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Drivers of Green Performance in Shanghai's MNCs: The Sequential Mediation of Environmental Awareness and Employee Engagement

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ABSTRACT
The growing necessity for sustainable practices among multinational corporations (MNCs) in Shanghai necessitates the enhancement of Employee Green Performance (EGP). This research investigates the impact of Servant Leadership (SL), Green HRM (GHRM) practices, and Individual Traits (IT) on Employee Green Performance (EGP), while also analysing the mediating roles of Environmental Awareness (EA) and Employee Engagement (EE). Using a quantitative approach, data were gathered from 300 employees in Shanghai MNCs and examined by multiple regression and bootstrapping mediation tests. The results showed that all of the proposed hypotheses were true. Servant Leadership, Green HRM practices, and Individual Traits, together with Environmental Awareness and Employee Engagement, were identified as major direct predictors of Employee Green Performance, with Environmental Awareness and Employee Engagement exhibiting the most pronounced impact. The examination of indirect impacts validated that both Environmental Awareness and Employee Engagement serve as major mediators. The correlation between Individual Traits and Employee Green Performance was completely mediated by Employee Engagement, suggesting that an employee's personality affects their environmentally friendly conduct solely through their degree of organisational commitment and motivation. This research presents a proven, comprehensive model illustrating the interplay between organisational variables and individual inclinations in promoting pro-environmental behaviour. For practitioners, the findings indicate that methods aimed at enhancing Employee Green Performance should prioritise the fundamental objectives of increasing environmental knowledge and fostering more employee involvement. Future study ought to utilise longitudinal designs to solidify causality, incorporate multi-source data to reduce potential biases, and perform comparison studies across various organisational and cultural contexts to evaluate the generalisability of these findings.
Keywords: Employee Green Performance (EGP), Servant Leadership (SL), Green HRM practices (GHRM), Individual Traits (IT) Environmental Awareness (EA), Employee Engagement (EE)..
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1. INTRODUCTION:

Shanghai's strategic position as China's most populous metropolitan area and a hub for MNCs that drive digital transformation and enterprise green dual innovation affects Green Human Resource Management (GHRM) in the city (Zhu, 2024). Shanghai has seen a surge in foreign investments since the 1978 economic reforms, bringing international HRM methods to local business operations (Goodall & Warner, 1998). This integration has changed Chinese enterprises' hierarchical management structures to flexible, employee-centered HR methods. Recently, Shanghai GHRM has adopted sustainable HRM practises supplemented by digital technologies, demonstrating a shift towards current management paradigms stressing environmental sustainability (Zhao & Du, 2023). However, implementing green practices within global HR rules and local legal and cultural standards is difficult. Shanghai's dynamic work market with high turnover rates makes it harder to retain advanced GHRM expertise (Huo et al., 2020).

Despite these challenges, Luo & Feng (2024)'s idea of being a “accelerator” for sustainable development describes large chances for organisations to pioneer environmental sustainability activities as HRM methods change. These strategies boost world ecology and employee green performance. EGP is becoming a key metric for GHRM effectiveness in Shanghai. According to Wu et al. (2024), ESG performance and corporate green innovation are positively correlated since these green activities comply with environmental requirements and improve corporate reputation and employee happiness. GHRM improves EGP by creating a work culture that promotes environmentally friendly practices. These behaviours include energy conservation, trash reduction, and innovative corporate sustainability measures. Effective GHRM practises including sustainability training, performance management systems that reward green behaviours, and leadership that promotes environmental stewardship boost EGP in enterprises (Ye et al., 2022).

This study examines Green Human Resource Management (GHRM) and its effects on Employee Green Performance (EGP) in Shanghai multinational corporations (MNCs) in light of the growing emphasis on sustainable business practices. The absence of studies on EGP in Shanghai MNCs despite recent green initiatives and advances suggests a research gap. The macro-level advances above hide a persistent micro-level shortfall in environmentally meaningful behaviour, creating a research dilemma. In a region-wide survey of 19,500 workers by PwC (2024), 42% of employees in Asia-Pacific (including the Chinese mainland) expect climate change to affect their jobs within three years, but they perceive only limited organisational follow-through, indicating a growing expectation–action gap between corporate pledges and daily practice. In a 2024 two-wave study of 262 employees from 22 mainland industries, the mean self-reported pro-environmental behaviour (PEB) score was 3.35 on a five-point Likert scale, barely above a neutral midpoint and well below the level needed to translate strategic commitments into operational performance (Min et al., 2024). The data imply that Shanghai-based MNCs' Green HRM processes have institutionalised faster than individual green performance.

According to the Shanghai Gov (2022), over 300 MNCs have contributed to the reduction of carbon dioxide emissions per unit of GDP and energy consumption per unit of GDP by over 50% between 2010 and 2022. Bains (2023) found that over 75% of Shanghai MNCs had extensive sustainability strategies to reduce carbon emissions, improve energy efficiency, and promote recycling and waste management. Chinese president Xi Jinping's statements emphasising “ecological protection to the high-quality development of the Yangtze River Delta regions surrounding Shanghai” and top-down regulations driving “inter-provincial consultation and joint ecological conservation, and make sure that all localities are on board of their shared development initiatives for the benefit of all” make all Shanghai MNCs directly liable for sustainability compliance. This shows that while MNCs in Shanghai are increasingly active in green behaviours, achieving substantial improvements in green and sustainability from an organisational level, there is a lack of understanding and data on EGP improvements from the perspective of employees, a key gap and research problem for this study.

Shanghai's status as a global financial and business hub emphasises the importance of sustainable practices in its MNCs, particularly in Green Human Resource Management (GHRM) and employee green performance, due to rising regulatory and societal expectations and recent data highlighting the need for green transformation. The 2024 Shanghai ESG Development Report found that 91% of listed financial enterprises in Shanghai submitted ESG reports, proving their commitment to sustainability (China Daily, 2024). In 2023, the Shanghai Stock Exchange reported 2,272 companies released yearly ESG data, with 1,149 producing separate ESG reports, demonstrating a strong push towards sustainable transparency (SSE, 2024). At the MNC Future Summit, reinventing employee experiences and building local leadership were acknowledged as crucial to sustainability goals (Deloitte, 2024). Shanghai MNCs are also urging staff to adopt sustainable practices in response to government policies that foster high-quality growth (Yicai Global, 2024). For competitiveness and alignment with Shanghai's green transformation goals, GHRM practices and employee green performance are crucial.

The blend of Western management ideas and traditional Chinese business practices has led to more flexible and participative HR strategies, underscoring GHRM's significance in encouraging green employee performance. According to Cooke et al. (2020), traditional Chinese businesses emphasise hierarchical structures, relationship-based recruitment, loyalty, and conformity in performance management, making this a valuable research topic. Instead, MNCs prioritise continual training, clear performance metrics, and worldwide best practices in their merit-based HRM strategies. MNCs are more proactive in adopting GHRM practices due to global sustainability goals and modern environmental management systems, while traditional Chinese enterprises focus on local environmental regulations (Cooke et al., 2020). In addition, the Shanghai Municipal Commission of Commerce (2024) mandates the full disclosure of ESG and GHRM information in company operations by 2026, emphasising the need to study how this growing trend of green developments will affect MN employees' ESP.

This study examines how Shanghai's MNCs apply GHRM to address EGP in response to environmental policies and global sustainability goals. This study will examine how GHRM practices, servant leadership, and personality qualities affect EGP through mediating factors including environmental awareness and employee engagement. The study seeks to understand the complex effects of GHRM on EGP in a key global business location by evaluating these interactions. This study integrates these elements into a cohesive analysis to help manage and stimulate green staff performances and behaviours in one of the world's top cities for international business and environmental innovation. Despite studies showing clear relationships between servant leadership (Gu & Liu, 2022), Green Human Resource Management (GHRM) (Noor et al., 2023; Ahmad et al., 2023), and individual traits with green employee performance (Szostek, 2021), Shanghai's multinational corporations (MNCs) have a significant research gap. Previous study has shown that these independent factors (IVs) improve green staff performance (DV), but Shanghai's unique regulatory and cultural context has not been properly investigated. While environmental awareness and employee engagement have been studied in general (Darvishmotevali & Altinay, 2022; Hou et al., 2023; Aboramadan, 2021), there are few studies on them in Shanghai MNCs.

This gap emphasises the need for targeted research to understand how these processes work in Shanghai, given its commercial practices and environmental policies. This study critically examines Shanghai multinational firms' Employee Green Performance (EGP) elements. This study examines how Servant Leadership (SL), Green Human Resource Management (GHRM), and Individual Traits (IT) affect EGP. The study also examines how

Environmental Awareness (EA) and Employee Engagement (EE) mediate these associations.

2. LITERATURE REVIEW

Servant Leadership (SL) on Employee Green Performance (EGP)

Servant leadership (SL) affects Employee Green Performance (EGP), according to Darvishmotevali & Altinay (2021). Their hotel industry study shows how servant leaders naturally promote sustainable practices by prioritising team and community growth. Servant leaders encourage green behaviour in their teams by serving outside the organisation (Darvishmotevali & Altinay, 2021). Hou et al. (2023) found that SL positively associated with environmental organisational citizenship actions such recycling, energy conservation, and proactive policy lobbying. According to Darvishmotevali & Altinay (2021), servant leaders inspire and facilitate green activities among employees, from recycling and conservation to new environmental solutions. This leadership style encourages environmental responsibility and strengthens the company's sustainability efforts. From these empirical observations, the following research hypothesis is proposed:

Hypothesis 1: Servant Leadership (SL) affects Employee Green Performance (EGP).

Green HRM practices (GHRM) on Employee Green Performance (EGP)

Employee Green Performance (EGP) is often promoted by Green Human Resource Management (GHRM) practices, which integrate environmental management goals into HR functions like recruitment, training, performance appraisal, and rewards (Amjad et al., 2021). GHRM has been shown to improve EGP (Hameed et al. 2020; Alam, 2021), and when organisations adopt environmentally conscious HR practises, employees' environmental attitudes improve. Darvishmotevali & Altinay (2022) say GHRM practices encourage pro-environmental behaviour by aligning personal achievements and rewards with company environmental goals. Integrating sustainability criteria into performance assessments and connecting bonuses to environmental targets encourages staff to adopt and adapt green practices (Darvishmotevali & Altinay, 2022). GHRM practices can be effective depending on how well they are communicated and embedded in the organisational culture. Companies that successfully integrate GHRM practices report better environmental compliance, brand reputation, and employee job satisfaction, which reinforces EGP. Despite these benefits, challenges remain, particularly in ensuring that GHRM initiatives are consistently applied across all levels of the organisation and that they reflect the organisation's commitment to sustainability rather than greenwashing (Pham et al. 2020). From these empirical observations, the following research hypothesis is proposed:

Hypothesis 2: Green HRM Practices (GHRM) affects Employee Green Performance (EGP).

Individual Traits (IT) on Employee Green Performance (EGP)

Personality traits (IT) strongly influence Employee Green Performance (EGP) because they affect how employees view and participate in their company's environmental initiatives (Ababneh, 2021). Ababneh (2021) found that eco-consciousness, openness to experience, and conscientiousness predict workplace environmental responsibility. Eco-conscious people are more inclined to promote sustainability projects since they realise their actions affect the environment (Tandon et al. 2023). Conscientious workers follow environmental policies and participate in green programmes (Yang et al. 2023). Beyond compliance, proactive personality qualities are linked to leading sustainability projects that innovate and improve procedures (Meyers & Rutjens, 2022). While favourable individual traits are positively correlated with EGP, the main challenge is leveraging and nurturing these traits within a diverse workforce. Organisational strategies that focus on recruitment and selection processes that screen for environmental values and training programmes that increase eco-consciousness across the employee base can help maximise individuals' contributions to EGP. Personalised engagement and development strategies are essential for maximising individual qualities and improving EGP (Meyers & Rutjens, 2022). From these empirical observations, the following research hypothesis is proposed:

Hypothesis 3: Individual Traits (IT) affects Employee Green Performance (EGP).

Servant Leadership (SL) on Environmental Awareness (EA)

Darvishmotevali & Altinay (2021) argue that servant leaders educate and motivate their teams about environmental issues, which is essential for fostering a deep-seated environmental awareness within the organisation. This leadership promotes a culture where environmental issues are understood and addressed in company practises (Siddiquei et al. 2021). Servant leaders also improve EA by discussing sustainability, advocating environmental projects, and setting an example (Darvishmotevali & Altinay, 2021). This method makes environmental awareness part of the team's culture rather than a policy. As Faraz et al. (2021) explain, servant leadership greatly affects environmental consciousness, but its success depends on constant and real dedication to green activities. This commitment ensures that servant leaders' environmental knowledge leads to green staff performance across the company. From these empirical observations, the following research hypothesis is proposed:

Hypothesis 4: Servant Leadership (SL) affects Employee Awareness (EA)

Green Human Research Management (GHRM) on Environmental Awareness (EA)

Green Human Resource Management (GHRM) techniques also boost environmental awareness (EA) in organisations (Omarova & Jo, 2022). Omarova & Jo (2022) argue that GHRM practices that integrate environmental goals into recruitment, training, employee engagement, and corporate communications promote a culture of sustainability and environmental awareness

among employees. Because GHRM provides the structure and resources to educate employees about environmental issues and the organization's sustainability goals, it has a substantial impact on EA. Omarova & Jo (2022) revealed that job-specific environmental training programs can improve employees' understanding and skills for sustainable practises. Environmental goals in job descriptions and performance appraisals can also reinforce environmental knowledge and encourage greener behaviours (Akbari & Anbarian, 2023). GHRM's efficacy in increasing EA depends on top management's commitment and alignment with the organization's strategy. Studies demonstrate that GHRM approaches may not raise environmental awareness without true commitment and evident leadership support (Jehan et al., 2020). All levels of management must be consistent and committed to help employees internalise and reflect environmental ideals (Farrukh et al., 2022). GHRM methods can improve EA, but their effectiveness depends on strategic integration, extensive implementation, and organisation-wide reinforcement (Ansari et al., 2021). From these empirical observations, the following research hypothesis is proposed:

Hypothesis 5: Green HRM practices (GHRM) affects Environmental Awareness (EA)

Green Human Research Management (GHRM) on Employee Engagement (EE)

Green Human Resource Management (GHRM) practices is found to significantly influence Employee Engagement (EE), particularly within the context of environmental sustainability, as GHRM involves the integration of eco-friendly principles into HR activities such as recruitment, training, performance management and rewards systems (Ababneh, 2021). According to Ababneh (2021), by aligning these practices with the organisation's sustainability goals, GHRM promotes environmental awareness and actively engages employees in these initiatives. Other research studies by Aboramadan (2022) and Graham et al. (2023) also indicates that GHRM practices that include sustainability goals in job roles, provide green skills training, and recognise eco-friendly behaviours can enhance employees' emotional and intellectual commitment to the organisation. According to Welmilla & Ranasinghe (2020), employees are more engaged when they feel their job is meaningful and aligned with their sustainability values. GHRM-driven engagement also boosts job satisfaction and reduces turnover because employees like working in an environmentally conscious atmosphere (Gupta & Jangra, 2024). However, Gupta & Jangra (2024) argue that GHRM's effectiveness in promoting EE depends on practice authenticity and organisational culture. If employees perceive green HRM initiatives as compliance or PR stunts, it may lead to scepticism and reduce engagement levels. Therefore, for GHRM practices to effectively enhance EE, they must be part of a genuine and comprehensive approach to sustainability that involves employees at all levels and recognises their contributions to environmental goals (Gupta & Jangra, 2024). From these empirical observations, the following research hypothesis is proposed:

Hypothesis 6: Green HRM practices (GHRM) affects Employee Engagement (EE)

Individual Traits (IT) on Employee Engagement (EE)

Khan (2022) states that individual traits (IT) including proactivity, conscientiousness, and openness to experience greatly impact Employee Engagement (EE) by influencing how individuals connect with their work environment and their company's aims and values. Since proactive individuals lead change and are more engaged, they can positively impact their coworkers (Khan, 2022). Another study by Meskelis & Whittington (2020) found that proactive people seek out meaningful work impact, which increases engagement, while conscientious employees who naturally show diligence and a sense of duty are more likely to be engaged because they align their work ethic with organisational expectations and goals. Open-minded personnel are more adaptive and willing to take on new challenges, including sustainability ones, which can boost engagement (Arasli et al. 2020). To increase EE through CSR and ESG activities, Cao & Lee (2023) suggest focused HR practices that detect and use these individual features. Roles that empower proactive individuals to support sustainable projects or ongoing learning for open-minded staff can boost engagement. From these empirical observations, the following research hypothesis is proposed:

Hypothesis 7: Individual Traits (IT) affects Employee Engagement (EE)

The mediating role of Environmental Awareness (EA) between Servant Leadership (SL) and Employee Green Performance (EGP)

The mediation of Servant Leadership (SL) and Employee Green Performance (EGP) by Environmental Awareness (EA). Empirical research show servant leadership. Hou et al. (2023) found that SL on organisational green performance, where leaders prioritise the growth and well-being of people and communities, boosts EA through green creativity and supports sustainability initiatives. By promoting care and responsibility, servant leaders can raise employees' environmental consciousness, which is essential to enhancing EGP, according to Darvishmotevali & Altinay (2022). The mediating effect of EA in this relationship is based on the idea that servant leaders promote sustainable practices and educate their team members about environmental stewardship, which motivates employees to adopt green behaviours and improve EGP. Hou et al. (2023) and Aboramadan et al. (2021) found that leaders that prioritise ethics and community involvement promote sustainability awareness and improve staff performance in green initiatives. By directly including servant leaders in sustainability programs, employees are likely to copy their conduct, which directly influences EGP through enhanced EA (Aboramadan et al. 2021). This modelling effect turns environmental awareness into actionable conduct that supports organisational sustainability goals. From these empirical observations, the following research hypothesis is proposed:

Hypothesis 8: Environmental Awareness (EA) mediates the relationship between Servant Leadership (SL) and

Employee Green Performance (EGP)

Hypothesis 12: Environmental Awareness (EA) affects Employee Green Performance (EGP)

The mediating role of Environmental Awareness (EA) between Green Human Research Management (GHRM) and Employee Green Performance (EGP)

According to Polas et al. (2023), Environmental Awareness (EA) mediates the association between Green HRM Practices (GHRM) and green knowledge management and innovation performances. According to El-Tahhan (2024), eco-friendly recruitment, sustainability training, performance management, and reward systems aligned with environmental goals would increase employees' awareness and commitment to environmental issues, mediating the relationship between GHRM practices in hospitality and sustainable tourism. EA's mediating role is crucial since GHRM practices inform, engage, and motivate employees to adopt sustainable behaviours, according to Darvishmotevali & Altinay (2022). For instance, environmental conservation and sustainability training can boost employee EA and provide them the tools to improve EGP. This increased EA leads to more conscious and deliberate green actions in daily operations, improving organisational sustainability (Darvishmotevali & Altinay, 2022). Omarova & Jo's (2022) study suggests that when employees are more conscious of their environmental affects, they are more likely to initiate and participate in green behaviours that support the organisation's sustainability goals. Aimon & Sentosa (2023) also noted that GHRM practices increase EA and create a work environment that supports the translation of this awareness into practical green performance by directly stimulating positive environment attitudes and green practice knowledge. Agrawal et al. (2023) have noted that the depth and breadth of GHRM practices can affect this mediation's effectiveness. Organisations that integrate environmental goals into their HR management are likely to have a stronger EA-EGP mediation effect. In contrast, shallow or inconsistent GHRM procedures may reduce environmental awareness and EGP. GHRM processes must be solid, genuine, and regularly adopted across the company to improve EGP through EA (Agrawal et al. 2023). From these empirical observations, the following research hypothesis is proposed:

Hypothesis 9: Environmental Awareness (EA) mediates the relationship between Green HRM Practices (GHRM) and Employee Green Performance (EGP)

The Mediating Role of Employee Engagement (EE) between Green Human Research Management (GHRM) and Employee Green Performance (EGP)

Employee Engagement (EE) mediates Green HRM Practices (GHRM) into Employee Green Performance (EGP) in banking, according to Ramanayake et al. (2022). Ramanayake et al. (2022) state that GHRM practises like integrating sustainability into job descriptions, conducting green training, and rewarding eco-friendly achievements promote a sustainable workplace culture and engage banking sector employees in these efforts. EE mediates because GHRM practices initially boost employee engagement by aligning their personal values with the organization's sustainability goals, as confirmed by Soomro et al.'s (2021) study, which increases their commitment and motivation to work, particularly in environmental sustainability activities, with engaged employees more likely to adopt and sustain green practices. Visamitanan & Assarut (2021) found that meaningful labour that benefits society boosts employee performance in certain activities, including environmental projects. Graham et al. (2023) found that GHRM practices that encourage employee participation and recognition in environmental matters increase engagement, which helps employees adopt new behaviours and perform better in environmental protocols. Engaged employees also pay more attention to the company's environmental policies and are more likely to find and adopt resource-saving work methods that boost EGP (Graham et al. 2023). GHRM initiatives can have a strong mediating effect on EGP if they are consistent and authentic. If employees see them as token gestures or inconsistent with other business practices, engagement levels can drop, weakening the mediation effect. To effectively deploy EE to enhance EGP, GHRM practices must be truly incorporated into the organization's operations and constantly maintained to encourage employee sustainability participation. From these empirical observations, the following research hypothesis is proposed:

Hypothesis 10: Employee Engagement (EE) mediates the relationship between Green HRM Practices (GHRM) and Employee Green Performance (EGP)

Hypothesis 13: Employee Engagement (EE) affects Employee Green Performance (EGP)

The mediating role of Employee Engagement (EE) between Individual Traits (IT) and Employee Green Performance (EGP)

Ababneh (2021) found that Employee Engagement (EE) mediates the relationship between Individual Traits (IT) and Employee Green Performance (EGP), connecting personal traits to professional environmental behaviours. Eco-consciousness, openness to experience, and proactivity affect how employees view and participate in sustainability projects (Ababneh, 2021). Ababneh (2021) further claims that these attributes alone cannot guarantee good green performance without interaction. Soomro et al. (2021) also argue that EE mediates because individual traits predispose employees to certain behaviours, but engagement channels these predispositions into active, consistent environmental performance, making engaged employees more committed, motivated, and likely to go above and beyond to support organisational sustainability goals. Ramanayake et al. (2022) found that employee engagement increases the likelihood of translating personal values and traits into meaningful action, improving EGP. An eco-conscious, engaged employee is more likely to proactively seek ways to reduce waste, conserve resources, and advocate for sustainable practices in the organisation. Engagement motivates green performance by using personal preferences. This is usually done by companies with strong HR practices including tailored development plans, meaningful sustainability engagement, and a culture that rewards

environmental efforts (Ramanayake et al. 2022). From these empirical observations, the following research hypothesis is proposed:

Hypothesis 11: Employee Engagement (EE) mediates the relationship between Individual Traits (IT) and Employee Green Performance (EGP)

3. CONCEPTUAL FRAMEWORK

The extensive range of discussions and analyses in the first three chapters of this thesis has led to the formulation of a comprehensive research framework as shown in the figure. This framework aims to encapsulate the multifaceted relationships and influences elucidated in both the literature review and methodology chapter. Serving as the foundation for subsequent investigations, this research framework offers a structured pathway for comprehensively exploring into the subject matter, guiding future explorations with clarity and purpose.

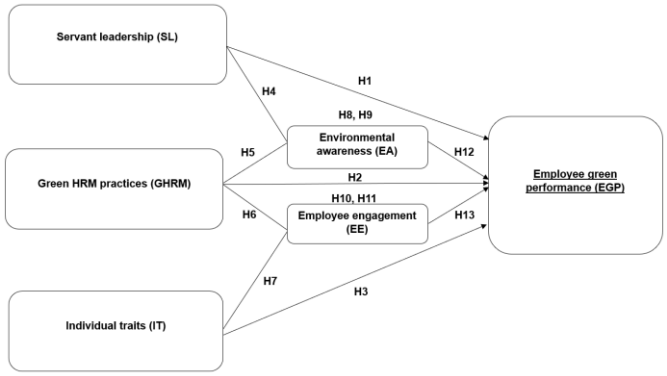

Figure 1 Research conceptual framework

4. METHODOLOGY

In a quantitative research framework, the study polls Shanghai MNC employees. Employees rate their green performance, leadership styles, HRM methods, personal attributes, and workplace environmental knowledge and participation. SPSS will be used for descriptive and inferential statistics in data analysis. Descriptive data on variable features and frequencies will provide a foundation for understanding MNC EGP. In contrast, the inferential analysis will investigate the causative linkages between variables, including the direct effects of SL, GHRM, and IT on EGP and the mediation roles of EA and EE. Shanghai, a worldwide financial capital, has many multinational corporations (MNCs), making it excellent for EGP research. The State Council of the People's Republic of China (2024) reports 956 MNCs with regional headquarters in Shanghai, with over half in Pudong. The 2023 Shanghai Housing Provident Fund Annual Report (Tencent News, 2024) shows that Shanghai has the most MNC employees in China, 158,300. These 158,300 employees will be the study's population sample. This large sampling frame enables for a complete investigation across a number of organisational environments, improving the study's generalisability and applicability.

Given the current population of 158,300 employees in multinational corporations (MNCs) with regional headquarters in Shanghai (The State Council of The People's Republic of China, 2024; Tencent News, 2024), a valid and statistically defendable sample size is essential for research integrity. We use Yamane (1973)'s formula to compute sample sizes for this investigation while considering outcomes precision:

n = N / (1 + N(e)^2

Where nn is the sample size, NN is the population size, and ee is the margin of error.

Using a population of N=158,300 MNC employees and a margin of error (ee) of 5% (0.05), the formula yields a sample size of around 300 employees at n≈282. The research uses Yamane's (1973) well-established statistical formula to ensure credible and applicable results to Shanghai's diversified and dynamic MNC environment.

The poll will include Shanghai MNC workers from various departments and seniority levels to ensure a broad and representative sample. Quantitative data will be processed sequentially in SPSS and IBM AMOS 29, increasing analytical rigour beyond the descriptive-and-regression technique. Ordinary Least Squares (OLS) regression is used to analyse direct effects like SL, GHRM, and IT on EGP. The equation for this model uses a coefficient (β) to reflect the expected change in EGP for each unit increase in independent variables, providing all other variables remain constant. The error term (ε) accounts for EGP changes not explained by independent factors.

$$EGP=\beta0+\beta1(SL)+\beta2(GHRM)+\beta3(IT)+\varepsilon EGP=\beta0+\beta1(SL)+\beta2(GHRM)+\beta3(IT)+\varepsilon$$

Additionally, to analyse the moderating effects of EA and EE, interaction terms are included in the regression models to ascertain their influence on the relationships between the primary independent variables and EGP. For instance, the moderating effect of EA on the relationship between SL and EGP can be modelled as:

$$EGPmod=\beta0+\beta1(SL)+\beta2(EA)+\beta3(SL\times EA)+\varepsilon EGPmod=\beta0+\beta1(SL)+\beta2(EA)+\beta3(SL\times EA)+\varepsilon$$

The second phase of data analysis transfers the cleaned dataset to AMOS for structural-equation modelling.

5. FINDINGS

Shanghai MNCs employee profile information

The subsequent analyses presented in this chapter are based on the final valid sample of 300 respondents. Each respondent represents a single unit of analysis and is an employee currently working within a multinational corporation (MNC) that maintains a regional headquarters in Shanghai with at least one year of work experience. The data presented in Table 1 offers a comprehensive overview of the demographic profile of the survey

participants, detailing the frequency and percentage distributions across four key characteristics: age, gender, duration of employment at their current company and current professional position within the organisation.

Table 1 Shanghai MNCs employee profile information

Employee profile	Frequency(N=300)	Percentage (%)
Age		
18-24	33	11%
25-34	129	43%
35-44	87	29%
45-54	42	14%
55+	9	3%
Gender		
Male	141	47%
Female	159	53%
Duration at current company		
1-3 years	117	39%
4-6 years	93	31%
7-10 years	54	18%
More than 10 years	36	12%
Current company position		
Entry level/ junior staff	45	15%
Mid-level professional	138	46%
Senior level professional/ specialist	66	22%
Manager/ team lead/ supervisor	39	13%
Director/ executive	12	4%

The age distribution of responders suggests that the workforce sample is mostly early to mid-career workers. The 25–34 age group accounts for 43% (n=129) of the sample. The 35–44 age group follows with 29% (n=87) of responses. There are somewhat more women than men in the sample. Women make up 53% (n=159) of the sample, while men make up 47% (n=141). The study benefits from this near-even split since it reduces gender bias. Employee tenure data shows a dynamic workforce. Most responders (39%) (n=117) have been with their employer for 1–3 years. Another 31% (n=93) have worked 4–6 years. This shows that 70% of the sample has worked at their company for six years or less. The sample's professional hierarchy favours non-managerial roles, providing a ground-up perspective. The largest group is mid-level professionals (46%, n=138). Senior professionals/specialists make up 22% (n=66) and entry-level/junior staff 15% (n=45).

Descriptive statistics of key variables

The descriptive statistics for the study's primary variable constructs—Servant Leadership (SL), Green Human Resource Management (GHRM), Individual Traits (IT), Environmental Awareness (EA), and Employee Engagement (EE), and Employee Green Performance (EGP). These variables' statistical breakdowns, including mean and standard deviation, are in the following subsections. This provides core insights on sample trends and patterns including servant leadership and employee green performance in studied organisations. Before inferential statistics, this descriptive analysis provides information on each construct's properties for interpreting the correlation and regression analyses that will test the research hypotheses.

Kaiser-Meyer-Olkin (KMO) and Bartlett's test

Based on the results from the KMO and Bartlett's Test as shown in table 2, the dataset is highly suitable for factor analysis. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy returned a value of .966, which substantially exceeds the recommended minimum threshold of 0.60.

Table 2 KMO & Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.966
Bartlett's Test of Sphericity	Approx. Chi-Square	24077.244
	df	2016
	Sig.	.000

Cronbach's Alpha (internal consistency)

According to the results presented in table 3, the internal consistency reliability for all six constructs measured in this study is excellent. A Cronbach's Alpha analysis was conducted separately for each scale to determine the extent to which its items cohesively measure the same underlying concept. The resulting Alpha coefficients were exceptionally high, ranging from .960 for the Employee Engagement (EE) scale to .979 for the Employee Green Performance (EGP) scale. All calculated values, including those for Servant Leadership (α = .978), Green HRM practices (α = .976), Individual Traits (α = .973), and Environmental Awareness (α = .978).

Table 3 Cronbach's alpha

Construct	**No of questions**	**Cronbach's alpha**

Employee Green Performance (EGP)	12	.979
Servant Leadership (SL)	12	.978
Green HRM practices (GHRM)	12	.976
Individual Traits (IT)	12	.973
Environmental Awareness (EA)	8	.978
Employee Engagement (EE)	8	.960

Inter-correlations (Pearsons)

A Pearson inter-correlation was run to assess the preliminary relationships between all key study constructs. Table 4 shows that Employee Green Performance (EGP) is positively and significantly correlated with all independent and mediating variables. Strong positive correlation found between EGP and Environmental Awareness (EA) (r =.658, p <.001), indicating a strong link between employee awareness and green performance. EGP was positively correlated with Green HRM practices (GHRM) (r =.581, p <.001) and Employee Engagement (EE) (r =.550, p <.001). EGP had substantial correlations with Servant Leadership (SL) (r =.354, p <.001) and Individual Traits (IT) (r =.332, p <.001), but with modest strength. The study's hypotheses that direct positive associations with Employee Green Performance are supported by these initial findings.

Table 4 Inter-correlations (Pearsons)

		EGP	SL	GHRM	IT	EA	EE
EGP	Pearson Correlation	1	.354**	.581**	.332**	.658**	.550**
SL	Pearson Correlation	.354**	1	-.006	.065	.414**	.010
GHRM	Pearson Correlation	.581**	-.006	1	-.049	.487**	.292**
IT	Pearson Correlation	.332**	.065	-.049	1	.051	.499**
EA	Pearson Correlation	.658**	.414**	.487**	.051	1	.130*
EE	Pearson Correlation	.550**	.010	.292**	.499**	.130*	1
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Model fit

The findings for several fitness indices are shown in Table 5 to assess the model's validity, fit to the data, and representation of variable relationships. A significant metric for model fit is the Chi-Square (x^2) statistic. This model's Chi-Square is 2339.633 with 1943 degrees of freedom. The Chi-Square test is sensitive to sample size, however it must be interpreted alongside other fit indices. The model's fit indices in Table 5 show excellent data fit. All values for x^2/df, SRMR, GFI, AGFI, IFI, TLI, CFI, and RMSEA reach or surpass essential limits for excellent fit, indicating the model effectively reflects variable connections and adequately explains data. These findings confirm the model's validity and the analysis's findings.

Table 5 Model fit

Fitness Index	**Critical Value**	**Test Data**	**Fitting Judgement**
x^2	—	2339.633	—
df	—	1943	—
x^2/df	1–5	1.204	YES
SRMR	< 0.08	0.021	YES
GFI	> 0.80	0.815	YES
AGFI	> 0.80	0.802	YES
IFI	> 0.90	0.984	YES
TLI	> 0.90	0.983	YES
CFI	> 0.90	0.983	YES
RMSEA	< 0.08	0.026	YES

Given these factor loadings, reliability, and convergent validity, the measurement model in figure 2 shows that all items loaded strongly and significantly on their latent variables, with standardised factor loadings ranging from 0.838 (EE4) to 0.934 (EA7), comfortably exceeding the 0.70 threshold. The constructs had strong internal consistency, with composite reliability (CR) values between 0.963 (Employee Engagement) and 0.981 (Environmental Awareness), above 0.70. Average variance extracted (AVE) ranged from 0.728 (Individual Traits) to 0.849 (Environmental Awareness), exceeding the 0.50 minimum threshold, confirming convergence. These indices show that the measuring model was reliable

and valid, justifying structural analysis using latent constructs.

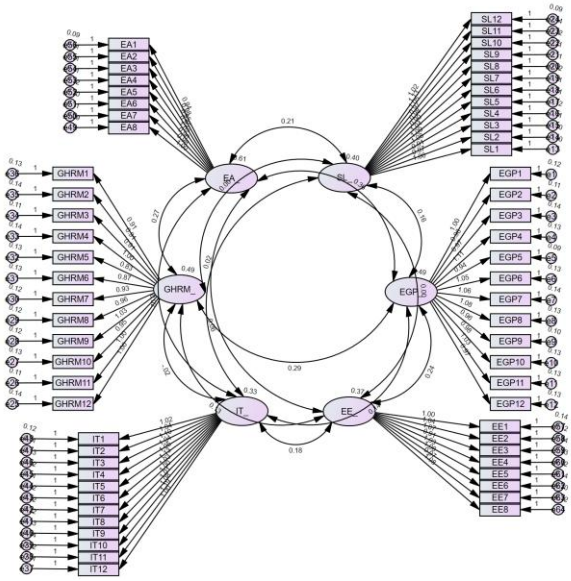

Figure 2 Measurement model

Structural equation modelling

Individual Traits (IT) had a moderate positive impact on EGP (β = 0.53), suggesting that personnel with environmental consciousness and sustainable ideals perform better in green efforts. This influence is weaker than SL or GHRM, but it supports the premise that personal qualities can help organisations achieve sustainability goals. staff Engagement (EE) has a moderate direct effect on EGP (β = 0.38), underlining the significance of staff involvement in green projects. The smaller coefficient than SL and GHRM shows that employee engagement supports green performance but may not be as important as leadership and HR management practices.

The relationship between Environmental Awareness (EA) and Green Performance (EGP) (β = 0.30) shows a positive but weaker effect, emphasising the need for environmental awareness among employees but not directly driving significant green performance increases. This supports the premise that environmental education and awareness campaigns need organisational structures, leadership, and HR practices to be effective. Besides direct effects, the model shows mediated interactions. Servant leadership (SL) significantly impacts staff engagement (β = 0.85), leading to improved green performance. This mediating impact emphasises the necessity of leadership in creating a sustainable workplace. GHRM strongly impacts EA (β = 0.78), highlighting the importance of green HR practices in fostering environmental consciousness among employees.

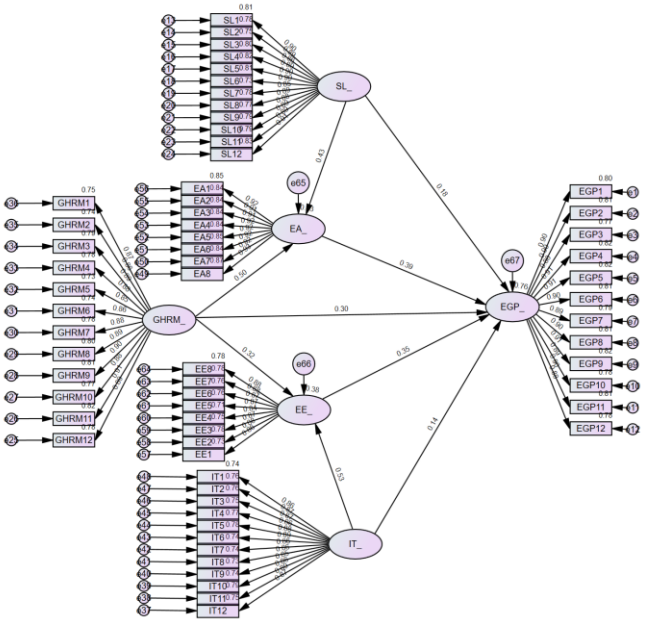

Figure 3 AMOS SEM model

REGRESSIONS & HYPOTHESIS TESTING

Direct relationships on Employee Green Performance

The primary multiple linear regression analysis measures the direct effects of independent and mediating variables on Employee Green Performance. These predictors were assessed using a simultaneous-entry multiple regression model. The composite scores for Servant Leadership (SL), Green HRM practices (GHRM), Individual Traits (IT), Environmental Awareness (EA), and Employee Engagement (EE) were independent factors, whereas EGP was the dependent variable. This analysis examines each predictor's contribution to EGP variance while controlling for other model variables. Results are utilised to test Hypotheses 1, 2, 3, 12, and 13. We tested multicollinearity before interpreting regression coefficients. Table 6 shows that all variables' Variance Inflation Factor (VIF) and Tolerance values were within acceptable bounds (VIF < 10, Tolerance > 0.1), indicating no multicollinearity in the analysis. The model was statistically significant and explained a lot of Employee Green Performance variance.

Table 6 OLS Regression on Employee Green Performance (EGP)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF

1	Constant	-1.117	.182		-6.128	.000		
	SL	.202	.038	.185	5.339	.000	.772	1.295
	GHRM	.325	.041	.306	7.925	.000	.622	1.607
	IT	.170	.042	.148	4.069	.000	.701	1.428
	EA	.354	.037	.382	9.594	.000	.584	1.711
	EE	.376	.042	.335	8.853	.000	.647	1.546
a. Dependent Variable: EGP								

The first hypothesis suggested Servant Leadership directly improved Employee Green Performance. Multiple regression analysis strongly supports this hypothesis. The study found that Servant Leadership positively predicts Employee Green Performance (β =.185, t = 5.339, p <.001). The statistical significance of this link (p <.001) indicates that it is unlikely to be attributable to chance. This strong statistical data supports Hypothesis 1. Hypothesis 2 stated that Green HRM practices would boost Employee Green Performance. The regression results corroborate the hypothesis, revealing GHRM as a significant predictor of EGP (β =.306, t = 7.925, p <.001). This strong and statistically significant positive connection supports Hypothesis 2. The third hypothesis claimed that positive affect, proactivity, and conscientiousness will directly improve Employee Green Performance. The statistically substantial result supports Hypothesis 3. Hypothesis 12 proposed a positive correlation between employee environmental awareness and green performance. Multiple regression results confirm EA as the primary predictor of EGP (β =.382, t = 9.594, p <.001). Hypothesis 12 is supported since this link is statistically significant.

Hypothesis 13, the final direct effect, predicted that Employee Engagement will increase Employee Green Performance. Results from multiple regression analysis support the hypothesis that EE is a significant positive predictor of EGP (β =.335, t = 8.853, p <.001). With a standardised beta coefficient of.335, practitioners may find that general employee engagement measures may help increase sustainability efforts. This strong statistical data supports Hypothesis 13.

ANTECEDENTS OF THE MEDIATING VARIABLE

Model A – Predicting Environmental Awareness

A multiple linear regression was conducted to test the effects of Servant Leadership (SL) and Green HRM practices (GHRM) on the mediating variable, Environmental Awareness (EA). The analysis confirmed that the assumption of no multicollinearity was met with Tolerance and VIF values for both predictors being optimal at 1.000. The overall model was statistically significant, explaining a substantial portion of the variance in Environmental Awareness as shown in table 7. The results for each specific hypothesis are detailed below.

Table 7 OLS Regression on Environmental Awareness (EA)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
A	(Constant)	-.143	.223		-.643	.521		
	SL	.491	.053	.417	9.348	.000	1.000	1.000
	GHRM	.561	.051	.489	10.982	.000	1.000	1.000
a. Dependent Variable: EA								

Fourth hypothesis: Servant Leadership would positively predict Environmental Awareness. The multiple regression analysis in Table 7 strongly supports this theory. Research indicates that Servant Leadership significantly improves Environmental Awareness (β =.417, t = 9.348, p <.001). This robust and statistically significant finding supports Hypothesis 4. Hypothesis 5 predicted that green HRM would boost environmental awareness. The regression results strongly support the hypothesis, with GHRM being the strongest predictor of Environmental Awareness (β =.489, t = 10.982, p <.001).

Because of this substantial and statistically significant positive association, Hypothesis 5 is supported.

Model B – Predicting Employee engagement

The sixth hypothesis proposed that the implementation of Green HRM practices would have a direct, positive effect on Employee Engagement. The results of the multiple regression, as presented in Table 8, provide strong statistical support for this hypothesis. GHRM was found to be a significant and positive predictor of Employee Engagement (β = .318, t = 6.777, p < .001). Based on this robust and statistically significant positive relationship, ***Hypothesis 6 is fully supported.***

Table 8 OLS Regression on Employee Engagement (EE)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
B	(Constant)	.233	.209		1.114	.266		
	GHRM	.301	.044	.318	6.777	.000	.998	1.002
	IT	.527	.048	.514	10.981	.000	.998	1.002
a. Dependent Variable: EE								

Hypothesis 7 suggested that an employee's Individual Traits would be a direct, positive predictor of their level of Employee Engagement. The regression results offer compelling support for this hypothesis, identifying Individual Traits as the most powerful predictor of Employee Engagement within this model (β = .514, t = 10.981, p < .001). Therefore, based on this strong statistical evidence, ***Hypothesis 7 is supported.***

The mediating role of Environmental Awareness and Employee Engagement

Mediation analysis for Environmental Awareness

To test the hypothesis that Environmental Awareness mediates the relationship between Servant Leadership and Employee Green Performance, the mediation results presented in table 9, provide strong support for the proposed mediating effect. The initial pathway from the independent variable to the mediator (Pathway A) was found to be statistically significant, with Servant Leadership having a strong, positive influence on Environmental Awareness (b = .4877, p < .001). The second pathway from the mediator to the dependent variable (Pathway B) was equally significant, demonstrating that Environmental Awareness positively predicts Employee Green Performance while adjusting for the influence of Servant Leadership (b = .5730, p < .001). The primary conclusion of the analysis is the indirect influence of Servant Leadership on Employee Green Performance through Environmental Awareness. The study found a statistically significant indirect effect, with an unstandardised coefficient of .2795 and a 95% bootstrap confidence interval spanning from .2077 to .3596. As this confidence range does not contain 0, the mediating effect is confirmed. Furthermore, the study showed that while the total effect of Servant Leadership on Employee Green Performance was significant (Effect = .3875, p < .001), a smaller direct effect remained significant after accounting for the mediator (Effect = .1081, p = .0391). This implies a partial mediation, demonstrating that Servant Leadership promotes Employee Green Performance both directly and, more substantially, indirectly by first creating higher levels of environmental consciousness amongst employees. Therefore, Hypothesis 8 is fully supported.

Table 9 Mediation analysis results for the Indirect Effect of Servant Leadership (SL) on Employee Green Performance (EGP) through Environmental Awareness (EA)

Pathway	**b**	**SE**	**t**	**p**
Pathway A: Servant Leadership → Environmental Awareness	0.488	0.062	7.841	<.001
Pathway B: Environmental Awareness → Employee Green Performance	0.573	0.044	12.963	<.001
Total Effect (C): Servant Leadership → Employee Green Performance	0.388	0.059	6.536	<.001
Direct Effect (C'): Servant	0.108	0.052	2.073	0.039

Leadership → Employee Green Performance				
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
Servant Leadership → EA → Employee Green Performance	0.28	0.039	0.208	0.36

Table 9 strongly supports Hypothesis 9's mediation of Green HRM practices and Employee Green Performance by Environmental Awareness. Analysis confirmed a substantial positive connection between the independent variable and mediator (Pathway A), with Green HRM practices strongly predicting Environmental Awareness (b =.5584, p <.001). The second condition was met as Environmental Awareness, the mediator, predicted Employee Green Performance, controlling for Green HRM (Pathway B: b =.4565, p <.001). The main finding is that GHRM indirectly affects EGP through EA, with an unstandardised correlation of .2549. This effect's 95% bootstrap confidence range, which extends from.1936 to.3217, does not contain zero, demonstrating mediation's statistical significance. A substantial direct effect of GHRM on EGP was found (Effect =.3639, p <.001), even after controlling for the mediator. The partial mediation suggests that GHRM influences EGP directly through its structural and motivational components and indirectly by raising employees' environmental consciousness. This shows that GHRM promotes pro-environmental conduct by raising staff cognitive and attitudinal awareness. This considerable indirect effect supports Hypothesis 9.

Table 10 Mediation analysis results for the Indirect Effect of Green HRM Practices (GHRM) on Employee Green Performance (EGP) through Environmental Awareness (EA)

Pathway	**b**	**SE**	**t**	**p**
Pathway A: Green HRM → Environmental Awareness	0.558	0.058	9.62	<.001
Pathway B: Environmental Awareness → Employee Green Performance	0.457	0.043	10.716	<.001
Total Effect (C): Green HRM → Employee Green Performance	0.619	0.05	12.33	<.001
Direct Effect (C'): Green HRM → Employee Green Performance	0.364	0.049	7.446	<.001
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
Green HRM → EA → Employee Green Performance	0.255	0.033	0.194	0.322

Mediation analysis for Employee Engagement

To test Hypothesis 10, Employee Engagement mediates the association between Green HRM practices and Employee Green Performance, Table 11 shows statistical evidence. The study found that Green HRM practices positively impacted employee engagement (b =.2776, p <.001), making it a strong predictor of Pathway A. We discovered that Employee Engagement, as a mediator, significantly predicted Employee Green Performance, even after controlling for Green HRM (Pathway B: b =.4658, p <.001). The indirect effect of GHRM on EGP through Employee Engagement was statistically significant, with an unstandardised coefficient of.1293. The 95% bootstrap confidence interval for this effect,.0729 to.1899, does not contain zero, demonstrating mediation's importance. The study found a significant direct effect of GHRM on EGP (Effect =.4895, p <.001), even after controlling for the mediator. This suggests partial mediation. This suggests that GHRM affects green performance directly and indirectly via engaging employees, which improves green performance. This shows that GHRM's motivating and commitment-building effects are crucial, but not the only ones. Significant indirect effect supports Hypothesis 10.

Table 11 Mediation analysis results for the Indirect Effect of Green HRM Practices (GHRM) on Employee Green Performance (EGP) through Environmental Engagement (EE)

Pathway	**b**	**SE**	**t**	**p**

Pathway A: Green HRM → Employee Engagement	0.278	0.053	5.28	<.001
Pathway B: Employee Engagement → Employee Green Performance	0.466	0.048	9.634	<.001
Total Effect (C): Green HRM → Employee Green Performance	0.619	0.05	12.33	<.001
Direct Effect (C'): Green HRM → Employee Green Performance	0.49	0.046	10.668	<.001
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
Green HRM → EE → Employee Green Performance	0.129	0.03	0.073	0.19

The final hypothesis was that Employee Engagement will mediate Individual Traits and Employee Green Performance. The results in Table 12 corroborate this theory and show full mediation. The study revealed a substantial correlation between the independent variable and the mediator (Pathway A), with Individual Traits significantly predicting Employee Engagement (b =.5114, p <.001). Employee Engagement substantially predicted Employee Green Performance, adjusting for Individual Traits (Pathway B: b =.5738, p <.001). The unstandardised coefficient of.2935 shows that Individual Traits indirectly affect Employee Green Performance through Employee Engagement. The mediation is statistically significant because the 95% bootstrap confidence interval (.2137 to.3785) is not zero. Importantly, after accounting for the mediator, the direct effect of Individual Traits on Employee Green Performance was non-significant (Effect =.0880, p =.1710). This shows that employee involvement fully mediates the initial substantial personality-green performance relationship. Engagement is crucial to connecting disposition and pro-environmental workplace behaviour. Full support for Hypothesis 11.

Table 12 Mediation analysis results for the Indirect Effect of Individual Traits (IT) on Employee Green Performance (EGP) through Environmental Engagement (EE)

Pathway	b	SE	t	p
Pathway A: Individual Traits → Employee Engagement	0.511	0.051	9.941	<.001
Pathway B: Employee Engagement → Employee Green Performance	0.574	0.063	9.174	<.001
Total Effect (C): Individual Traits → Employee Green Performance	0.381	0.063	6.071	<.001
Direct Effect (C'): Individual Traits → Employee Green Performance	0.088	0.064	1.372	0.171
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
Individual Traits → EE → Employee Green Performance	0.294	0.042	0.214	0.379

This study examined direct and indirect relationships affecting Employee Green Performance using thirteen hypotheses. The statistical analyses, including multiple linear regression and PROCESS Macro mediation tests, supported all theoretical hypotheses. The initial regression analysis showed that all antecedent paths were significant: Servant Leadership and Green HRM practices strongly

predicted Environmental Awareness, whereas Green HRM practices and Individual Traits predicted Employee Engagement. The main predictive model for Employee Green Performance supported all five direct effect hypotheses. Servant Leadership, Green HRM, Individual Traits, Environmental Awareness, and Employee Engagement all predicted Employee Green Performance positively and clearly. After testing the four mediation hypotheses, all were statistically significant. It was found that Environmental Awareness partially moderated the effects of Servant Leadership and Green HRM on Employee Green Performance. Equally, Employee Engagement partially mediated the association between Green HRM and Employee Green Performance. In an intriguing discovery, Employee Engagement fully mediated the association between Individual Traits and Employee Green Performance, demonstrating that personality's impact on green behaviour is wholly through employee engagement.

6. CONCLUSION

This study sought to fill a gap in the literature on Employee Green Performance (EGP) in Shanghai's dynamic multinational corporations (MNCs). The study proposed and tested an integrated theoretical model that investigated leadership, human resource systems, and individual variations to move beyond singular answers. With a positivist ideology and deductive research approach, the study collected quantitative data from 300 employees of these businesses. The main goal was to empirically assess the direct effects of Servant Leadership (SL), Green HRM (GHRM), and Individual Traits (IT) on EGP while testing the mediating roles of Environmental Awareness (EA) and Employee Engagement. The research used Stakeholder Theory, the Resource-Based View (RBV), and the Ability-Motivation-Opportunity (AMO) framework to explain workplace pro-environmental conduct. Multiple regression and bootstrapping mediation tests in SPSS were used to evaluate the thirteen hypotheses from this framework, revealing the determinants of employee sustainability. The statistical studies confirmed all thirteen hypotheses, proving the theoretical model. The results showed that all independent and mediating variables directly improve Employee Green Performance. Environmental Awareness (β =.382) and Employee Engagement (β =.335) were the strongest predictors of green conduct, indicating that employee knowledge and feelings about their organisation drive green action. The study also verified organisational and personal trait effect routes. Both Servant Leadership and Green HRM were strong positive antecedents of Environmental Awareness, while Green HRM and Individual Traits predicted Employee Engagement. The mediation analyses were most fascinating since Environmental Awareness partially mediated the effects of Servant Leadership and Green HRM on EGP, suggesting that these factors work by boosting employees' environmental awareness. Critically, the research found full mediation in the final pathway, showing that Employee Engagement fully mediates the effect of Individual Traits on green performance. In conclusion, this study advances theory and practice. A validated, integrated model shows how leadership styles, HR systems, and personality traits collectively and interactively shape pro-environmental behaviour, adding empirical depth to Stakeholder, RBV, and AMO theories in sustainability. Our research provides a clear and actionable methodology for Shanghai MNC leaders and HR experts. The data strongly show that promoting Employee Green Performance requires creating a special internal environment rather than just following policies. The best initiatives will combine systematic GHRM principles with servant leadership to raise employee knowledge and participation. A sustainable organisation relies on its people's cognitive and emotive commitment, therefore focussing on these human-centric characteristics can establish a true culture of sustainability that leads to effective environmental action...

REFERENCES

1. Ababneh, O. M. A. (2021). How do green HRM practices affect employees' green behaviours? The role of employee engagement and personality attributes. *Journal of Environmental Planning and Management*, *64*(7), 1204-1226.
2. Abbott, M. L., & McKinney, J. (2013). *Understanding and applying research design*. John Wiley & Sons.
3. Abdelhamied, H. H., Elbaz, A. M., Al-Romeedy, B. S., & Amer, T. M. (2023). Linking green human resource practices and sustainable performance: The mediating role of job satisfaction and green motivation. *Sustainability*, *15*(6), 4835.
4. Aboramadan, M. (2022). The effect of green HRM on employee green behaviours in higher education: the mediating mechanism of green work engagement. *International Journal of Organisational Analysis*, *30*(1), 7-23.
5. Agrawal, S., & Pradhan, S. (2023). Employee green behaviour in hotels: the role of green human resource management, green transformational leadership and value congruence. *Consumer Behaviour in Tourism and Hospitality*, *18*(2), 241-255.
6. Ahmad, F., Hossain, M. B., Mustafa, K., Ejaz, F., Khawaja, K. F., & Dunay, A. (2023). Green HRM practices and knowledge sharing improve environmental performance by raising employee commitment to the environment. *Sustainability*, *15*(6), 5040.
7. Arasli, H., Nergiz, A., Yesiltas, M., & Gunay, T. (2020). Human resource management practices and service provider commitment of green hotel service providers: Mediating role of resilience and work engagement. *Sustainability*, *12*(21), 9187.
8. Ari, E., Karatepe, O. M., Rezapouraghdam, H., & Avci, T. (2020). A conceptual model for green human resource management: Indicators, differential pathways, and multiple pro-environmental outcomes. *Sustainability*, *12*(17), 7089.
9. 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.

10. Barney, J. B., & Arikan, A. M. (2005). The resource-based view: origins and implications. *The Blackwell handbook of strategic management*, 123-182.
11. Bashirun, S. N., & Noranee, S. (2020). Influence of environmental knowledge and attitude on employee green behaviour. *International Journal of Academic Research in Business and Social Sciences*, *10*(6), 937-946.
12. Botelho, C. (2020). The influence of organisational culture and HRM on building innovative capability. *International Journal of Productivity and Performance Management*, *69*(7), 1373-1393.
13. Caldwell, B. (2018, June). Reflecting on beyond positivism at thirty-five. In *Including a Symposium on Bruce Caldwell's Beyond Positivism After 35 Years* (Vol. 36, pp. 81-90). Emerald Publishing Limited.
14. Canavesi, A., & Minelli, E. (2022). Servant leadership: A systematic literature review and network analysis. *Employee Responsibilities and Rights Journal*, *34*(3), 267-289.
15. Cao, Y., & Lee, K. (2023). Employee engagement in corporate social responsibility: disentangling the effects of values vs prestige. *Journal of Managerial Psychology*, *38*(6), 449-463.
16. 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.
17. 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.
18. Friedman, M. (1970) The Social Responsibility of Business Is to Increase Its Profits. New York Times Magazine, 13 September 1970, 122-126.
19. Garavan, T., Ullah, I., O'Brien, F., Darcy, C., Wisetsri, W., Afshan, G., & Mughal, Y. H. (2023). Employee perceptions of individual green HRM practices and voluntary green work behaviour: A signalling theory perspective. *Asia Pacific Journal of Human Resources*, *61*(1), 32-56.
20. 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.
21. Hou, H., Gai, R., & An, L. (2023). The impact of environmentally-specific servant leadership on organisational green performance: The mediating role of green creativity. *Frontiers in Psychology*, *13*, 1091025.
22. Jaworski, B. J., & MacInnis, D. J. (1989). Marketing jobs and management controls: toward a framework. *Journal of Marketing Research*, *26*(4), 406-419.
23. 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).
24. Jember, P. N., Prasetiyaningtiyas, S., Endhiarto, T., & Muhsyi, A. (2023). The Empirical Testing of Organisational Citizenship Behaviour (OCB) with Anticedent Servant Leadership, Emotional Intelligence and Organisational Commitment.
25. Khatoon, A., Khan, N. A., Parvin, F., Wahid, M. S., Jamal, M. T., & Azhar, S. (2022). Green HRM: Pathway towards environmental sustainability using AHP and FAHP in a nascent parsimony. *International Journal of Manpower*, *43*(3), 805-826.
26. McNabb, S. K. (2020). *Servant leadership and job satisfaction as moderated by workplace spirituality* (Doctoral dissertation, Walden University).
27. 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.
28. Muisyo, P., Su, Q., Ho, T. H., Julius, M. M., & Usmani, M. S. (2022). Implications of green HRM on the firm's green competitive advantage: the mediating role of enablers of green culture. *Journal of Manufacturing Technology Management*, *33*(2), 308-333.
29. Omarova, L., & Jo, S. J. (2022). Employee pro-environmental behaviour: The impact of environmental transformational leadership and GHRM. *Sustainability*, *14*(4), 2046.
30. Ones, D. S., Wiernik, B. M., Dilchert, S., & Klein, R. M. (2018). Multiple domains and categories of employee green behaviours: More than conservation. In *Research handbook on employee pro-environmental behaviour* (pp. 13-38). Edward Elgar Publishing.
31. Osolase, E. H. (2022). Explaining the Concept of Green Human Resource Management Practices through Theoretical Perspectives: AMO and Stakeholder Theories. Academia Letters. *Academia Letters*, 2.
32. Patwary, A. K., Mohd Yusof, M. F., Bah Simpong, D., Ab Ghaffar, S. F., & Rahman, M. K. (2023). Examining proactive pro-environmental behaviour through green inclusive leadership and green human resource management: an empirical investigation among Malaysian hotel employees. *Journal of Hospitality and Tourism Insights*, *6*(5), 2012-2029.
33. Rice, D. L. (2020). *A phenomenological study on the impact of servant leadership for establishing a culture of high performance as perceived by high school principals* (Doctoral dissertation, Brandman University).

34. Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse researcher*, *25*(4), 41-49.
35. 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*.
36. Shoaib, M., Nawal, A., Zámečník, R., Korsakienė, R., & Rehman, A. U. (2022). Go green! Measuring the factors that influence sustainable performance. *Journal of Cleaner Production*, *366*, 132959.
37. Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management (IJARM)*, *5*.
38. Tandon, A., Dhir, A., Madan, P., Srivastava, S., & Nicolau, J. L. (2023). Green and non-green outcomes of green human resource management (GHRM) in the tourism context. *Tourism Management*, *98*, 104765.
39. Tang, G., Ren, S., Wang, M., Li, Y., & Zhang, S. (2023). Employee green behaviour: A review and recommendations for future research. *International Journal of Management Reviews*, *25*(2), 297-317.
40. 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.
41. Visamitanan, K., & Assarut, N. (2021). Impact of green supply chain management practices on employee engagement and organisational commitment: mediating role of firm performance. *Global Business Review*, 09721509211018569.
42. Xiao, C., & Hong, D. (2010). Gender differences in environmental behaviors in China. *Population and Environment*, *32*, 88-104.
43. Xie, S., Gong, Y., Zhang, A., Liu, Y., & Li, C. (2024). Untangling the critical success factors of the latest compulsory waste sorting initiative in Shanghai: The role of accountability governance. *Journal of Cleaner Production*, 141268.
44. 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.
45. Zhu, G. (2024, January). Digital transformation and enterprise green dual innovation——Empirical evidence based on text analysis methods. In *Proceedings of the 2024 Guangdong-Hong Kong-Macao Greater Bay Area International Conference on Digital Economy and Artificial Intelligence* (pp. 587-592).

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