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RESEARCH ARTICLE

Enhancing construction excellence: The role of Green Human Resource Management (GHRM) in organizational performance

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ABSTRACT - Integrating environmental management practices is crucial for mitigating the construction industry's environmental impact. Environmental management in the construction industry involves implementing practices and policies designed to reduce the environmental impact of construction activities. Green Human Resource Management (GHRM) is important in ensuring that environmental management practices are effectively implemented and maintained. The studies exploring the connection between organizational performance and GHRM, especially among construction organizations, are still underutilized. Therefore, this study will investigate the construct of GHRM and analyze the relationship between GHRM's construct and organizational performance among construction companies focused in Pahang State, Malaysia. The quantitative research method was utilized, and SPSS ver.23 and Smart PLS 4.0 software were applied to test the measurement and structural models of this study. The findings revealed that green recruitment and selection, green training and development, green performance management, and green reward and compensation are positively associated with organizational performance. The findings of this study also reveal that the respondents were aware of the significance of GHRM practices, however, their level of understanding of the issues was constructed through experience, and not based on any framework, standards, or other formal instruction/documentation.

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1. INTRODUCTION

In today's world, organizations that effectively integrate environmental considerations into their operations can achieve long-term success, resilience, and positive societal impact. The study of environmental management and organizational performance is crucial where sustainable practices are not just ethical imperatives but also strategic necessities (Anwar et al., 2021). Organizations increasingly realize that environmental management is not merely an ethical obligation but a strategic imperative (Tahir et al., 2021). The construction industry is one of the largest consumers of natural resources and a significant contributor to environmental pollution. According to the United National Environmental Programme (UNEP) Report, construction activities are accountable for the largest emitter of greenhouse gases, responsible for at least 37% of the global emissions (UNEP, 2022). This harmful activity is due to operations during the construction process which 18% of these emissions are caused by transporting and processing construction materials. Protecting the environment in the construction industry is imperative for conserving resources, reducing pollution, mitigating climate change, preserving biodiversity, complying with regulations, ensuring health and safety, achieving economic benefits, and promoting long-term sustainability (Amjad et al., 2021). By adopting sustainable practices and prioritizing environmental protection, the construction industry can play a vital role in building a sustainable future while maintaining its economic viability and social responsibility. Thereby, many organizations have taken green initiatives as an approach to establish harmless daily operation towards the environment.

The integration of environmental management practices has become crucial in mitigating the construction industry's impact on the environment. Environmental management in the construction industry involves the implementation of practices and policies designed to reduce the environmental impact of construction activities (Rehman et al., 2021). The efficient use of resources, waste management, pollution control, and sustainable design are generally included in environmental management practices in the construction industry. According to Ahmad et. al. (2022), environmental management practices are the level of resources invested in activities and the development of knowledge that resulted in the reduction of pollution at its source. These includes the adoption of the environmental management systems (EMS) such as ISO 14001, the application of environment-friendly programs, and green practices like the 3R (reduce, reuse, and recycle). Environmental management practices at the organizational level need to be adapted and integrated according to the organizational system to ensure that these practices are widely implemented in the construction industry. Therefore, this realization has given rise to Green Human Resource Management (GHRM), a practice that integrates environmental management into human resource policies and procedures to foster a culture of sustainability.

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The effectiveness of any strategic measure is dependent on the availability and capability of its people. GHRM can be defined as green initiatives within conventional human resource management that contribute to an organizational competitive edge and subsequently lead to the success of an organization. GHRM is considered very crucial as its human resource practices may help organizations improve environmental performance and indirectly achieve sustainable development (Shafie et al., 2020; P. Mishra, 2017). In the context of the construction industry, GHRM plays an important role in ensuring that environmental management practices are effectively implemented and maintained. GHRM plays a pivotal role in aligning human resource policies and practices with an organization's environmental goals. By incorporating environmental management into human resource policies and practices, GHRM promotes eco-friendly behaviors, enhances financial and operational performance, and strengthens organizational reputation (Singh et al, 2019). Aside from that, prior research has demonstrated that GHRM practices have a major impact on both the organizational and individual levels. By connecting people with environmental sustainability, GHRM facilitates the development of connections between the technically and managerially highly skilled employees and the employees that currently exist (Karakasnaki, 2024). Effective implementation of GHRM also can aid in developing the employee's green skills and knowledge, which will, in turn, increase employees' organizational commitment (Shoaib et al., 2021; M. Memon et al., 2022). Thus, a study on GHRM can suggest strategic measures for building the capability of employees and creating a supportive culture that facilitates adopting pro-environmental behavior.

The increasingly pivotal role of GHRM practices in ensuring pro-environmental behavior among employees and likely to achieve organizational goals has contributed to increasing the interest of researchers in GHRM practice (Dumont et al., 2017; Pham et al., 2019; Yu et al., 2020; Saaed et al., 2021; Aboramadan et al., 2021). Despite the surge in research interest in GHRM practices, the adoption of GHRM, particularly in the Malaysian construction industry, is still doubtful. Compared to other industry sectors, studies exploring the connection between organizational performance and GHRM, especially among construction organizations, are still underutilized (Mukherji & Bhatnagar, 2022). Apart from that, the concept of GHRM is still a new and emerging approach to improving organizational performance effectiveness and efficiency via strategic and sustainable human resources (Ahmad & Dogar, 2021). Since the GHRM encompasses both macro perspectives, which examine how human resource activities contribute to achieving sustainable outcomes, and meso or micro-level insights that focus on making human resource activities a more sustainable practice, there are a variety of definitions and methods employed in GHRM (Macke & Genari, 2019; Richards, 2020; Ahmad and Dogar, 2021; Siddique et al. 2024). Thus, this indicates the transition to GHRM is not straightforward and is marked by complexities.

This study will explore the construct of GHRM and analyze the relationship between GHRM's construct and organizational performance among construction companies focused in Pahang State, Malaysia. The development of the construction industry in Pahang has undergone significant transformation over the decades, driven by economic development, urbanization, and government initiatives. The future of the industry looks promising, with ongoing projects and a focus on sustainable practices set to shape its trajectory. Therefore, by addressing the research gap, this study could provide invaluable insights for construction companies in Pahang striving to integrate sustainable practices effectively within their operational frameworks. This study addresses two key research questions:

1. What are the GHRM's construct in determining organizational performance?
2. What is the relationship between GHRM's construct and organizational performance in construction companies?

To answer these questions, this study employed grounded theoretical approaches with a quantitative research design, allowing for a questionnaire survey process. Moreover, the use of Smart PLS4 for data analysis calls for more robust statistical methods in GHRM studies. This approach provides enhanced accuracy and reliability, contributing new insights into the dynamic field of GHRM.

2. LITERATURE REVIEW

2.1 Theoretical Background – Institutional Theory

Institutional theory focuses on the influence of societal norms, values, and regulations on organizational behavior. It posits that organizations are not isolated entities but are embedded in broader social, cultural, and regulatory environments that shape their practices and structures (Qiu et al., 2023). According to institutional theory, organizations adopt certain practices not only for economic efficiency but also to gain legitimacy, conform to social expectations, and adhere to regulatory requirements. The context of GHRM adoption is mostly examined from an institutional theory's point of view. Anlesinya et al. (2023) claimed that an institutional theory emerges as a fundamental theme, indicating that the institutional theory incorporates a comprehensive analysis of how societal factors interact with organizational dynamics in adopting GHRM (McRorie, 2019; Hensher, 2023). This theory realizes the environmental goals through GHRM adoption and equips a practical framework to interpret GHRM and its respective environmental outcomes to improve organizational performance (Anwar et al, 2020; Siddique et al. 2024). Hence, it is a feasible theory that interprets green approaches and comprehends a comprehensive lens through which to understand the adoption and implementation of GHRM practices.

2.2 Construction Excellence

Construction excellence refers to the pursuit of superior performance and continuous improvement in the construction industry through the integration of best practices, innovation, stakeholder collaboration, and effective project management. It encompasses not only the delivery of high-quality infrastructure but also the optimization of cost, time, safety, and sustainability. Recent studies have emphasized the critical role of digital technologies, lean construction methods, and stakeholder engagement in enhancing project outcomes and fostering long-term value creation (Alaloul et al., 2021; Ibrahim et al., 2023). Furthermore, organizational culture and leadership commitment are identified as essential enablers of construction excellence, particularly in complex and large-scale projects (Sweis et al., 2022). Industry insights further reinforce the importance of cultivating a culture of continuous improvement, where innovation, learning, and proactive problem-solving are embedded into daily practices to drive consistent project success (Weyandt, 2024). As the construction industry navigates challenges such as climate change, urbanization, and technological disruption, the adoption of construction excellence frameworks becomes increasingly vital for achieving resilience and competitiveness.

2.3 Organizational Performance

Organizational performance is defined as the ability of an organization to achieve its objectives and mission and maximize results as much as possible. Past researchers claim that organizational performance is a critical indicator of a company's success, reflecting its efficiency, productivity, and ability to achieve its goals (Valmohammadi, 2011; Fadol et al., 2015; Al Hammadi, and Hussain, 2019). The indicators encompass a wide range of factors, including financial outcomes, operational efficiency, market position, and employee satisfaction. Business capacity to meet objectives in the context of constant change is also known as organizational performance in the modern workforce. Expanding market share, increasing profits, and improving competitiveness is the goal of organizational performance in a company (Oyemomi et al., 2019). The company need to measure organizational performance because it assesses the ability of how work is completed and the focus given in areas that need improvement. Making a strategic plan, providing and providing feedback on the quality of the processes carried out in the organization, and giving an assessment of the achievement of the organization's goals can help in performance measurement (Alrowwad et al., 2017).

However, over the years, organizational performance measurement has become an increasingly challenging activity. There is a variety of different ways to measure organizational performance and there is no generally accepted method of comprehensively measuring such a thing. In a study by Fadol et al. (2015), each method provides only a partial, skewed vision of organizational performance. Moreover, since different parts of the organization may perform differently, it is suggested that the organization incorporate three perspectives of performance (internal business, learning and growth, and customer perspectives) which balance different aspects of organizational performance and hence depict it more comprehensively. Aside from that, prior studies concur that since human resource management affects employee productivity and behavior, it is thought to be the most important component in determining the success of organizational performance (Anwar, 2017). Stated differently, ensuring that the methods and techniques of human resource management are vitally important to the success of the organization. Research has demonstrated that all aspects of human resource management contribute positively to income, development, and the overall influence of the organization.

2.4 Green Human Resource Management (GHRM)

The notion behind GHRM revolves around the role of HRM-related aspects in successful environmental management. Generally, the concept of GHRM refers to the use of employees and employee-relevant aspects of a business to promote sustainable practices in the environment by increasing awareness and commitment amongst employees regarding issues of environmental sustainability (Renwick et al., 2013; Bahuguna et al.,2022). Such initiatives involve adopting effective environmentally friendly human resource practices which, amongst others, result in higher efficiency, greater cost reductions, and increased employee retention and engagement. Nowadays, with growing global concern around, the effects of business operations on the environment, the number of organizations that are venturing into GHRM is increasing considerably (Mishra, 2017; Mehrajunnisa et al., 2022; Siddique et al., 2024; Karakasnaki, 2024). A study by Mukherji et al. (2021), examined the connection of GHRM to the sustainability literature, based on a review of 38 recent empirical studies on GHRM.

The study found support in the literature for the impact of environmental human resource initiatives on building long-term capabilities and improving firm-specific social outcomes. In addition, the study showed that the different perspectives used in conceptualizing GHRM reveal the different implications for organizational and environmental sustainability that underlie the growing recognition of GHRM as an important tool for organizations to demonstrate their commitment as responsible actors in the socioeconomic system. As GHRM is a fundamental initiative that has a significant association with environmental performance as well as a strong relationship with business performance (Ghouri et al., 2020), there are a few elements mainly focused on GHRM practices. In the context of this study, the elements that integrate into the GHRM practices are green recruitment and selection, green training and development, green performance management, and green rewards and compensation. Figure 1 shows the conceptual framework of this study.

2.4.1 Green recruitment and selection

Recruitment is one of the important parts of the human resources activity because it focuses on locating or hiring people who fit the job specifications. Meanwhile, the selection process means choosing a suitable person to fill the position in a company. The people selected for the job are determined based on equality with the job offered and also the values of the organization (Renwick et al., 2013). Green recruitment and selection cover the assessment of candidates' comprehension principle and awareness towards the environment as well as focus on selecting candidates of high environmental concerns. An organization with a strategic recruitment procedure especially for construction companies will lead towards a constructive organizational culture, thus navigating towards organizational goal accomplishment (Shafaei et al., 2020; Zaid et al., 2018). Therefore, the following hypothesis is developed:

H1: Green recruitment and selection positively affect the organizational performance

2.4.2 Green training and development

The growth of an individual's actions, knowledge, abilities, and attitudes necessary to carry out a job or assigned mission effectively is included in training and development. According to Subramaniam et al., (2018), training and development programs can be obtained through an employee's efficient management and skills. In addition, retaining and producing talented people is the foundation of success in an organization. Training is also a continuous string of investments and is not a one-time thing because training must be done continuously until it becomes a set standard. In producing skilled workers, consistent training is necessary to maintain high skills, especially in a dynamic workplace and an ever-changing work area. Green training and development are crucial to integrating environmental management into organizational human resource management since it can develop environmental awareness and enforce green practices among employees Jabbour, 2013; Yusliza et al., 2019; Anwar et al., 2021; Siddique et al., 2024). A systematic process in organizational development through training and development is to implement organizational change but with the same goal of improving performance. Based on the literature discussed above, the following hypothesis is developed:

H2: Green training and development positively affect the organizational performance

2.4.3 Green performance management

Green performance management encompasses employee's performance evaluation that includes their environmental management responsibilities, environmental assessment and organizational guidelines (Nejati et al., 2017). Organizations that are moving forward sustainability should incorporate the environmental management objectives into employees' performance. This initiative will allow the employees to regularly receive feedbacks on their green performance towards achieving the environmental objectives (Arulrajah et al, 2015; Jackson et al, 2021). Therefore, the following hypothesis is developed:

H3: Green performance management positively affects the organizational performance

2.4.4 Green rewards and compensation

Having an incentive management system will essentially inspire the workforce towards environmental objectives and encourage employees' behavioral changes. Green rewards and compensation should be proposed for employees based on the outcome of their green practice as to motivate employees' pro-environmental behaviour (Aboramadan et al., 2022). According to Zoogah (2021), employees' pro-environmental behaviours are promoted by the GHRM practice and it will constructively influence the environmental performance and likely to the overall organizational performance.

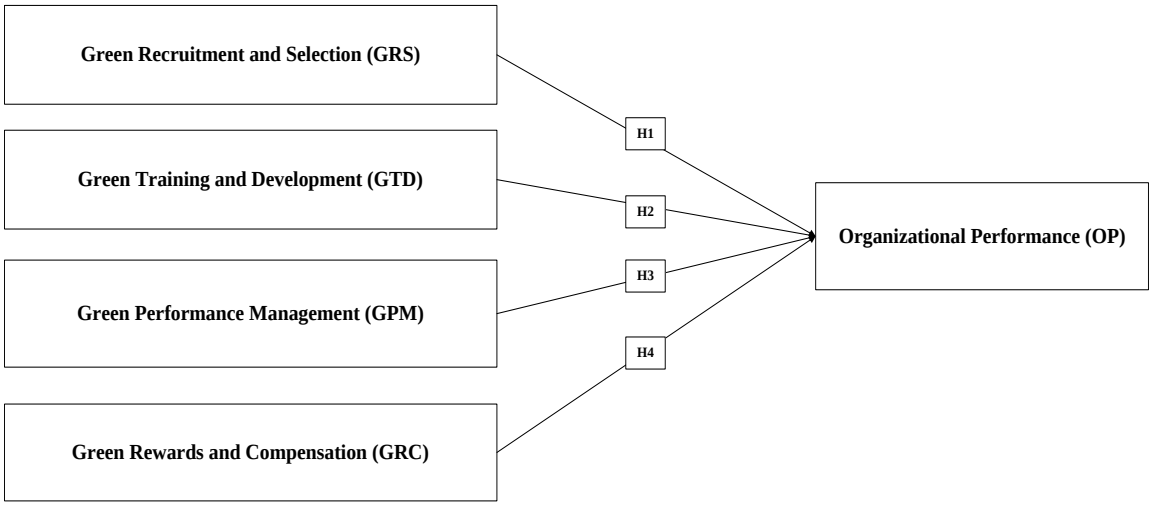

Figure 1. Research conceptual framework

Considering the elements of green rewards and compensation in achieving the organizational success as mentioned above, the following hypotheses are formulated:

H4: Green rewards and compensation positively affect the organizational performance

The conceptual framework depicted in Figure 1 of this study is based on Institutional Theory, which suggests that the context of GHRM adoption can enhance organizational performance.

3. METHODOLOGY

This cross-sectional study applied a quantitative design, and the measurements for each construct were adapted and adopted from several recent works of literature on GHRM and organizational performance, as depicted in Table 1. Data were collected by using a set of closed-ended questionnaires to indicate the effect of GHRM constructs on organizational performance among construction companies. The survey questionnaires were primarily based on the Likert scale of five ordinal measures from one (1) to five (5) according to the level of importance. The questionnaire was comprised of three sections and assessed the respondents' background, the GHRM construct which was adapted from Kim et al. (2017), and the attributes of organizational performance was adopted from Anwar et al. (2021).

Table 1. Measurement development

Variables	Construct	References
Green Human Resource Management (GHRM)	Green Recruitment and Selection	Kim et al. (2017)
	Green Training and Development	Kim et al. (2017)
	Green Performance Management	Kim et al. (2017)
	Green Reward and Compensation	Kim et al. (2017)
Organizational Performance		Anwar et al. (2021)

This study adopts the non- probability sampling technique as the target population will be the specific respondents from a population. Random Sampling is adopted as the sampling method. The targeted respondents in this study are the construction companies that are registered as G1 in Pahang State. According to the official data from the Malaysia Contractor Portal (MCP), there were 2503 of the total population of G1's construction companies registered in Pahang State. By using G*Power software version 3.1, the minimum 100 samples size were used in this study. The unit analysis is the organization, specifically the employees from the groups of the management level who have directly or indirectly involved in the decision-making process. The targeted groups at the management level also can provide insight into this matter and answer the research questions of the current study.

The pilot test was conducted for content validity, reliability, and brevity. Face-to-face interviews were used to get fast and clear feedback from the respondents during the pre-testing phase, and six respondents were selected which come from academicians and practitioners that well-versed in the construction industry. The results of the pilot test provide an overall satisfactory depiction of the questionnaires. The majority of the participants found the survey questions clear and easy to respond. Nevertheless, a few changes are required in some of the questions, and after modifications, the survey questions were finalized. All data were collected, firstly using SPSS Version 23 software that used to analyze the descriptive statistics. Secondly, the Smart PLS 3.0 software was used for testing the goodness of the model and hypothesis testing.

4. RESULTS AND DISCUSSION

Out of the 200 distributed questionnaires, 102 questionnaires were returned indicating a response rate of 52%. Table 2 shows the demographic information of the respondents. The number of female respondents was higher than male respondents, with 58 female respondents (56.3%) and 44 male respondents (42.7%). Most of the respondents held a degree or professional qualification (60.2%), followed by a high school and postgraduate (16 or 15.5%). In terms of years of experience in the construction sector, 61 (58.3%) of them have less than five years of experience. Meanwhile, 26 respondents, or 25.2% have 6 to 9 years of work experience (34.25%) and the other 15 respondents have more than 10 years of experience (14.6%). Most of the respondents work as project managers (44 or 36.0%), followed by supervisors (37 or 25.8%), (9 or 12.16%) and lastly, CEO/Director of the organization (4 or 3.9%). With regards to the type of organizations, most of the respondents came from industrial (42 or 40.8%). Secondly from commercial (20 or 19.4%) and building (non-housing) (15 or 14.6%). Lastly, regarding the years of the company in the construction sector, most of the organizations have less than 5 years in the construction industry (49 or 46.6), then 36 (35.0%) have 5 to 20 years of experience and lastly, 17 respondents or 16.5% came from the company who have experienced more than 20 years.

Structural equation modeling (SEM) was used for data analyses and Smart PLS Version 3.0 software was chosen mainly due to its ability to model the latent constructs both formatively and reflectively (Sarstedt, Ringle, & Hair, 2018). The measurement model was first assessed, and this was followed by the assessment of the structural model. In assessing the measurement model, it is important to test the reliability, convergent validity, and discriminant validity of the measuring items. The convergent validity was assessed by considering the factor loadings, average variance extracted (AVE), and composite reliability (CR) Hair, Babin, & Krey, (2017). Table 3 indicates the details of convergent validity. The cut-off value for outer loadings is must be higher than 0.50, AVE values are more than 0.50, and CR values are above 0.70 (Hair Jr., Matthews, Matthews, & Sarstedt, 2017; Hair, Hollingsworth, Randolph, & Chong, 2017). The assessment

of the measurement model shows that the outer loadings ranged from 0.648 to 0.871, AVE is 0.534 to 0.745 and CR is 0.767 to 0.854 values. The items for GRC3 were removed because the item had not surpassed the cut-off value.

Table 2. Demographic profile of respondents

Demographic variables	Category	Respondents (N = 102)	
		Frequency	Percentage (%)
Gender	Male	44	42.7
	Female	58	56.3
Academic qualification	High school or below	16	15.5
	Diploma	8	7.8
	Degree or professional qualification	62	60.2
	Postgraduate	16	15.5
Years of experience	<5 years	61	58.3
	6 –9 years	26	25.2
	>10 years	15	14.6
Job position	CEO/Director	4	3.9
	Senior Manager	17	14.3
	Project Manager	44	25.8
	Supervisor	37	36.0
Type of organization	Building (Non-Housing)	15	14.6
	Commercial	20	19.4
	Housing	16	15.5
	Industrial	42	40.8
	Mechanical	9	7.8
Years of Company	<5 years	49	46.6
	5-20 years	36	35.0
	>20 years	17	16.5

Table 3. Convergent Validity

Constructs	Items	Outer Loadings	Average Variance Extracted (AVE)	Composite Reliability (CR)
Green Recruitment and Selection (GRS)	GRS1	0.732	0.645	0.809
	GRS2	0.787		
	GRS3	0.775		
Green Training and Development (GTD)	GTD1	0.740	0.534	0.820
	GTD2	0.684		
	GTD3	0.732		
Green Performance Management (GPM)	GPM1	0.783	0.628	0.835
	GPM2	0.824		
	GPM3	0.769		
Green Reward and Compensation (GRC)	GRC1	0.871	0.745	0.854
	GRC2	0.855		
Organizational Performance	OP1	0.740	0.588	0.767
	OP2	0.763		
	OP3	0.732		
	OP4	0.763		

Table 4 indicates the results of the structural model in this study. The results revealed that the GHRM constructs which were green recruitment and selection, green training and development, green performance management, and green reward and compensation positively affected organizational performance. Chin, Jin Kim, & Lee, (2013) and Hayes & Preacher, (2014) suggested PLS bootstrapping based on 5000 bootstrap samples to derive a 95 percent bias-corrected confidence interval are applicable to test the hypotheses. All the standardized beta values relating to the independent variable and dependent variables are significant at p value < 0.05 (t > 1.650) with non-zero confidence intervals. This study also

utilized the R-squared (R2) of regression analysis to determine how well the data collected fit with the regression model. The R^2 values for all endogenous latent variables in the structural model. The R^2 values for green performance management was 0.378 or 37.8%, and green training and development was 55.2%, indicates medium effect towards organizational performance. Meanwhile, green recruitment and selection, and green rewards and compensation indicates the substantial effects towards organizational performance with R^2 value 64.8% and 78.0%.

Table 4. Summary of hypotheses testing of structural model

Hypotheses	Path	Standard Beta	t-value	R^2	Q^2	Supported
H1	GRS → OP	0.036	15.335	0.648	0.433	Yes
H2	GTD → OP	0.042	8.988	0.552	0.495	Yes
H3	GPM → OP	0.022	7.863	0.378	0.492	Yes
H4	GRC → OP	0.031	21.033	0.780	0.500	Yes

Besides, blindfolding was applied to ensure the predictive relevance Q^2 of the model. The Q^2 shows the ability of a model to predict endogenous variables. The results were extracted through the cross-validated redundancy and the model has a predictive relevance if the Q^2 values in all the endogenous variables are more than zero. The Q^2 values of 0.02, 0.15, and 0.35 signify small, medium, and large predictive relevance of certain latent variables (Hair et al., 2017). Referring to Table 4 shows that all GHRM constructs had large relevancy towards organizational performance.

This research aimed to assess this study about the impact of GHRM on organizational performance in construction companies. The previous research has indicated that there is a positive link between GHRM practices and organizational performance. Based on an intensive study of the literature review, the study hypothesized that the following GHRM practices; green recruitment and selection, green training and development, green performance management, and green reward and compensation, are positively associated with organizational performance. This is shown in Figure 2. The outcomes of this study are theoretically expressed in hypotheses that could provide an important structure and a series of strategies for the construction sector in Pahang District. On testing the first hypothesis considered for the present study, H1: Green recruitment and selection positively affect organizational performance was accepted. Anwar et al. (2021) discussed that selected recruitment and selection is a major practice that enhances profits. Hensher et al (2023) investigated the sustainable human resource practices of high-performance institutions and predicted that selecting and attracting proper employees enhances the productivity of employees, boost the performance of organization and contribute in reducing turnover.

Hypothesis 2: Green training and development positively affects organizational performance was accepted. According to Yong et al (2020) and Yu et al (2020), the most essential employee performance factor is training. Training is essential to develop the employee's capabilities. The employees who have much of the experience of the job have better performance because there is an increase in both the competencies and skills because of much experience in the job. Organizational performance depends on the performance of employees because the human resource capital of an organization plays an essential part in the development and performance of the organization especially in achieving environmental objectives. These outcomes also show that if an organization focuses on making its activities greener, skillful employees are mandatory, requiring training at all levels and emphasizing green thinking. Hence, a pro-environmental method by HR professionals is required to hire talent that is ecologically aware.

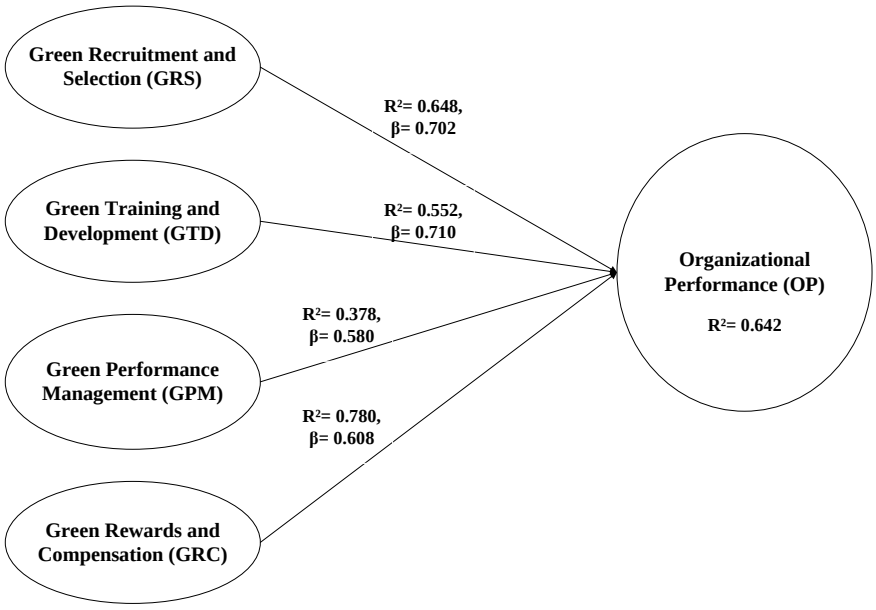

Figure 2. Results of model testing

For hypothesis 3: Green performance management positively affects organizational performance was also supported. This finding is in line with the study findings of Mishra (2017) who stated that green performance management is regarded as a critical predictor for improving organizational performance. According to Saaed et al (2022) managing a sustainable performance has an essential influence on the overall performance of the organization as well as the team. Lastly, hypothesis 4: Green rewards and compensation positively affect organizational performance was accepted. This finding is in line with the literature reviewed such as Zhang et al (2023), Yusliza et al (2020), and Arumugam, et al. (2011), who found that rewards and incentive practices are positively related to organizational performance. Apart from that, there is a strong correlation between incentives and promotion systems and organizational performance level (Anwar, 2017: Anwar et al., 2021). These practices will allow the most committed employees towards environmental management that can inspire them towards green performance. This will encourage the emergence of green creativity and innovation.

5. CONCLUSION

This study considers GHRM practices in the context of construction companies focused in Pahang State by providing insights into investigating the GHRM constructs as the important drivers of increasing organizational performance. The results obtained from this study as the empirical testing of the conceptual framework indicate significant positive relationship between independent and dependent variables. Overall, the hypothesis of this study shows that the green recruitment and selection, green training and development, green performance management, and green reward and compensation, are positively associated with organizational performance. The findings of this study also reveal that the respondents were aware of the significance of GHRM practices, however, their level of understanding of the issues was constructed through experience, and not based on any framework, standards, or other formal instruction/documentation. Apart from that, the respondents agree that by integrating GHRM into construction companies is a critical step towards achieving sustainability and enhancing organizational performance in a competitive and environmentally conscious market.

From the discussion above, this study recognizes a few essential contributions to the theoretical and practical perspectives. Firstly, it advanced the theoretical understanding of institutional theory by empirically validating an amplified conceptual model consisting of constructs of GHRM and organizational performance. Institutional theory provides valuable insights into the adoption and implementation of GHRM practices and their impact on organizational performance. Coercive, mimetic, and normative pressures drive organizations to integrate environmental sustainability into their human resource policies, enhancing both environmental and operational performance. While challenges exist, the benefits of GHRM, including resource efficiency, regulatory compliance, cost savings, employee engagement, and competitive advantage, underscore its importance in achieving organizational sustainability. By leveraging institutional pressures and addressing implementation challenges, organizations can effectively integrate GHRM practices and contribute to a sustainable future.

Apart from that, the practical impacts of GHRM practices are multifaceted, enhancing both environmental sustainability and various dimensions of organizational performance. GHRM practices have a profound and practical impact on organizational performance. By enhancing employee engagement and productivity, reducing operational costs, ensuring regulatory compliance, and improving corporate reputation, GHRM practices contribute significantly to both environmental sustainability and business success. Organizations that effectively implement GHRM can expect to see tangible benefits across multiple dimensions, including financial performance, market competitiveness, and innovation. These practical impacts underscore the importance of integrating environmental management into human resource practices to achieve long-term organizational sustainability and performance.

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AUTHORS CONTRIBUTION

Zarith Sufia Azlan (Conceptualization; Formal analysis; Visualisation; Supervision)

Tuan Hasmira Tuan Hussain (Methodology; Data curation; Writing - original draft; Resources)

AVAILABILITY OF DATA AND MATERIALS

The data supporting this study's findings are available on request from the corresponding author.

ETHICAL STATEMENT

Not applicable.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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