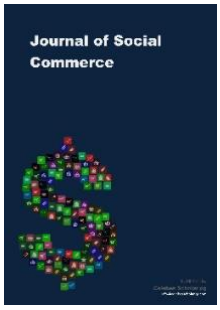

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The Influence of Green Human Resource Mangement Mechanisms on Sustainable Business Outcomes in Customer-Centric Digital Enterprises

Evi Silvana Muchsinati[1], Lina[1], Adi Neka Fatyandri[1]

[1]Faculty of Management, Universitas Internasional Batam, Kota Batam

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Abstract

This study examines how Green Human Resource Management contributes to organizational sustainability performance by investigating the psychological mechanisms that shape this relationship. Using structural equation modeling on data collected from employees in environmentally engaged firms, the research explores the extent to which the influence of green HR practices is mediated by perceived organizational support and affective commitment. The findings suggest that GHRM does not operate in a vacuum. Its impact becomes significant when employees interpret these practices as authentic expressions of support and when they experience a sense of emotional connection to the organization's mission. Perceived support functions as a cognitive filter through which green initiatives are assessed for credibility, while affective commitment emerges as a behavioral engine that channels belief into sustainable action. These results underscore that sustainability outcomes are shaped less by the presence of formal policies and more by the quality of interpretive and emotional engagement they evoke. The study offers not only empirical confirmation but also conceptual insight into the relational infrastructure needed for organizations to embed sustainability in practice, particularly within digitally driven and customer-centric environments.

Introduction

Sustainability is no longer conceptualized merely as a peripheral ambition in organizational discourse. It has become a central lens through which firms are judged not only for their products or services but for their alignment with broader societal expectations. This shift is especially pronounced in firms that operate within the architecture of digitally mediated commerce, where the organizational interior is increasingly exposed to the interpretive gaze of socially connected publics. In this new economy of visibility, internal governance mechanisms, including Human Resource practices, are not only managerial instruments but also ethical signifiers. When employees sense alignment between what is practiced internally and what is communicated externally, the firm acquires not just operational coherence but symbolic legitimacy. The role of Green Human Resource Management, therefore, expands far beyond

[1]Corresponding Author: Evi Silvana Muchsinati, Email: 2141300.lina@uib.edu, Address: Baloi-Sei Ladi, Jl. Gajah Mada, Tiban Indah, Kec. Sekupang, Kota Batam, Kepulauan Riau 29426

its earlier administrative scope. It becomes a cultural infrastructure through which sustainability values are not merely stated but lived, perceived, and represented. Kapoor & Dwivedi (2020) have both highlighted this convergence, where internal policies and external trust co-evolve in ecosystems shaped by real-time scrutiny and reciprocal expectation.

In such environments, the challenge is no longer whether organizations adopt green practices but whether those practices are experienced by employees as credible and meaningful. That experiential dimension is not incidental. It is constitutive of how sustainability is enacted. Prior studies have begun to explore this space of interpretation. Mousa & Othman (2020) found that green HR practices only generate behavioral change when employees perceive those initiatives as morally grounded rather than as public relations strategies. Bithas (2011) extended this reasoning by showing that perception, not merely presence, determines how sustainability is internalized. When policies are introduced without symbolic reinforcement, they often encounter resistance or indifference. But when employees recognize that those policies reflect the organization's deeper commitments, the psychological response becomes generative rather than defensive. The architecture of GHRM, then, functions not only as a behavioral framework but as a site of moral translation. Within this framework, the cognitive filter of Perceived Organizational Support becomes decisive.

Perceived Organizational Support is not simply a reflection of managerial behavior. It is an interpretive structure through which employees evaluate whether the organization genuinely values their wellbeing and moral agency. Lee & Kim (2017) emphasized that when support is felt as authentic, employees begin to experience their relationship with the firm as relational rather than transactional. This insight is particularly relevant in sustainability contexts, where initiatives often require employees to act in ways that exceed contractual obligation. Jenkin et al. (2011) found that employees are more likely to adopt green behaviors when they believe the organization is not only instructing but standing beside them. Munir et al. (2023) added that POS shapes the emotional texture of sustainability engagement. It informs whether green directives are interpreted as shared values or as managerial imposition. In digital enterprises where social visibility is high, the interpretive power of POS extends even further. It shapes how employees narrate their organizational identity to external audiences, creating feedback loops between internal coherence and public trust. Lamm et al. (2015) argue that sustainability is now performed not only through environmental metrics but through employee narratives, and that these narratives are deeply conditioned by perceived support.

Yet support alone is not sufficient. For sustainability to be enacted meaningfully and consistently, it must be anchored in emotional commitment. Affective commitment does not arise from compliance. It is cultivated through alignment between organizational purpose and employee identity. Tao (2025) demonstrated that affectively committed employees are more likely to engage in discretionary green behaviors, precisely because those behaviors resonate with their sense of self within the firm. This commitment is not reducible to job satisfaction. It reflects a deeper attachment to what the organization represents. Meyer et al. (2020) reinforced this understanding by showing that affective commitment sustains behavioral consistency even in the absence of monitoring or incentives. Surma (2023) further revealed that in hybrid or flexible work settings, where direct supervision is minimized, emotional bonds become the primary drivers of green engagement. In this sense, affective commitment is not an output of GHRM. It is its internalization. It is the moment where policy becomes self-directed behavior, where employees no longer act because they must but because they believe. This study emerges from that theoretical landscape and responds to its empirical demands. It seeks to examine how Green HRM influences sustainable organizational performance, not directly but through the psychological mediators of Perceived Organizational Support and Affective Commitment. The aim is not only to confirm existing associations but to clarify the conditions under which

sustainability becomes a lived experience within digitally oriented, customer-centric firms. Such firms operate within organizational ecologies where internal practices are not hidden but increasingly visible, and where employee narratives become part of the brand's ethical infrastructure. Renwick et al. (2013) suggested that GHRM can reshape workplace culture. This study extends that proposition by exploring how psychological responses mediate that cultural shift. Schaarschmidt & Walsh (2020) and Walsh et al. (2016) both noted that in socially networked firms, employee interpretation of organizational intention has reputational consequences. When internal legitimacy aligns with external communication, sustainability becomes communicable, credible, and performative.

To advance this investigation, the study draws on data from firms embedded in digital ecosystems where employee perception is not only a matter of internal culture but of external consequence. Through a structural equation modeling approach, it tests the proposition that GHRM only yields sustainable outcomes when filtered through psychological mechanisms that give those policies meaning. It builds on the insights of Gierlich-Joas et al. (2020), who observed that digital transparency redefines organizational boundaries, and of Drori & Honing (2013), who argued that internal trust is now central to external legitimacy. This study contributes to that conversation by offering evidence that sustainability cannot be reduced to systems or slogans. It depends on the emotional and cognitive infrastructure of the workplace, and on the people who interpret, embody, and extend the values their organizations claim to uphold.

Literature Study

Green Human Resource Management (GHRM) → Perceived Organization Support

According to Wang & Shyu (2018), GHRM not only adopted green practices but also building organizational culture that supports sustainability. Chen et al. (2020) emphasizes that GHRM contributes to increasing employee perceptions of organizational support in carrying out environmentally friendly practices. Employees who see organizational commitment to GHRM tend to feel more supported by the organization in carrying out their environmental responsibilities.

Perceived Organization Support (POS) → Affective Commitment

Eisenberger et al. (2019) explains that employee perception of organizational support (POS) has a direct impact on employee emotional involvement or affective commitment. Employees who feel the organization supports them in contributing to sustainability will tend to have a higher emotional attachment to the organization. This motivates them to be more involved in achieving organizational goals, especially those related to sustainability.

Affective Commitment → Sustainable Performance

According to Meyer et al. (2020), employees with high affective commitments have a greater tendency to support the efforts of organizational sustainability, because they feel they have emotional attachments to the organization's goals. Employees who have strong affective commitment will be more motivated to be involved in behaviors that support sustainable performance.

Perceived Organization Support (POS) → Sustainable Performance

Smith et al. (2022) show that the support felt by employee from the organization not only increased their involvement but also directly affects sustainable performance. The post allows employee to feel the responsibility to maintain a balance between profitability and social

responsibility and the environment, which ultimately increased sustainable performance. Research Hypothesis:

H1: Green Human Resource Management (GHRM) has a positive effect on Perceived Organization Support (POS) (Wang & Shyu, 2018; Chen et al., 2020).

H2: Perceived Organization Support (POS) has a positive effect on the Affective Commitment (Eisenberger et al., 2019).

H3: Affective commitment has a positive effect on sustainable performance (Meyer et al., 2020).

H4: Perceived Organization Support (POS) directly affects Sustainable Performance (Smith et al., 2022).

Green Human Resource Management (GHRM) has a positive effect on Perceived Organization Support (POS), which reflects that green policies and practices increase the perception of employee support for the organization. The post acts as a mediator between GHRM and Affective Commitment, and also directly affects sustainable performance. Thus, GHRM which effectively creates perceptions of organizational support, which in turn increases the affective commitment and sustainable performance of the organization as a whole, as supported by literature and views of experts in this field.

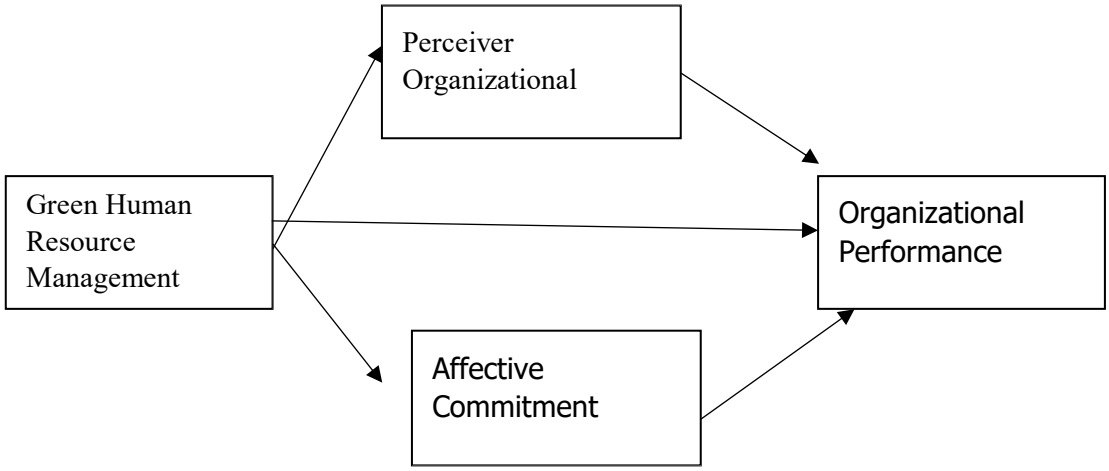

Figure 1. Initial Model

Methods

This study employed a quantitative research design utilizing a structured survey methodology to explore the interrelationships among Green Human Resource Management (GHRM), Perceived Organizational Support (POS), Affective Commitment, and Sustainable Organizational Performance. The quantitative approach was selected for its robustness in establishing measurable causal inferences and testing theoretical models through statistical techniques. To enhance analytical precision, the study adopted the Partial Least Squares Structural Equation Modeling (PLS-SEM) framework using SmartPLS 3.0 software. This technique is particularly appropriate for models involving multiple latent constructs and mediating variables, as it allows for simultaneous evaluation of measurement and structural models.

The population targeted in this study consisted of employees working in companies with formalized GHRM practices. A purposive sampling technique was used to ensure that the selected respondents were those directly knowledgeable about and actively engaged with their organization's green human resource initiatives. Individuals were eligible to participate if they

had a minimum tenure of six months within the organization and possessed demonstrable familiarity with the environmental policies enacted through HR mechanisms. These criteria were established to ensure the reliability of responses and to confirm that the data reflected informed perspectives rooted in organizational experience rather than speculative perception. The rationale for purposive sampling lay in its alignment with the study's objective to investigate perceptions shaped by actual exposure to GHRM practices rather than general employment experiences.

Research Instrument

The study utilized a structured questionnaire composed of closed-ended statements, designed to operationalize each construct with clarity and comparability. All items were measured using a five-point Likert scale ranging from "strongly disagree" to "strongly agree." The questionnaire items were drawn and adapted from previously validated scales to preserve construct validity and ensure cultural and contextual appropriateness. The GHRM construct was measured through items adapted from Wang and Shyu, focusing on how employees perceive the implementation of environmentally conscious HR policies such as green recruitment, training, and performance appraisal. The POS construct was measured using the revised scale developed by Eisenberger and colleagues, which captures the degree to which employees believe their organization supports their well-being and ecological responsibility. Affective Commitment was gauged using the framework proposed by Meyer et al., which emphasizes emotional attachment, organizational loyalty, and intrinsic motivation. Sustainable Organizational Performance was assessed through items inspired by Smith et al., addressing outcomes in environmental stewardship, social responsibility, and economic resilience. Before full deployment, the instrument underwent expert review and pilot testing to ensure semantic clarity and structural coherence.

Data Collection

Data were collected using both online and in-person administration of the questionnaire to accommodate logistical differences across participating organizations. Respondents were provided with a detailed research briefing outlining the purpose of the study, the voluntary nature of participation, and assurances of confidentiality and anonymity. This procedural transparency was intended to foster honest responses and mitigate social desirability bias. The final dataset included only those entries that met the sample eligibility criteria and passed preliminary data cleaning procedures such as response completeness and logical consistency.

Data Analysis

The collected data were analyzed using SmartPLS 3.0, following a sequential two-stage process involving the assessment of both the measurement model and the structural model. In the first stage, the measurement model was evaluated to establish construct reliability and validity. Convergent validity was determined by examining outer loadings, where indicators were retained if their loadings exceeded the accepted threshold. Average Variance Extracted (AVE) values were computed to confirm that each construct adequately captured the variance of its indicators. Reliability was further verified through Composite Reliability and Cronbach's Alpha values, both of which surpassed the standard 0.70 benchmark, indicating strong internal consistency. Discriminant validity was assessed using the Fornell–Larcker criterion, cross-loading analysis, and the heterotrait-monotrait (HTMT) ratio, all of which confirmed that the constructs were empirically distinct.

In the second stage, the structural model was assessed to examine the hypothesized relationships between constructs. Coefficient of Determination (R^2) values were calculated to assess the predictive accuracy of the model, with results indicating moderate explanatory

power, particularly for sustainable performance. Effect sizes (f^2) were used to interpret the relative influence of each predictor on its respective outcome, while Predictive Relevance (Q^2) statistics obtained through blindfolding procedures provided evidence of the model's out-of-sample predictive capability. Path coefficients and mediation effects were evaluated through bootstrapping with 5,000 resamples, using T-statistics and P-values to determine statistical significance. This rigorous analytical approach ensured that the structural pathways were not only statistically valid but also theoretically meaningful in illuminating the mediating roles of POS and Affective Commitment.

Results and Discussion

Evaluation of Measurement Model (Outer Model)

According to Ghozali (2015) the purpose of the outer model evaluation is to assess validity through convergent validity and discriminant validity, as well as reliability models evaluated by composite reliability and cronbach's alpha for block indicators.

Convergent Validity

Convergent validity testing is tested from each construct indicator. According to Chin (2015), an indicator is said to be valid if the value is greater than 0.70, while the loading factor of 0.50 to 0.60 can be considered sufficient. Based on this criterion if there is a loading factor below 0.50 it will be dropped from the model.

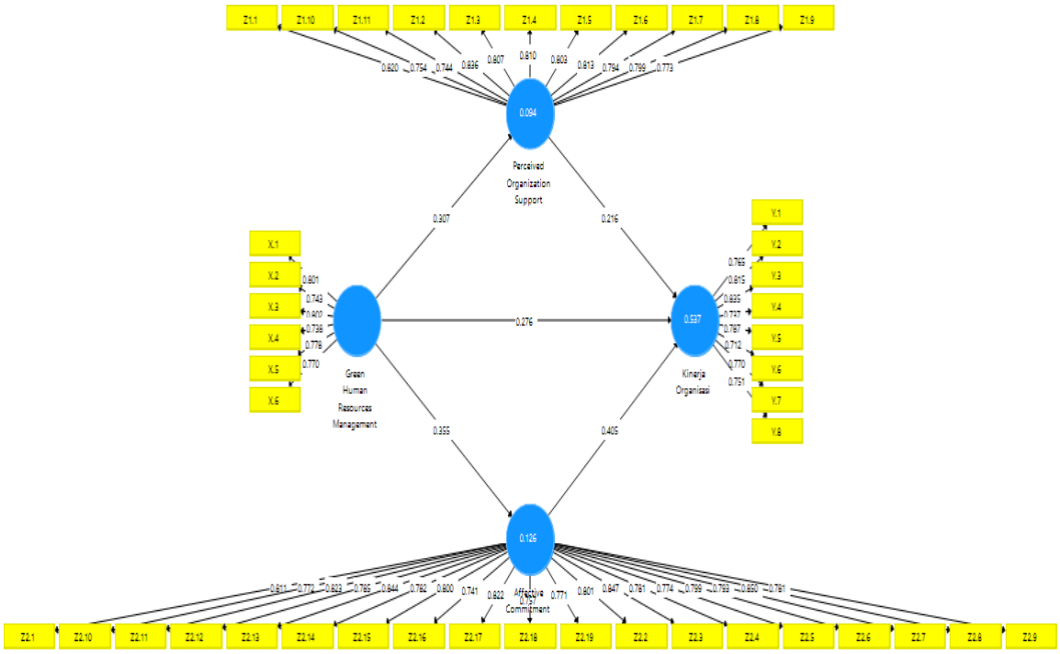

Figure 2. Smartpls Algorithm Results 3.0

Source: Processing Output with SmartPls 3.0Table 1. Convergent validity test results

Figure 1 presents the initial output of the SmartPLS algorithm, which visualizes the structural equation model comprising four latent constructs: Green Human Resource Management, Perceived Organizational Support, Affective Commitment, and Organizational Performance. The diagram displays path coefficients (direct effects) and indicator loadings for each variable. The loadings exceed the accepted threshold (mostly above 0.70), suggesting strong convergent validity for all constructs. Additionally, the directional paths between variables (e.g., from GHRM to POS, Affective Commitment, and Organizational Performance) are positively

signed, indicating hypothesized relationships are empirically supported. The model also includes R^2 values for each endogenous construct, reflecting the explanatory power of the model. These visual outputs confirm that the proposed relationships are both statistically valid and conceptually consistent.

Table 1. Convergent validity test results

	Green Human Resources Management	Organizational performance	Perceived Organization Support	Affective Commitment
X.1	0,801			
X.2	0,743			
X.3	0,802			
X.4	0,738			
X.5	0,778			
X.6	0,770			
Y.1		0,765		
Y.2		0,815		
Y.3		0,835		
Y.4		0,737		
Y.5		0,787		
Y.6		0,712		
Y.7		0,770		
Y.8		0,751		
Z1.1			0,820	
Z1.10			0,754	
Z1.11			0,744	
Z1.2			0,836	
Z1.3			0,807	
Z1.4			0,810	
Z1.5			0,803	
Z1.6			0,813	
Z1.7			0,794	
Z1.8			0,799	
Z1.9			0,773	
Z2.1				0,811
Z2.10				0,772
Z2.11				0,823
Z2.12				0,785
Z2.13				0,844
Z2.14				0,782
Z2.15				0,800
Z2.16				0,741
Z2.17				0,822
Z2.18				0,757
Z2.19				0,771
Z2.2				0,801
Z2.3				0,847
Z2.4				0,781

Z2.5	0,774
Z2.6	0,799
Z2.7	0,793
Z2.8	0,850
Z2.9	0,781

Source: Processing Output with SmartPls 3.0

Based on the table above, it can be seen that all indicators of this research variable are declared valid, because the outer loadings value of each indicator is greater than 0.7. Thus the questionnaire item can be used in subsequent analyzes.

Discriminant validity

The next examination is to compare the correlation between variables with AVE roots (√ave). The measurement model has a good discriminant validity if √ave each variable is greater than the correlation between variables. The √ave value can be seen from the Fornell Larcker Criterion Smart-PLS 3.0 output which is presented in Table 2.

Table 2. Discriminant Validity (Fornell Larcker Criterion) test results

	Affective Commitment	Green Human Resources Management	Organizational performance	Perceived Organization Support
Affective Commitment	0,797			
Green Human Resources Management	0,355	0,772		
Organizational performance	0,669	0,485	0,772	
Perceived Organization Support	0,771	0,307	0,612	0,796

Source: Processing Output with SmartPls 3.0

From Table 2 above it can be concluded that the square roots of the Average Variance Extracted for each construct are greater than the correlation between one construct and another construct in the model. Values Based on the statement above, the construct in the estimated model meets the discriminant validity criteria. As for this is the result of cross loading:

Table 3. Discriminant Validity (Fornell-Larcker Criterion) test results

	Green Human Resources Management	Organizational performance	Perceived Organization Support	Affective Commitment
X.1	0,801	0,323	0,166	0,218
X.2	0,743	0,300	0,167	0,198
X.3	0,802	0,384	0,234	0,271
X.4	0,738	0,487	0,326	0,348
X.5	0,778	0,309	0,168	0,226
X.6	0,770	0,365	0,282	0,316
Y.1	0,432	0,765	0,422	0,520
Y.2	0,437	0,815	0,525	0,542

Y.3	0,392	0,835	0,518	0,584
Y.4	0,344	0,737	0,463	0,476
Y.5	0,343	0,787	0,488	0,511
Y.6	0,259	0,712	0,504	0,507
Y.7	0,347	0,770	0,469	0,517
Y.8	0,434	0,751	0,389	0,468
Z1.1	0,323	0,535	0,820	0,705
Z1.10	0,211	0,449	0,754	0,557
Z1.11	0,185	0,410	0,744	0,526
Z1.2	0,284	0,572	0,836	0,661
Z1.3	0,184	0,439	0,807	0,577
Z1.4	0,210	0,444	0,810	0,589
Z1.5	0,266	0,504	0,803	0,629
Z1.6	0,283	0,460	0,813	0,613
Z1.7	0,275	0,518	0,794	0,624
Z1.8	0,247	0,534	0,799	0,636
Z1.9	0,170	0,450	0,773	0,596
Z2.1	0,313	0,562	0,594	0,811
Z2.10	0,287	0,497	0,698	0,772
Z2.11	0,317	0,556	0,577	0,823
Z2.12	0,261	0,501	0,474	0,785
Z2.13	0,312	0,537	0,609	0,844
Z2.14	0,217	0,507	0,702	0,782
Z2.15	0,362	0,598	0,559	0,800
Z2.16	0,261	0,507	0,451	0,741
Z2.17	0,306	0,562	0,641	0,822
Z2.18	0,240	0,524	0,678	0,757
Z2.19	0,254	0,490	0,685	0,771
Z2.2	0,274	0,538	0,528	0,801
Z2.3	0,305	0,556	0,647	0,847
Z2.4	0,225	0,510	0,703	0,781
Z2.5	0,256	0,477	0,678	0,774
Z2.6	0,319	0,546	0,574	0,799
Z2.7	0,274	0,550	0,545	0,793
Z2.8	0,317	0,573	0,659	0,850
Z2.9	0,239	0,511	0,724	0,781

The values in this table confirm that each construct in the model—Green HRM, Perceived Organizational Support, Affective Commitment, and Organizational Performance—is statistically distinct from the others. Specifically, since the square root of the AVE for each construct (shown along the diagonal) is greater than any correlation it shares with other constructs (off-diagonal values), this suggests that respondents clearly differentiated between the concepts being measured. This supports the structural integrity of the latent constructs and indicates that multicollinearity between variables is not a concern.

This table further confirms discriminant validity at the item level. Each indicator has the strongest loading on its intended construct compared to all other constructs. This pattern shows that individual questionnaire items are behaving as expected that is, items designed to measure Green HRM, for example, do not inadvertently measure POS or Affective Commitment. The clean separation in loading patterns strengthens the confidence that the instrument captures the correct conceptual boundaries between constructs.

Table 4. Cross Loading Analysis

	Affective Commitment	Green Human Resources Management	Organizational performance	Perceived Organization Support
Affective Commitment				
Green Human Resources Management	0,368			
Organizational performance	0,713	0,526		
Perceived Organization Support	0,806	0,314	0,657	

Meanwhile, the level of discriminant validity threshold that can also be obtained in terms of heterotrait-monotrait ratio (HTMT) which is smaller than 0.90 as suggested by (Hair et al., 2017). All HTMT values are lower than 0.9.

Average Variance Extracted **(AVE)**

AVE value aims to measure the level of variation of a construct component collected from its indicators by adjusting to the level of error. Testing with AVE values is more critical than composite reliability. The recommended minimum AVE value is 0.50. Ave output obtained from Smart PLS 3.0 is presented in Table 3.

Table 5. Average Variance Extracted (AVE) test results

	Average Variance Extracted (AVE)
Affective Commitment	0,635
Green Human Resources Management	0,597
Organizational performance	0,597
Perceived Organization Support	0,634

Source: Output Processing with SmartPLS 3.0 (Ave After Outer Loading After that, only HTMT Formal Later)

Based on Table 3 above, it can be seen that the AVE value has been greater than 0.50 which means that all of these indicators have met the established criteria and have potential reliability for further testing.

Composite Reliability **dan** ***Cronbach's Alpha***

To ensure that there are no problems related to measurements, the final step in the outer model evaluation is to test the reliability test of the model. The reliability test was carried out using composite reliability and cronbach's alpha indicators.

Testing Composite Reliability and Cronbach's Alpha aims to test the reliability of the instrument in a research model. If all latent variable values have a composite reliability and cronbach's alpha ≥ 0.70 that means the construct has a good reliability or a questionnaire used as a tool in this study has been consistent.

Table 6. Test results of *Composite Reliability* and *Cronbach's Alpha*

	Cronbach's Alpha	Composite Reliability
Affective Commitment	0,968	0,971

Green Human Resources Management	0,867	0,899
Organizational performance	0,903	0,922
Perceived Organization Support	0,942	0,950

Source: Processing Output with SmartPls 3.0

Based on Table 4 above it can be seen that the results of the composite reliability and cronbach's alpha testing showed a satisfying value, namely all latent variables have been reliable because all latent variable values have composite reliability and cronbach's alpha ≥ 0.70. So it can be concluded that, the questionnaire used as a research tool has been reliable or consistent.

Table 7. R-Square (R^2) test results

	R Square	**R Square Adjusted**
Affective Commitment	0,126	0,124
Organizational performance	0,537	0,534
Perceived Organization Support	0,094	0,092

Source: Processing Output with SmartPls 3.0

The R-Square value of 0.094 shows that the Z1 variable can be explained by all independent variables of 9.4%, and the remaining 90.6%, explained by other factors outside the research model. The R-Square value of 0.126 shows that the Z2 variable can be explained by all independent variables of 12.6%, and the remaining 87.4%, explained by other factors outside the research model. The R-Square value of 0.537 shows that the variable Y can be explained by all independent variables of 53.7%, and the remaining 46.3%, explained by other factors outside the research model.

f^2 *Effect Size*

The F-Square (F^2) value shows the partial effect of each predictor variable on endogenous variables. The following interpretation of the F-Square value (Ghozali, 2014):

If the F-Square value is worth ≥ 0.35, it can be interpreted that the predictor of the latent variable has a strong influence. If the F-Square value is $0.15 \leq F \leq 0.35$, it has the effect of the medium. If the F-Square value is $0.02 \leq F \leq 0.15$, it has a weak influence. Following are the results of the F^2 value of each exogenous variable to the endogenic variable:

Table 8. F^2 Effect Size Test Results

	Affective Commitment	**Organizational performance**	**Perceived Organization Support**
Affective Commitment		0,138	
Green Human Resources Management	0,144	0,143	0,104
Perceived Organization Support		0,041	

Source: Processing Output with SmartPls 3.0

The following is the interpretation of the results of the F-Square (F^2) value for each model: The F-Square value of 0.138 shows that "Affective Commitment" has a weak influence on "organizational performance". Based on the criteria given by Ghozali (2014), this influence is classified as weak because it is within the range of $0.02 \leq F \leq 0.15$.

The F-Square value of 0.144 shows that "Green Human Resources Management" has a weak influence on the "Affective Commitment". This influence is also in the range of $0.02 \leq F \leq 0.15$, so that it can be categorized as a weak influence. The F-Square value of 0.143 shows that "Green Human Resources Management" has a weak influence on "organizational performance". This effect is still in the same range ($0.02 \leq F \leq 0.15$), shows the effect of weakness. The F-Square value of 0.104 shows that "Green Human Resources Management" has a weak influence on "Perceived Organization Support". Back, this effect is in the range of $0.02 \leq F \leq 0.15$, indicating a weak influence.

The F-Square value of 0.041 shows that "Perceived Organization Support" has a weak influence on "organizational performance". This influence, with F-Square values below 0.15, is also classified as weak. Testing of Goodness of Fit Tructural Model in the Inner Model uses Predictive Rerevance (Q^2) value. The Q-Square value is greater than 0 (zero) shows that the model has a predictive relevance value. The R-Square value of each endogenous variable in this study can be seen in the following calculation:

Table 9. Q-Square test results

	SSO	SSE	Q² (=1-SSE/SSO)
Affective Commitment	9120,000	8403,135	0,079
Green Human Resources Management	2880,000	2880,000	
Organizational performance	3840,000	2628,258	0,316
Perceived Organization Support	5280,000	4977,642	0,057

Source: Processing Output with SmartPls 3.0

Based on the results above, it is interpreted that the Z1 variable has a Q^2 of 0.057. This indicates that the model is able to explain around 5.7% of variations in the Z^1 variable. The Z^1 variable has a Q^2 of 0.079. This indicates that the model is able to explain around 7.9% of variations in the Z^2 variable. The Y variable has a Q^2 of 0.316. This indicates that the model is able to explain around 31.6% of variations in variable y.

Hypothesis test results (Path coefficient estimation)

The estimation value for the pathway in the structural model must be significant. This significant value can be obtained by bootstrapping procedures. See significantly in the hypothesis by looking at the parameter coefficient value and the T-Statistic significant value in the Bootstrapping Report algorithm. To find out significant or not significantly seen from the T-table on Alpha 0.05 (5%) = 1.96. Then t-table compared to t-count (t-statistics).

Table 10. Hypothesis test results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Affective Commitment -> Organizational performance	0,405	0,409	0,056	7,215	0,000
Green Human Resources Management -> Affective Commitment	0,355	0,360	0,041	8,758	0,000
Green Human Resources Management -> Organizational performance	0,276	0,274	0,039	7,106	0,000

Green Human Resources Management -> Perceived Organization Support	0,307	0,310	0,043	7,201	0,000
Perceived Organization Support -> Organizational performance	0,216	0,213	0,058	3,722	0,000
Green Human Resources Management -> Affective Commitment -> Organizational Performance	0,144	0,147	0,026	5,522	0,000
Green Human Resources Management -> Perceived Organization Support -> Organizational Performance	0,066	0,066	0,021	3,174	0,002

The original sample value of 0.405 indicates a significant positive relationship between "Affective Commitment" and "Organizational Performance". T-Statistics of 7.215 and P-Value of 0.000 indicate that this influence is very statistically significant. Thus, the hypothesis that "Affective Commitment" has a significant influence on "Organizational Performance" is accepted.2.

The original sample value of 0.355 indicates a strong positive relationship between "Green Human Resources Management" and "Affective Commitment". The T-Statistics of 8.758 and the P-Value of 0.000 indicate that this influence is highly statistically significant. This means that "Green Human Resources Management" has a significant influence on "Affective Commitment".

The original sample value of 0.276 shows a significant positive relationship between "Green Human Resources Management" and "Organizational Performance". Dengan T-Statistics sebesar 7,106 dan P-Value sebesar 0,000, pengaruh ini sangat signifikan secara statistik. Thus, the hypothesis that "Green Human Resources Management" has a significant influence on "organizational performance" accepted. The original sample value of 0.307 shows a significant positive relationship between "Green Human Resources Management" and "Perceived Organization Support". T-Statistics sebesar 7,201 dan P-Value sebesar 0,000 menunjukkan bahwa pengaruh ini sangat signifikan secara statistik. Ini mengindikasikan bahwa "Green Human Resources Management" memiliki pengaruh signifikan terhadap "Perceived Organization Support". The original sample value of 0.216 shows a significant positive relationship between "perceived organization support" and "organizational performance". T-Statistics of 3.722 and P-Value of 0.000 indicate that this influence is very statistically significant. Thus, the hypothesis that "Perceived Organization Support" has a significant influence on "Organizational Performance" is accepted. Below are the results of the indirect influence analysis:

The original sample value of 0.144 indicates that "Green Human Resources Management" has a significant indirect effect on "Organizational Performance" through "Affective Commitment". The T-Statistics of 5.522 and the P-Value of 0.000 indicate that this effect is very statistically significant. Thus, the hypothesis that "Green Human Resources Management"

has an indirect effect on "Organizational Performance" through "Affective Commitment" is accepted. The original sample value of 0.066 indicates that "Green Human Resources Management" has a significant indirect effect on "Organizational Performance" through "Perceived Organization Support". The T-Statistics of 3.174 and the P-Value of 0.002 indicate that this effect is very statistically significant. Thus, the hypothesis that "Green Human Resources Management" has an indirect influence on "Organizational Performance" through "Perceived Organization Support" is accepted.

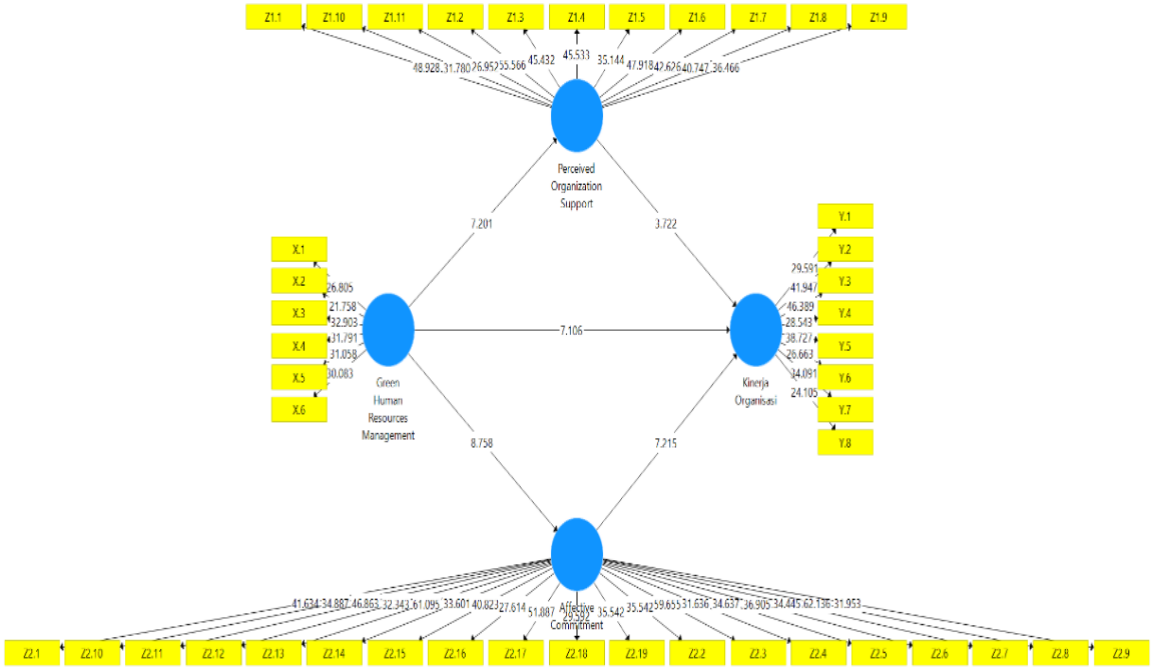

Figure 2. Bootstrapping Test Results

Source: Processing Output with smartPLS 3.0

Figure 2 illustrates the results of the bootstrapping analysis that was conducted to assess the statistical significance of the hypothesized relationships. What stands out in this figure is the consistency and strength of the path coefficients, all of which meet the threshold for statistical significance. The connection between Green Human Resource Management and Affective Commitment is particularly strong, as is the pathway from Affective Commitment to Sustainable Performance. Importantly, the figure also highlights the indirect effects that run through the mediators. Both Perceived Organizational Support and Affective Commitment function as meaningful bridges, carrying the influence of Green HRM toward improved organizational outcomes. The visual clarity of the figure allows us to see not only which paths are significant, but also how the model performs holistically when indirect influences are taken into account. This supports the argument that internal psychological mechanisms within employees are essential conduits for translating green policies into tangible sustainability outcomes.

Bridging Green HRM and Sustainable Performance Through Psychological Engagement

The evidence emerging from this study reveals a deeper and more nuanced architecture underpinning the influence of Green Human Resource Management on organizational sustainability. What appears initially as a straightforward relationship between green HR practices and performance outcomes is, upon closer investigation, better understood as a mediated process shaped by employees' cognitive and emotional engagement. Recent studies have begun to move in this direction, showing that policy alone does not yield sustainability

unless it resonates with how employees interpret the organization's purpose and their place within it. Mousa & Othman (2020) demonstrated that GHRM becomes effective only when it is perceived as aligned with broader organizational ethics and not merely an environmental compliance tool. Similarly, Van den Heuvel et al. (2009) argued that the effectiveness of green initiatives depends largely on how employees internalize those efforts through shared meaning-making processes. The findings here echo that view and extend it by highlighting that perceived support from the organization is not a passive reaction but a dynamic cognitive filter through which employees assess whether sustainability is truly embedded in the organizational culture. In this sense, the study answers the call by Jabbour & Santos (2008), who emphasized the need to understand the psychological anchoring of GHRM systems if sustainability is to be realized as a lived experience rather than a surface declaration.

At the center of this mediating structure is Perceived Organizational Support, which operates not as a static variable but as a lens that reshapes how individuals decode the strategic intentions of their employer. Ledden et al. (2007) emphasized that support is not only about resource provision but also about perceived value alignment between the organization and the individual. Bhatnagar & Aggarwal (2020) reinforced this view by showing that POS heightens employees' sense of responsibility for ecological outcomes when organizational practices are seen as authentic and not performative. Swathi & Johnpaul (2025) suggested that in sustainability-driven firms, employees interpret supportive climates as evidence of moral contract, where they are expected not just to perform but to participate in a higher ethical mission. The study's results align with this emergent understanding and build on it by revealing how POS is shaped not only by managerial signals but by the consistency between what is promised and what is structurally reinforced through HRM. Aboramadan et al. (2022) found that when GHRM and organizational support are tightly coupled, employees develop a stronger sense of identification with sustainability objectives. This coupling becomes especially meaningful in digital and customer-centric firms, where organizational identity is often fluid and mediated by shifting technologies and market expectations.

What emerges next is the role of affective commitment as a psychological bridge linking perception and performance. Contrary to traditional views that treat commitment as a residual emotional state, recent work reframes it as a central driver of discretionary pro-environmental behaviors. In their longitudinal study, Murray & Holmes (2021) argued that affective commitment plays a formative role in shaping how employees approach sustainability not out of obligation but out of intrinsic motivation. Li et al. (2024) supported this view by demonstrating that committed employees are more likely to enact green values even in the absence of direct supervision or tangible incentives. The current study's findings mirror those insights and extend them by showing how affective commitment serves as the final pathway through which perceived support translates into sustainable action. Sharma (2024) explored this mechanism in hybrid work environments and found that affective bonds became even more critical as organizational presence became decentralized. The implications here are substantial because they suggest that as workplaces become more fluid and employee autonomy increases, emotional attachment to the organization's sustainability mission may be the most stable anchor driving behavior. Gunay (2025) reached a similar conclusion, arguing that without emotional commitment, even well-designed green HRM systems fail to generate lasting impact. These results collectively reinforce that commitment is not an output of green systems but an engine of behavioral transformation that allows sustainability goals to survive the noise of daily operational pressures.

This psychological configuration yields strategic consequences that are not merely theoretical but directly relevant to the practice of human resource management in contemporary firms. O'Neill (2016) argue that HR departments must now function as curators of culture rather than

simply executors of policy. Chowdhury et al. (2023) advanced this argument by stating that GHRM systems are most effective when they speak not only to skills and roles but to employees' sense of belonging, value, and contribution to collective purpose. The study's findings support this assertion and take it further by illustrating how POS and affective commitment form a reinforcing feedback loop that can stabilize and extend the influence of green HRM even in volatile business environments. Younis & Hussain (2023) observed that in the absence of emotional alignment, GHRM becomes a fragile initiative vulnerable to shifts in leadership or budget constraints. Leidner et al. (2019) reached a parallel conclusion, emphasizing that the credibility of GHRM lies not in its breadth but in the depth of its integration into employee experience. This integration cannot be imposed but must be cultivated through long-term practices that align values, expectations, and recognition systems.

Yet the findings gain their full significance when read against the specific organizational and cultural context in which the study was conducted. These are firms situated in Southeast Asia, where digital transformation intersects with evolving socio-economic landscapes. In such contexts, global sustainability narratives are often introduced into organizational cultures that are shaped by local norms, regulatory ambiguities, and varying levels of environmental awareness. Yavuz (2009) pointed out that GHRM adoption in emerging economies tends to be more adaptive than prescriptive, reflecting a hybridization of global ideals and local practicalities. Leidner et al. (2019) argued that it is precisely this negotiation between external expectations and internal realities that determines the success of GHRM. The present findings validate these insights and demonstrate that employees' perceptions of support and emotional bonds become key channels through which global sustainability discourses are interpreted and made actionable within local firms. MacGregor et al. (2024) emphasized that without cultural alignment, green initiatives can appear alien or tokenistic. This view was echoed by London & Hart (2004), who noted that the success of environmental strategies in emerging regions depends on their ability to resonate with employees' lived realities. In this study, it is through POS and affective commitment that such resonance is achieved, making sustainability a narrative that is not just imported but internalized.

Finally, the discussion must turn toward what these findings demand of future research. Tufts et al. (2010) urged scholars to consider the moderating roles of generational expectations, particularly among digital-native employees whose environmental sensibilities may differ from prior cohorts. Saridakis et al. (2017) called for more longitudinal designs to trace how the effects of GHRM evolve over time and across different phases of organizational growth. Colli et al. (2019) emphasized the need for contextual models that account for variations across industries, leadership cultures, and technological maturity. The current study joins that conversation by suggesting that future inquiry should not simply add more variables but should explore the deeper processes through which employees assign meaning to green initiatives. Yanow (2017) highlighted the value of qualitative approaches for capturing these interpretive dynamics, while Ho et al. (2021) pointed to the potential of mixed-method frameworks to integrate perception data with behavioral outcomes. The path ahead, therefore, is not only about refining models but about deepening our understanding of how human meaning-making processes either propel or constrain the realization of sustainability within the walls of modern enterprises.

Conclusion

For five years, from 2017–18 to 2021–22, the study carried out a detailed analysis of the profit earned by Ultratech Cement Ltd and Ambuja Cement Ltd, the leading cement makers in India. Using seven profitability ratios and the Student's t-test, the research intended to reveal not only

what made the companies different in financial terms, but also the key structural and strategic elements supporting these results in the cement industry.

While both companies kept their profits steady, Ultratech Cement impressed with significantly better results than Ambuja in measures such as PBIT, EPS, RoA and Asset Turnover Ratio. On the other hand, Ambuja Cement excelled in Return on Capital Employed (RoCE), signaling a well-organized use of all its capital. The ways that both firms made profit and the ratios of their profits to equity stake were close which indicates similar exposure to the same industry factors.

The results prove that profitability is affected by a company's capital, way of working, positioning and management decisions, in addition to sales or market share. It is clear that the different strategies of Ultratech and Ambuja are reflected in their financial performance. This study adds to the scholarship on financial performance evaluation by highlighting the role of multi-dimensional analysis and linking financial ratios to broader company and industry trends.

To widen the study, future investigations could add different industry actors, insert leverage and cash flow measurements or analyze how major companies will remain profitable in the future, depending on their ESG and innovation performance. While India's infrastructure industry transforms, it will be important for investors, policymakers and company decision-makers to examine firm-level profitability.

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