially those involved in the "Belt and Road" initiative (Fan, 2024). This international alignment compels MNCs to adopt rigorous sustainability measures, thus positioning them as leaders in environmental stewardship in Shanghai and influencing local companies and policies through example and partnership (Jia et al., 2023).

Furthermore, Shanghai faces significant environmental challenges including air pollution and waste management issues as seen in the introduction of the four-category classification for waste disposal in 2019, which heighten the urgency for MNCs to implement green behaviours (Xie et al., 2024). These practices call for increasingly stringent regulatory compliance and the need for strategic business decisions that enhance competitiveness, attract environmentally conscious consumers and talent and mitigate operational risks associated with environmental degradation. Consequently, the role of MNCs in promoting green employee behaviours in Shanghai is of substantial importance for pioneering innovative green technologies and practices, as the global resources and expertise of MNCs better enable them to implement cutting-edge sustainable solutions that can be adapted and adopted by other markets, both local and international (Ye et al., 2022). Therefore, Shanghai's MNCs commitment to complying with environmental standards and actively driving environmental innovation in Shanghai become increasingly evidential, essential for the organisation and its employees' own sustainable development and also influencing the broader market and setting new standards in one of the world's most influential cities, thereby fostering a more sustainable future for global business practices. Given the apparent practical importance, this paper aims to critically examine the key theoretical underpinnings that explain employee green performance within GHRM-driven MNCs in Shanghai, contributing with deeper understanding of the role of MNCs in fostering

green practices that address Shanghai’s pressing environmental challenges and set a precedent for sustainable development in global business contexts.

METHODOLOGY

The narrative review method is adopted in this paper to explore the latest developments on the research topic, exploring the theoretical underpinnings of employee green performance within GHRM-driven MNCs in Shanghai. To ensure comprehensive coverage of the topic, academic articles, research papers, books and credible electronic sources such as organisation reports and government websites are retrieved using primary search engines including Google Scholar and Scopus. Key search terms include “employee green performance”, “green human resource management”, “GHRM practices”, “sustainability in MNCs”, “green performance”, “Shanghai environmental challenges”, “sustainable development in business” and “theoretical foundations of green behaviour”. The search prioritises recent materials published within the last five years to reflect the latest developments and insights in the field. Resources are initially screened by reviewing titles and abstracts to determine their relevance. Subsequently, selected materials are thoroughly read and analysed to construct a cohesive understanding of the theoretical frameworks that explain and influence employee green performance.

The influence of GHRM on employee green performance (EGP)

The concept of Green Human Resource Management (GHRM) is emerging as a pivotal strategy for firms to adapt its traditional HRM practices with focus on achieving environmental sustainability (Amjad et al., 2021). As global awareness of environmental issues intensifies, the role of human resource (HR) practices in promoting sustainable corporate behaviours and enhancing the employee green performance is increasingly recognised, spanning across the incorporation of environmental management principles into HR policies to cultivate an organisational culture deeply rooted in sustainability (Muisyo & Qin, 2021; Wongleedee, 2020). According to Aboramadan (2022), GHRM refers to the strategic integration of environmental management into HR practices, aiming to foster an organisational environment where sustainable practices are encouraged and deeply embedded within the core functions of the HR department. Furthermore, according to Chowdhury et al.’s (2023) holistic framework of GHRM as shown in Figure 1 below, GHRM represents a highly dynamic phenomenon that underscores the need to achieve sustainable performance through multiple theoretical underpinnings including Freeman et al.’s (2010) stakeholder theory, Barney & Arian’s (2005) resource-based view theory and Jaworski & MacInnis’ (1989) ability-motivation-opportunity theory.

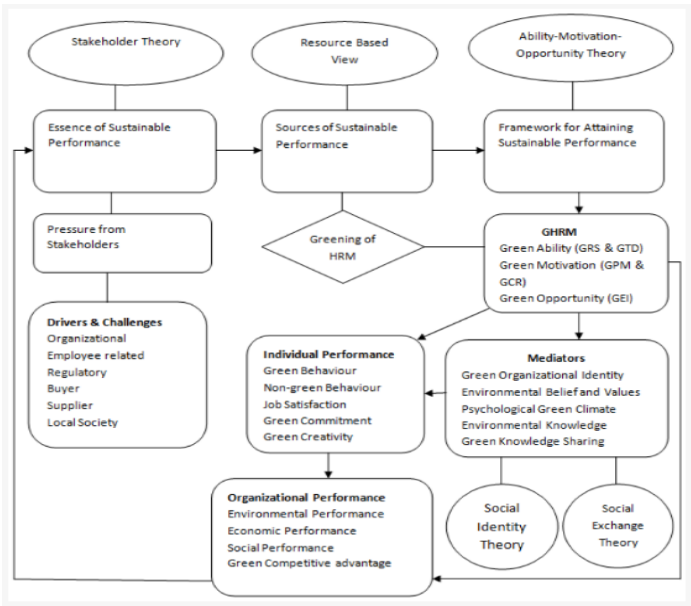


Figure 1: Holistic framework of GHRM (Chowdhury et al., 2023)

Under the theoretical underpinnings of Freeman et al.'s (2010) stakeholder theory, it is posited that organisations must address the interests and pressures of various stakeholders, including employees, shareholders, suppliers and the broader community. In the context of GHRM, this theory emphasises the importance of engaging with these stakeholders to promote environmental initiatives with the expectation that by meeting stakeholder demands for sustainable practices, companies can enhance their legitimacy and competitive edge (Chowdhury et al., 2023). This is particularly important as companies face increasing pressure from environmentally conscious consumers and investors who value sustainability. Alternatively, under the theoretical underpinnings of the resource-based view theory, it is suggested that leveraging internal resources can provide a competitive advantage (Barney & Arian, 2005). In GHRM, this involves utilising human resources to foster a sustainable competitive advantage practices such as eco-friendly recruitment and green training programs, are viewed as strategic assets that enhance organisational capabilities and performance in environmental management. These resources are crucial for developing a workforce that is skilled in traditional aspects of their roles and also competent in advancing corporate sustainability goals (Chowdhury et al., 2023).

Furthermore, the ability motivation opportunity theory posits that GHRM can enhance sustainable performance by ensuring that employees have the ability (skills and knowledge), motivation (desire to engage in green behaviours) and opportunity (an organisational culture that supports such behaviours) to contribute to environmental goals (Yu et al., 2020). According to Chowdhury et al. (2023), GHRM practices are designed to equip employees with green skills (Green Ability), enhance their commitment to environmental values (Green Motivation) and create an organisational environment that supports green initiatives (Green Opportunity). Chowdhury et al. (2023) also outlines the direct impact of GHRM on individual performance, highlighting specific outcomes like green behaviour, job satisfaction and green commitment, suggesting that GHRM practices would directly influence the environmental outcomes of organisations and also affect the individual's engagement and satisfaction levels, representing a dual impact that underscores the integral role of HR in achieving both organisational and environmental performance. Chowdhury et al.'s (2023) holistic framework of GHRM also recognises the role of key mediators that would affect the acceptance of sustainability and its effective integration within the organisational culture such as green organisational identity and psychological green climate, positing that green practices are not isolated initiatives but are integral to the company's operations and strategic direction.

Numerous empirical studies have attempted to explore the relationship implementing GHRM practices to boost employee green performance (EGP), as indicated in Hameed et al.'s (2020) study that most companies with GHRM practices report a clear increase in waste reduction and recycling efforts, effective utilisation of resources and the overall improvements on employee green performance targets. Another study by Amjad et al., (2021) collected data from 165 managerial personnel of textile companies, finding that the implementation of GHRM practices in areas of training and development, performance appraisal, reward and compensation had significantly improved organisational sustainability, especially in areas of employee green performance. Similarly, other studies by Shahzad et al. (2023) and Sakharina et al., (2020) also explored the multifaceted aspects of GHRM impacts on the workforce across various key HR functions. For example, by integrating environmental criteria into the recruitment and selection processes, companies are found to better attract candidates that are both highly skilled and highly conscious of environmental issues. This alignment with corporate sustainability goals naturally leads to enhanced EGP, as employees are already predisposed to engage in and advocate for green practices (Shahzad et al., 2023), finding that firms emphasising sustainability in job postings are more likely to attract talent that is motivated by green initiatives, thereby fostering a workforce aligned with the company's environmental objectives.

Alternatively, implementing targeted training programs focused on environmental management and sustainability is found to be crucial for equipping employees with the necessary skills and knowledge to improve their green performance, as such training ensures that employees are aware of and proficient in the latest sustainable practices and technologies, directly contributing to enhanced EGP across the organisation (Sakharina et al., 2020). Moreover, the inclusion of sustainability criteria within performance management systems and linking compensation to EGP outcomes are powerful

motivators for employees, as Jehan et al., (2020) argue that this approach incentivizes green behaviours as well as integrating them into the core performance expectations of employees, making sustainability a key component of organisational success. A study by Aboramadan (2022) examined the effects of GHRM on employee engagement and involvement, finding that the encouragement of active employee participation in sustainability initiatives and decision-making processes significantly enhances their commitment to and effectiveness in achieving environmental goals, when employees are involved in crafting and implementing sustainability strategies, they are more likely to take ownership of the outcomes, leading to improved green performances amongst employees.

Nonetheless, despite the widely recognised benefits of GHRM practices and its effective implementation, a major research trend points to identifying the apparent challenges in the implementation of GHRM practices to ensure achieving desired benefits (Kodua et al., 2022). According to Hussain et al., (2020), resistance to change is a major barrier as organisational inertia and the comfort of established routines can lead to scepticism and resistance among employees and management. Hussain et al. (2020) detailed the difficulties encountered in altering the company culture to adopt new, sustainable practices, highlighting resistance particularly from senior employees who were accustomed to traditional operational methods. Another significant challenge is the lack of environmental management expertise within HR teams, as Kodua et al. (2022) found that HR professionals in Ghana are not adequately trained in sustainability, which hampers the development and implementation of effective GHRM strategies with an apparent skills gap that even when organisations are willing to embrace GHRM, they may not have the internal expertise necessary to design and execute effective initiatives. Moreover, Tanveer et al., (2024) argues that the initial costs associated with restructuring HR practices to integrate sustainability can be prohibitive, especially for small and medium-sized enterprises (SMEs), as this financial barrier includes costs related to training, developing new hiring criteria and implementing green performance metrics, which may deter companies from pursuing GHRM initiatives.

Despite increasing research attention dedicated to GHRM and its effects of EGP in recent years, Tanveer et al. (2024) argues that future research on Green Human Resource Management (GHRM) should focus on its application across diverse cultural contexts and within different types of enterprises. It is also important to understand how cultural dynamics influence the effectiveness of GHRM practices can provide deeper insights into customising strategies that resonate with specific regional and organisational values. Additionally, examining the unique challenges and opportunities in implementing GHRM in companies of different scale can yield valuable data on scaling and adapting best practices in resource-constrained environments (Tanveer et al., 2024).

### **GHRM in Shanghai's MNCs**

The regulatory landscape in China, particularly with respect to environmental policies, plays a pivotal role in shaping the operations of multinational corporations (MNCs) in Shanghai. As discussed by Hepburn et al. (2021), the Chinese government's 14<sup>th</sup> five-year plans have increasingly emphasised sustainability and green practices, aligning national development goals with environmental stewardship with plans often including specific targets for energy efficiency, emission reductions and renewable energy usage, directly influencing corporate policies across sectors. Consequently, as China's global commercial hub, Shanghai has implemented its own set of regulations aimed at fostering an environmentally sustainable business environment and development of eco-industrial parks, representing the first and front-runners of sustainability legislative moves in China to promote the city's green transformation (Wu & Guo, 2022). Shanghai's action plan for accelerating the improvement of environment, social and governance (ESG) capabilities of foreign-related enterprises in Shanghai (2024-2026) in particular has set forth a comprehensive set of guidelines that MNCs must follow, which includes waste management protocols, emission standards and resource conservation measures (International Services Shanghai, 2024). According to a report by International Services Shanghai (2024), compliance rates among MNCs have seen a notable increase, with over 80% of surveyed foreign firms exceeding regulatory standards within the last two years, this compliance has corresponded with a measurable improvement

in key sustainability metrics, such as an overall 30% reduction in waste output and a 25% decrease in water usage among compliant firms.

Additionally, in response to these regulatory pressures, foreign companies and MNCs in Shanghai have adapted their HR practices to better support environmental objectives, as sustainable recruitment strategies now often include assessing candidates' commitment to and knowledge of sustainability practices (Hu et al., 2021). Green training programs are increasingly common, aiming to embed sustainable thinking right from the induction stage and throughout career development paths (Khalid et al., 2021). Additionally, performance management systems have been recalibrated to incorporate environmental targets, directly linking bonuses and promotions to green performance metrics (Dathe, 2024). Many Shanghai-based MNCs are part of global networks that adhere to international sustainability frameworks such as the Global Reporting Initiative (GRI) or the Sustainable Development Goals (SDGs). These standards provide a template that helps local operations integrate broader sustainability goals into their day-to-day operations. For instance, a study by Ng et al., (2023) highlighted how a leading automotive MNC in Shanghai improved its EGP by 40% by aligning its GHRM practices with global standards. Furthermore, Fan's (2024) study indicates a significant uptake of GHRM practices among MNCs in the region, showing that over 75% of MNCs in Shanghai have actively adopted targeted green HR policies, which have led to a 50% increase in employee engagement in sustainability initiatives, this study also noted a marked improvement in green performance outcomes, including enhanced energy efficiency and increased rates of recycling within these organisations.

Despite the evolving regulatory environment for Shanghai's MNC to adopt GHRM practices, there remains notable barriers and challenges for these MNCs to effectively adopt GHRM due to several key issues according to Morris (2023). Morris (2023) argues that cultural differences in work practices can significantly impact the effectiveness of GHRM initiatives. For instance, traditional business practices in China often emphasise short-term gains, which can conflict with the long-term perspective required for meaningful environmental sustainability. This cultural aspect can make it difficult to integrate sustainability deeply into corporate values and operations, which is essential for effective GHRM (Morris, 2023). Similarly, the short-term result orientation of local workers may result in resistance from management and employees, posing a substantial barrier and a lack of understanding or commitment to sustainability goals at the managerial level, which can hinder the implementation of green policies (Morris, 2023). Employees may also resist changing their routines or adopting new practices due to lack of awareness or motivation. For example, a survey by D'Souza et al., (2020) found that more than half of employees in Shanghai-based foreign companies were unaware of their companies' sustainability goals, which significantly reduced their engagement in GHRM practices. Additionally, the high initial costs of implementing GHRM initiatives are another critical challenge, as the development and deployment of training programs, revising performance management systems and integrating technology for sustainability tracking all require significant investment (Zhao et al., 2023).

Chowdhury et al.'s (2023) holistic framework of GHRM indicates that there are three fundamental theoretical underpinnings that explain the impacts of various factors toward driving employee green performance. The following section will critically discuss these theoretical foundations in relation to Freeman et al.'s (2010) stakeholder theory, Barney & Arikan's (2005) resource-based view theory and Jaworski & MacInnis' (1989) ability-motivation-opportunity theory, contributing to the narrative review design of this paper. The stakeholder theory represents the main theory for this paper and is complemented by the resource-based view theory and the ability-motivation-opportunity theory due to its emphasis on key stakeholder groups such as employees that this paper aims to focus on.

## Stakeholder theory

Originated in Freeman's (1984) earlier study, the stakeholder theory revolutionised how businesses view their roles and responsibilities within a broader societal context. The theory posits that organisations must consider the interests and impacts of all stakeholders and not just shareholders are in their decision-making processes. This broader view includes various entities such as employees, customers, suppliers, communities, governments and even competitors, as depicted in the Figure 2 below (Freeman et al. 2010). The origins of stakeholder theory lie in the

acknowledgment that the actions of a firm are interconnected with a wider network of relationships, challenging the traditional shareholder-centric view of the firm proposed by Friedman's (1970) shareholder theory by arguing that sustainable success requires managing relationships with all relevant stakeholders effectively. This perspective encourages businesses to evaluate the impacts of their decisions not only through financial lenses but also through social, environmental and ethical dimensions (Freeman et al. 2010). In relation to environmental management and specifically to Employee Green Performance (EGP), stakeholder theory serves as a robust theoretical underpinning, as adopted in empirical studies to support that employees, as key stakeholders, have significant influences on and are affected by the firm's environmental strategies (Mu et al. 2024; Saleem et al. 2020; Chen et al. 2021). Their engagement in green practices is critical for the firm's overall environmental performance, emphasising that sustainable outcomes are best achieved when internal stakeholders (employees) are aligned with external environmental goals (Osolase, 2022).



**Figure 2: Stakeholder theory (Freeman et al. 2010)**

As shown in Figure 2, various stakeholders around the firm underscores the complex interplay of influences and expectations that a firm must address, for example, environmentalists and local community organisations often push firms towards more sustainable practices. In response, firms might adopt Green HRM practices that enhance EGP, aligning internal stakeholder interests (employees) with external pressures and expectations (Yong et al. 2022). This alignment supports compliance with environmental regulations and enhances the firm's reputation, satisfies consumer advocates and ultimately builds a stronger relationship with the community (Freudenreich et al. 2020). Furthermore, Freudenreich et al. (2020) argues that considering employees as central stakeholders in environmental performance initiatives highlights their dual role. On one hand, they are influenced by the firm's policies and culture, which shape their behaviours and attitudes towards sustainability. On the other hand, their collective actions and innovations contribute to the firm's environmental performance metrics, influencing how the organisation is perceived by other stakeholders such as media, government agencies and special interest groups (Freudenreich et al. 2020). Critically, while stakeholder theory provides a compelling framework for inclusive management practices, Khan et al. (2023) argues that it also presents challenges as the need to balancing the often-competing interests of multiple stakeholders can be complex and may lead to conflicts or compromises that dilute environmental efforts. Moreover, the theory assumes that firms have the capacity and willingness to genuinely engage with and integrate stakeholder interests, which might not always be the case due to existing power dynamics or financial constraints (Khan et al. 2023). Nonetheless, stakeholder theory fundamentally shifts the firm's focus from a narrow shareholder orientation to a broader stakeholder approach, making it an essential theoretical foundation for examining and enhancing EGP.

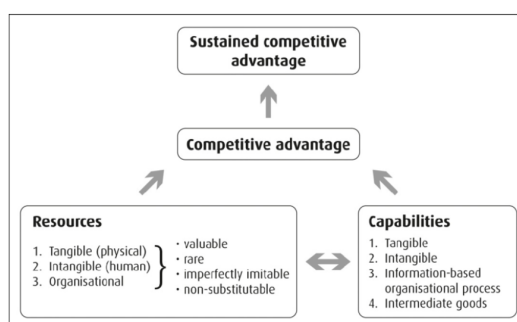
Although the stakeholder theory is primarily considered an organisational-based framework (Miles, 2017), it offers sound theoretical justifications and can be effectively applied to focus on the employee perspective by emphasising the role of employees as critical internal stakeholders. As Freeman (1984) argues that sustainable success requires organisations to balance the needs and interests of various stakeholders, including employees, who directly influence and are influenced by organisational strategies. In the context of this paper, employees' green performance (EGP) is central



to achieving broader environmental goals, making their engagement and awareness vital components of a sustainable corporate strategy. Employees are both the recipients of leadership and HR practices and also active participants whose behaviours significantly impact organisational sustainability (Freudenreich et al., 2020). For example, servant leadership fosters moral responsibility and care, aligning employees' values with environmental objectives, while Green HRM practices ensure that employees are equipped and motivated to adopt sustainable behaviours (Aboramadan, 2022). Moreover, the stakeholder theory highlights the importance of aligning internal stakeholder (employee) contributions with external stakeholder expectations, such as regulatory requirements and community demands for sustainability (Ayaz et al., (2023). Through framing employees as key agents within this stakeholder network, the theory provides a robust lens to analyse how organisations can leverage employee engagement and awareness to achieve environmental objectives.

### Resource-based view theory

The Resource-Based View (RBV) of the firm is a key theory in strategic management that focuses on the internal resources of an organisation as the primary source of competitive advantage and sustained success. Originating from the work of Penrose (1959), who first highlighted the importance of firm resources, the theory was further developed in the 1980s by scholars such as Wernerfelt (1984) and Barney & Arikan (2005) the RBV theory has been adopted and applied across various context and critically examined the application of the RBV theory towards sustainable green behaviours. Barney & Arikan (2005) argued that for resources to provide a sustained competitive advantage, they must be valuable, rare, imperfectly imitable and non-substitutable. As illustrated in the Figure 3 below, RBV categorises resources into three main types including tangible (physical), intangible (human) and organisational, these resources are linked to capabilities which include tangible and intangible assets, information-based organisational processes and the production of intermediate goods (Barney & Arikan, 2005). Consequently, the Bathory posits that leveraging these unique resources and capabilities can lead to a competitive advantage, which if sustained results in sustained competitive advantage.



**Figure 3 Resource-based view theory (Barney & Arikan, 2005)**

In the context of Employee Green Performance (EGP), RBV offers a robust framework for understanding how unique organisational resources can be optimised to enhance environmental performance (Khan et al. 2023). According to Khana et al. (2020), human resources play a critical role as employees' skills, knowledge and attitudes towards environmental sustainability can be viewed as intangible resources that contribute to an organisation's overall capability to perform environmentally. For example, Malik et al. (2020) also found that investing in employee training on sustainability practices enhances the firm's green capabilities, potentially leading to a competitive advantage in industries where environmental performance is key to customer satisfaction and regulatory compliance. Furthermore, organisational processes that embed sustainability into the corporate culture can be seen as unique capabilities that drive EGP, as Agrawal & Pradhan (2023) found that these include standardised procedures for waste reduction, energy management systems, or sustainable supply chain practices. When these processes are aligned with the organisation's strategic resources, they become difficult for competitors to replicate, thus providing a sustained competitive advantage.

Nonetheless, Tuan (2023) argues that while RBV is a powerful tool for understanding how internal resources can be leveraged for environmental sustainability, RBV can also be overly inward-looking,

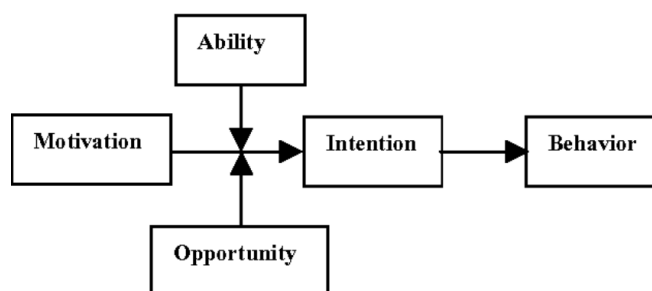


potentially neglecting the importance of external market forces and stakeholder pressures which are also critical in shaping EGP. Additionally, the theory assumes resource stability and underestimates the dynamic capabilities needed to adapt resources swiftly in response to environmental changes. Overall, the RBV theory provides a valuable lens for examining how unique internal resources and capabilities can enhance Employee Green Performance, particularly for firms looking to sustain a competitive advantage through their green practices, it is essential to develop rare and inimitable resources to continuously adapt and innovate in response to external environmental changes (Hameed et al. 2020).

Although the RBV theory is primarily used as an organisational-based theory (Darcy et al., 2014), it can be effectively applied in this paper to focus on the employee perspective by framing employees as valuable, rare, inimitable and non-substitutable resources essential for achieving competitive advantage (Barney & Arikan, 2005). RBV emphasises that the unique capabilities and knowledge of employees are critical intangible resources that organisations can leverage to enhance their environmental performance (Arsyah & Pakri, 2024). Green HRM practices such as targeted recruitment, training and development are instrumental in shaping employees' skills and behaviours to align with green organisational objectives, enhancing their ability to perform environmentally sustainable tasks (Chauradia et al., 2018). Similarly, individual traits like conscientiousness and proactive personality further strengthen the employee resource base by fostering a workforce that actively engages in sustainability initiatives. Furthermore, RBV highlights the importance of embedding sustainability into organisational processes to create a green-oriented culture, making employee engagement and environmental awareness indispensable (Yu et al., 2017). Through applying RBV, employees are not only participants but strategic assets whose optimised green performance provides the organisation with a sustainable competitive advantage in Shanghai's dynamic MNC environment.

#### 2.4.3 Ability-motivation-opportunity theory

The ability-motivation-opportunity theory was developed by Jaworski & MacInni (1989) to understand better the determinants of performance at work. It posits that an employee's performance is fundamentally influenced by three critical elements including ability, motivation and opportunity, as each component plays a distinct role in shaping behaviours and their interaction can significantly enhance or hinder performance outcomes (Jaworski & MacInni, 1989). According to Iftikar et al.'s (2022) application of the AMO theory towards green organisational behaviours, the model suggests that optimal performance results when employees possess the abilities (skills and competencies) needed to complete tasks, are motivated (both intrinsically and extrinsically) to perform these tasks and are provided with the opportunities (resources and context) to apply their skills and motivations effectively. As illustrated in Figure 4 below (Jaworski & MacInni, 1989), AMO theory succinctly captures the essence of how ability, motivation and opportunity interact to influence employee intentions and behaviours, illustrating that ability and motivation directly impact an employee's intentions, which then dictate their behaviours. The opportunity acts as a facilitator, enabling or hindering the translation of intention into actual behaviour, aiding the understanding of how different HR practices can be designed to enhance each of these elements (Osolase, 2022).



**Figure 4 Ability-motivation-opportunity theory (Jaworski & MacInni, 1989)**

When applied to the context of Employee Green Performance (EGP), the AMO theory offers a valuable lens through which to view the effectiveness of environmental initiatives within an organisation. Sarmad et al.'s (2023) study argues that employees need the relevant knowledge and skills to perform green behaviours effectively, such as energy conservation techniques or waste management

practices, whereby training and development initiatives that focus on these skills can enhance the ability component. Additionally, motivation can be influenced by organisational culture, incentives and the intrinsic values held by employees about the environment, as recognition and rewards for green behaviours can enhance motivation, as can a culture that values and supports sustainability (Sibian & Ispas, 2021). Moreover, Ayaz et al., (2023) argues that even the most skilled and motivated employees cannot perform green behaviours if they do not have the opportunity, this include having access to recycling facilities, the ability to participate in sustainability committees, or involvement in decision-making processes related to environmental practices. Overall, the AMO theory provides a robust framework for analysing and enhancing EGP through targeted human resource practices by positing that when employees possess the ability, are properly motivated and are given the opportunities to engage in sustainable practices, organisations can significantly improve their environmental impact.

## CONCLUSION

Integrating the stakeholder, resource-based view (RBV) and ability-motivation-opportunity (AMO) theories provide a comprehensive framework for examining the effects of GHRM practices on employee green performance (EGP) in Shanghai's MNCs. Although primarily organisational-based, stakeholder theory emphasises the importance of considering the interests of all stakeholders including employee, as key contributors to sustainable outcomes (Freeman et al., 2010). This theory underscores how employees as critical internal stakeholders, influence and are influenced by organisational strategies. For example, servant leadership fosters moral responsibility and care, aligning employees' values and behaviours with external environmental objectives, thereby bridging the gap between internal practices and external stakeholder expectations (Freudenreich et al., 2020; Yong et al., 2022). The RBV complements this by framing employees as valuable, rare, inimitable and non-substitutable resources whose skills, knowledge and traits contribute to organisational competitiveness (Barney & Arikan, 2005). Green HRM practices such as targeted recruitment and sustainability training enhance these intangible resources, enabling employees to drive green performance outcomes (Malik et al., 2020). Individual traits such as conscientiousness and proactive personality, are also viewed as critical capabilities that organisations can leverage to achieve superior environmental performance. The AMO Theory further enriches this framework by explaining how employee ability, motivation and opportunity interact to optimise green behaviours (Jaworski & MacInni, 1989). Through integrating environmental awareness and employee engagement as mediating variables, this model acknowledges that enhancing employees' knowledge and active participation creates a bridge between organisational strategies and actual environmental outcomes (Osolase, 2022; Sarmad et al., 2023). This combined theoretical approach ensures that internal stakeholder contributions and unique organisational resources align effectively with external environmental goals, fostering a sustainable corporate culture in Shanghai's dynamic MNC environment.

## Recommendations and implications

The rapidly evolving nature of stakeholder needs and interests toward green behaviours require Shanghai's MNCs to continuously refine and adapt its integrated GHRM strategies. Key recommendations include implementing targeted recruitment strategies to attract environmentally conscious talent, alongside comprehensive sustainability training programs to build employees' knowledge and skills in green practices. Promoting servant leadership within organisations can foster a culture of moral responsibility and alignment between employee values and organisational sustainability objectives. Furthermore, creating structured opportunities for active employee engagement in green initiatives supported by well-designed recognition and reward systems can enhance both intrinsic motivation and performance. These strategies are important for establishing and maintaining a sustainable corporate culture, helping to drive innovation and enhance organisational competitiveness. Through aligning internal capabilities with external environmental goals, Shanghai's MNCs can position themselves as global leaders in sustainable business practices, setting benchmarks for environmental excellence and long-term viability.

## Authors contributions

LS conducted the research, performed the literature review and wrote the manuscript as part of the PhD project. JT, as the supervisor provided guidance on refining the study, clarifying its scope and

offering critical feedback on the manuscript. Both authors read and approved the final version of the manuscript.

## Acknowledgements

The authors would like to thank the Pakistan Journal of Life and Social Sciences (PJLSS) for providing a platform to publish this work. We appreciate the efforts of the editorial team and reviewers for their valuable feedback and support throughout the peer-review process.

## REFERENCES

- Aboramadan, M. (2022). The effect of green HRM on employee green behaviors in higher education: the mediating mechanism of green work engagement. *International Journal of Organizational Analysis*, 30(1), 7-23.
- 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.
- Amjad, F., Abbas, W., Zia-Ur-Rehman, M., Baig, S. A., Hashim, M., Khan, A., & Rehman, H. U. (2021). Effect of green human resource management practices on organizational sustainability: the mediating role of environmental and employee performance. *Environmental Science and Pollution Research*, 28, 28191-28206.
- Arsyah, T. D., & Pakri, P. (2024). Leveraging human capital for performance enhancement in Indonesia Technology Sector. *Journal of Economics and Business Letters*, 4(3), 12-20.
- Ayaz, M. Q., Raza Ullah, D. M. A. M., & Muhammad, N. (2023). Perceived Role Of Green Human Resource Management Practices Towards Employees Pro-Environmental Behavior: Examining The Moderating Role Of Environmental Knowledge. *Journal of Positive School Psychology*, 7(5), 1519-1544.
- Ayaz, M. Q., Raza Ullah, D. M. A. M., & Muhammad, N. (2023). Perceived Role Of Green Human Resource Management Practices Towards Employees Pro-Environmental Behavior: Examining The Moderating Role Of Environmental Knowledge. *Journal of Positive School Psychology*, 7(5), 1519-1544.
- Barney, J. B., & Arikan, A. M. (2005). The resource-based view: origins and implications. *The Blackwell handbook of strategic management*, 123-182.
- Chauradia, A. J., Echambadi, R., Milewicz, C., & Ganesh, J. (2018, July). Advancing the Resource-Based View: Human Capital Investments and Consumer Satisfaction. In *Academy of Management Proceedings* (Vol. 2018, No. 1, p. 13131). Briarcliff Manor, NY 10510: Academy of Management.
- Chen, S., Jiang, W., Li, X., & Gao, H. (2021). Effect of employees' perceived green HRM on their workplace green behaviors in oil and mining industries: Based on cognitive-affective system theory. *International Journal of Environmental Research and Public Health*, 18(8), 4056.
- Chowdhury, S. R., Mendy, J., & Rahman, M. (2023). A systematic literature review of GHRM: organizational sustainable performance reimagined using a new holistic framework. *Sustainability*, 15(9), 7513.
- Darcy, C., Hill, J., McCabe, T. J., & McGovern, P. (2014). A consideration of organisational sustainability in the SME context: A resource-based view and composite model. *European Journal of Training and Development*, 38(5), 398-414.
- Dathe, T. (2024). *Implementing Environmental, Social and Governance (ESG) Principles for Sustainable Businesses: A Practical Guide in Sustainability Management*. Springer Nature.
- Ding, X., Xu, Z., Petrovskaya, M. V., Wu, K., Ye, L., Sun, Y., & Makarov, V. M. (2023). Exploring the impact mechanism of executives' environmental attention on corporate green transformation: evidence from the textual analysis of Chinese companies' management discussion and analysis. *Environmental Science and Pollution Research*, 30(31), 76640-76659.
- D'Souza, C., McCormack, S., Taghian, M., Chu, M. T., Mort, G. S., & Ahmed, T. (2020). An empirical examination of sustainability for multinational firms in China: Implications for cleaner production. *Journal of Cleaner Production*, 242, 118446.
- Fan, P. (2024). CSR reporting and the Belt and Road Initiative's sustainable development: evidence from Chinese multinational enterprises.
- Freeman, E. R. (1984). Stakeholder Theory.

- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). Stakeholder theory: The state of the art.
- Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2020). A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of business ethics*, 166(1), 3-18.
- Friedman, M. (1970) The Social Responsibility of Business Is to Increase Its Profits. *New York Times Magazine*, 13 September 1970, 122-126.
- Hameed, Z., Khan, I. U., Islam, T., Sheikh, Z., & Naeem, R. M. (2020). Do green HRM practices influence employees' environmental performance?. *International Journal of Manpower*, 41(7), 1061-1079.
- Hepburn, C., Qi, Y., Stern, N., Ward, B., Xie, C., & Zenghelis, D. (2021). Towards carbon neutrality and China's 14th Five-Year Plan: Clean energy transition, sustainable urban development, and investment priorities. *Environmental Science and Ecotechnology*, 8, 100130.
- Hou, H., Gai, R., & An, L. (2023). The impact of environmentally-specific servant leadership on organizational green performance: The mediating role of green creativity. *Frontiers in Psychology*, 13, 1091025.
- Hu, X., Li, D., & Liao, R. C. (2021). The Propagation of ESG Practices through Multinational Companies. *Available at SSRN 3934690*.
- Huo, W., Li, X., Zheng, M., Liu, Y., & Yan, J. (2020). Commitment to human resource management of the top management team for green creativity. *Sustainability*, 12(3), 1008.
- Hussain, F., Saifuddin, Q., & Khan, I. U. (2020). Striving to implement green human resource management (GHRM) policies and practices: A Study from HR Managers Perspective (FMCG Sector). *International Journal of Management Excellence (ISSN: 2292-1648)*, 14(2), 2037-2051.
- Iftikar, T., Hussain, S., Malik, M. I., Hyder, S., Kaleem, M., & Saqib, A. (2022). Green human resource management and pro-environmental behavior nexus with the lens of AMO theory. *Cogent business & management*, 9(1), 2124603.
- International Services Shanghai (2024), Action plan for accelerating the improvement of environmental, social and governance (ESG) capabilities of foreign-related enterprises in Shanghai (2024-2026). Available at: <https://english.shanghai.gov.cn/en-SustainabilityESG/20240305/5161b07e78434382b6f9af2243fe6181.html>, last accessed 01/04/2024
- Jaworski, B. J., & MacInnis, D. J. (1989). Marketing jobs and management controls: toward a framework. *Journal of Marketing Research*, 26(4), 406-419.
- Jehan, Y., Hussai, D., Batool, M., & Imran, M. (2020). Effect of green human resource management practices on environmental sustainability. *International Journal of Human Capital in Urban Management*, 5(2).
- Jia, J., Yuan, S., Wei, L. Q., & Tang, G. (2023). When firms adopt sustainable human resource management: A fuzzy-set analysis. *Human Resource Management*, 62(3), 283-305.
- Khalid, F., Sun, J., Huang, G., & Su, C. Y. (2021). Environmental, social and governance performance of Chinese multinationals: A comparison of state-and non-state-owned enterprises. *Sustainability*, 13(7), 4020.
- Khan, S. A. R., Sheikh, A. A., & Ahmad, Z. (2023). Developing the interconnection between green employee behavior, tax avoidance, green capability, and sustainable performance of SMEs through corporate social responsibility. *Journal of cleaner production*, 419, 138236.
- Khana, M. P., Talibb, N. A., & Kowangc, T. O. (2020). The development of a sustainability framework via lean green six sigma practices in SMEs based upon RBV theory. *Development*, 12(5), 135-156.
- Kodua, L. T., Xiao, Y., Adjei, N. O., Asante, D., Ofosu, B. O., & Amankona, D. (2022). Barriers to green human resources management (GHRM) implementation in developing countries. Evidence from Ghana. *Journal of cleaner production*, 340, 130671.
- MacInnis, D. J., & Jaworski, B. J. (1989). Information processing from advertisements: Toward an integrative framework. *Journal of marketing*, 53(4), 1-23.
- Malik, S. Y., Cao, Y., Mughal, Y. H., Kundi, G. M., Mughal, M. H., & Ramayah, T. (2020). Pathways towards sustainability in organizations: Empirical evidence on the role of green human resource management practices and green intellectual capital. *Sustainability*, 12(8), 3228.
- Miles, S. (2017). Stakeholder theory classification: A theoretical and empirical evaluation of definitions. *Journal of business ethics*, 142, 437-459.

- Morris, M. (2023). *Chinese firms and adherence to global Environmental, Social and Governance (ESG) standards in developing countries: Is there potential to create common ground?* (No. 18/2023). IDOS Discussion Paper.
- Mu, H. L., Xu, J., & Chen, S. (2024). The impact of corporate social responsibility types on happiness management: a stakeholder theory perspective. *Management Decision*, 62(2), 591-613.
- Muisyo, P. K., & Qin, S. (2021). Enhancing the FIRM'S green performance through green HRM: The moderating role of green innovation culture. *Journal of cleaner production*, 289, 125720.
- Ng, A. W., Leung, T. C. H., Yu, T. W., Cho, C. H., & Wut, T. M. (2023). Disparities in ESG reporting by emerging Chinese enterprises: evidence from a global financial center. *Sustainability Accounting, Management and Policy Journal*, 14(2), 343-368.
- Osolase, E. H. (2022). Explaining the Concept of Green Human Resource Management Practices through Theoretical Perspectives: AMO and Stakeholder Theories. *Academia Letters*, 2.
- Penrose, E. (1959). *The Theory of the Growth of the Firm*. Oxford: Blackwell.
- Sakharina IK, S. I., Kadarudin, K., Patittingi F, P. F., Hasrul M, H. M., Latif B, L. B., & Palutturi S, P. S. (2020). The impact of green human resource practices on environmental performance. *Polish Journal of Management Studies*.
- Saleem, M., Qadeer, F., Mahmood, F., Ariza-Montes, A., & Han, H. (2020). Ethical leadership and employee green behavior: A multilevel moderated mediation analysis. *Sustainability*, 12(8), 3314.
- Sarmad, M., Pirzada, M. A., & Iqbal, R. (2023). Fostering extra-role green behavior through green HRM practices: mediating role of green absorptive capacity. *International Journal of Manpower*, 44(8), 1535-1552.
- Shahzad, M. A., Jianguo, D., & Junaid, M. (2023). Impact of green HRM practices on sustainable performance: mediating role of green innovation, green culture, and green employees' behavior. *Environmental Science and Pollution Research*, 30(38), 88524-88547.
- Sibian, A. R., & Ispas, A. (2021). An approach to applying the ability-motivation-opportunity theory to identify the driving factors of green employee behavior in the hotel industry. *Sustainability*, 13(9), 4659.
- Tanveer, M. I., Yusliza, M. Y., & Fawehinmi, O. (2024). Green HRM and hospitality industry: challenges and barriers in adopting environmentally friendly practices. *Journal of Hospitality and Tourism Insights*, 7(1), 121-141.
- Tao, Z., & Xiang, G. (2022). Empirical measurement and evaluation of rural green development: take Hunan Province, China as an example. *Environmental Earth Sciences*, 81(9), 268.
- The State Council of The People's Republic of China (2024), Shanghai attracts over 6,000 new foreign companies in 2023, available at: [https://english.www.gov.cn/archive/statistics/202403/22/content\\_WS65fcd3dc6d0868f4e8e5557.html](https://english.www.gov.cn/archive/statistics/202403/22/content_WS65fcd3dc6d0868f4e8e5557.html), last accessed 01/04/2024
- Tuan, L. T. (2023). Fostering green product innovation through green entrepreneurial orientation: The roles of employee green creativity, green role identity, and organizational transactive memory system. *Business Strategy and the Environment*, 32(1), 639-653.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.
- Wongleedee, K. (2020). The effects of GHRM and GSCM on the sustainable performance of the Thailand pharmacies: Mediating role of employee performance. *Systematic Reviews in Pharmacy*, 11(1), 371-379.
- Wu, Y., & Gao, X. (2022). Can the establishment of eco-industrial parks promote urban green innovation? Evidence from China. *Journal of Cleaner Production*, 341, 130855.
- Xie, Y., Yu, X., Yu, Z., & Zhou, Y. (2024). Spatial outward FDI: Evidence from China's multinational firms. *Review of International Economics*, 32(2), 574-603.
- Ye, J., Zhang, X., Zhou, L., Wang, D., & Tian, F. (2022). Psychological mechanism linking green human resource management to green behavior. *International Journal of Manpower*, 43(3), 844-861.
- Yong, J. Y., Yusliza, M. Y., & Ahmad, N. H. (2022). Connecting Green Human Resource Management to Performance: Pathways Toward Sustainability. In *Green Human Resource Management Research: Issues, Trends, and Challenges* (pp. 53-78). Cham: Springer International Publishing.
- Yu, W., Chavez, R., & Feng, M. (2017). Green supply management and performance: a resource-based view. *Production Planning & Control*, 28(6-8), 659-670.

- Yu, W., Chavez, R., Feng, M., Wong, C. Y., & Fynes, B. (2020). Green human resource management and environmental cooperation: An ability-motivation-opportunity and contingency perspective. *international journal of production Economics*, 219, 224-235.
- Zhao, F., Wang, L., Chen, Y., Hu, W., & Zhu, H. (2024). Green human resource management and sustainable development performance: organizational ambidexterity and the role of responsible leadership. *Asia Pacific Journal of Human Resources*, 62(1), e12391.
- Zhao, S., & Du, J. (2023). New Issues of Human Resource Management in China: Experiences and Optimization Proposal for Overseas Talent Management. In *Routledge Handbook of Chinese Business and Management* (pp. 272-292). Routledge.