

Green Recruitment and Rewards, Environmental Training, and Pro-Environmental Behavior: Evidence from Conservation Organizations in South Kalimantan

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Abstract

This study investigates the influence of Green Human Resource Management (GHRM) practices namely Green Recruitment and Green Rewards on Pro-Environmental Behavior (PEB), with Environmental Training as a mediating variable, within the Ability-Motivation-Opportunity (AMO) framework. Using a cross-sectional survey of 100 employees from conservation organizations in South Kalimantan, Indonesia, and analyzed through Partial Least Squares Structural Equation Modeling (PLS-SEM), the results demonstrate that both Green Recruitment and Green Rewards significantly enhance Environmental Training, which in turn strongly predicts PEB. Furthermore, Environmental Training partially mediates the relationships between GHRM practices and PEB, emphasizing its central role in operationalizing environmental values into workplace behaviors. The study contributes to the literature by validating the AMO model in a non-corporate, conservation-focused context in the Global South and offers practical insights for sustainability-oriented HR strategies.

Keywords: Green Human Resource Management, Environmental Training, Pro-Environmental Behavior, AMO Theory, Green Recruitment; Green Rewards, Conservation Organizations, Sustainability

INTRODUCTION

Environmental degradation has intensified over recent decades, manifesting in climate change, biodiversity loss, and ecosystem instability. These global challenges demand urgent, collective responses not only from governments and industries but also from organizations as key agents of sustainability transformation. Increasingly, organizations are

expected to embed environmental values into their internal operations, particularly through the transformation of human resource management (HRM) practices (Fawehinmi et al., 2024; Naz et al., 2023)

Green Human Resource Management (GHRM) has thus emerged as a strategic approach to align organizational behavior with ecological objectives. It integrates environmental concerns into core HR functions such as recruitment, training, and rewards, enabling the development of pro-environmental cultures and behaviors within the workforce (Ba & Cao, 2023; Z. Hameed et al., 2022). Through GHRM, organizations can cultivate employees who actively and voluntarily contribute to sustainability initiatives (S. Yu, 2024). This alignment between HRM and environmental priorities not only supports internal policy coherence but also helps build external legitimacy among environmentally conscious stakeholders.

Among the various outcomes of GHRM, pro-environmental behavior (PEB) defined as discretionary, environmentally beneficial actions in the workplace has attracted increasing scholarly attention (Nguyen et al., 2025; Ojo et al., 2022). However, the literature predominantly focuses on corporate and industrial sectors in developed countries or high-growth economies. Research remains limited in ecologically critical and under-resourced sectors, such as conservation organizations in the Global South. In Indonesia, particularly in South Kalimantan's wetland ecosystems, where biodiversity is high and governance is fragmented, the role of GHRM in fostering PEB remains underexplored (Apresian, 2024; Arisanty et al., 2024).

While prior studies have demonstrated the positive effects of green recruitment and green rewards on employee behavior, less is known about the mechanisms through which these practices translate into sustained environmental actions (Iftikar et al., 2022; Zaman et al., 2025). Environmental training emerges as a potentially critical, yet under-theorized, mediating variable. As a developmental intervention, environmental training enhances employees' environmental knowledge, skills, and self-efficacy providing the cognitive foundation necessary to enact sustainable behaviors (Ahuja et al., 2023; Li & Li, 2025).

Theoretically, environmental training reflects the "ability" component in the Ability-Motivation-Opportunity (AMO) framework, where recruitment channels motivation, rewards represent opportunity, and training develops individual ability (W. Yu et al., 2020). Despite this alignment, empirical studies that integrate these three GHRM dimensions into a coherent model especially within conservation settings remain scarce. Some have treated environmental training as a direct predictor (H. Zhang & Sun, 2021) or moderator (Veerasamy et al., 2023), but its mediating role, particularly in resource-constrained contexts like South Kalimantan, has yet to be rigorously tested.

This research addresses that gap by investigating whether environmental training mediates the relationship between green recruitment and rewards on PEB in conservation-focused organizations. It situates this inquiry in the unique institutional context of South Kalimantan, where conservation NGOs and government agencies often face limited budgets, informal HR systems, and complex political dynamics (Azzahra et al., 2025; Rochwulaningsih et al., 2020). These organizations frequently operate in fragile ecological areas with competing land-use interests and community-based governance models. Consequently, HR practices are often informal, fragmented, or reactive rather than strategic or performance-driven. This makes the implementation of coherent GHRM particularly challenging, but potentially even more impactful when successful.

Moreover, conservation organizations in Indonesia tend to rely heavily on intrinsic employee motivation, informal networks, and local wisdom in managing environmental programs. While such contextual assets are valuable, they are rarely institutionalized within formal HRM systems. As Arisanty et al. (2024) note, sustainable outcomes are unlikely to emerge from local knowledge alone unless it is supported by organizational learning structures and capacity development mechanisms. Environmental training can serve as that institutional bridge, translating values into behaviors, and informal commitment into structured capability.

In doing so, this study offers three key contributions:

1. Theoretical contribution: It extends the AMO framework by positioning environmental training as a mediating mechanism between green recruitment/rewards and PEB. This helps uncover the “black box” of how GHRM practices foster employee behavior (Fawehinmi et al., 2024).
2. Contextual contribution: It introduces empirical evidence from a conservation sector in an underrepresented region, providing grounded insight into HR practices in wetland-based ecological management. This is particularly important in the Global South, where organizational capacity for sustainability is shaped by a different set of institutional and socio-political constraints compared to the Global North.
3. Practical contribution: It informs HR and sustainability managers about the critical role of environmental training especially where financial incentives or structured recruitment are not fully developed. Training serves not only to transmit technical skills but also to embed environmental values and norms, supporting long-term behavioral change in frontline conservation work.

This study aims to examine:

- The direct effects of green recruitment and green rewards on pro-environmental behavior.

- The mediating role of environmental training in these relationships.
- The applicability of the AMO framework in conservation-specific, non-corporate settings.

The research is guided by the following questions:

1. To what extent do green recruitment and green rewards influence pro-environmental behavior among employees in conservation organizations?
2. Does environmental training mediate the relationship between green recruitment/rewards and pro-environmental behavior?
3. How do these dynamics manifest in the organizational and cultural context of South Kalimantan?

By addressing these questions, this research bridges theoretical and contextual gaps between North and South, business and conservation, strategy and behavior. It advances the agenda for aligning human capital strategies with ecological sustainability in under-researched and institutionally distinct sectors.

REVIEW OF LITERATURE

Green Human Resource Management (GHRM) and Pro-Environmental Behavior (PEB)

Green Human Resource Management (GHRM) is defined as the deliberate integration of environmental objectives into traditional HR functions, including recruitment, training, performance evaluation, and rewards (Naz et al., 2023; Veerasamy et al., 2023). As an evolving subdomain of HRM, GHRM seeks not only to minimize the ecological footprint of organizational operations but also to cultivate environmentally responsible behavior among employees (Fawehinmi et al., 2024). In essence, GHRM embodies a strategic alignment between people management and ecological sustainability, making it central to an organization's transition toward green performance (Ba & Cao, 2023).

A key behavioral outcome associated with GHRM is pro-environmental behavior (PEB), which refers to discretionary actions taken by employees that aim to protect or enhance the environment in the workplace. These actions can include resource conservation, recycling, eco-innovation, environmental advocacy, and voluntary engagement in sustainability programs (R. Hameed, Rehman, et al., 2023; Nguyen et al., 2025). PEB is typically driven by a combination of intrinsic values and organizational reinforcement mechanisms. A growing body of literature demonstrates a positive association between GHRM and PEB, both in corporate and service-oriented sectors (W. Yu et al., 2020).

However, much of the current research remains concentrated in private-sector contexts, particularly within manufacturing, hospitality, and information technology

industries. These studies often assume the presence of well-established HR structures, strong policy mandates, and financial resources conditions that are not always present in conservation or non-profit sectors (Ishaque & Ansari, 2025). For instance, in Indonesia's environmental organizations, especially those operating in ecologically sensitive regions such as South Kalimantan, HRM systems are frequently informal, underfunded, and fragmented (Arisanty et al., 2024; Rochwulaningsih et al., 2020). Consequently, while the theoretical relevance of GHRM to PEB is recognized, its empirical application across diverse organizational and geographic settings remains underexplored.

Another concern in the literature is the tendency to treat GHRM as a monolithic construct, without adequately disaggregating the distinct pathways through which specific HR practices influence behavior. Scholars have called for finer-grained investigations into how individual components such as recruitment, rewards, and training operate and interact to produce behavioral outcomes (Iftikar et al., 2022; Veerasamy et al., 2023). Addressing this gap is critical, particularly in contexts where HR practices must be tailored to resource limitations and cultural specificity, as is often the case in community-based conservation organizations.

Green Recruitment and Its Relationship with Pro-Environmental Behavior

Green recruitment is the process of attracting and selecting candidates based not only on conventional qualifications and experience but also on their environmental values, awareness, and behavioral tendencies. It represents an initial point of strategic alignment between individual values and organizational sustainability goals (Pham & Paillé, 2020). By incorporating environmental criteria into job advertisements, interview questions, and selection protocols, organizations can shape the composition of their workforce to be more environmentally conscious from the outset (Y. Zhang et al., 2019).

This alignment sends a dual signal: internally, it reinforces the normative expectation that environmental responsibility is a core part of organizational life; externally, it communicates a strong commitment to sustainability, thereby enhancing employer branding and stakeholder trust (Naz et al., 2023). As a result, green recruitment contributes to shaping the psychological green climate within organizations, which has been positively associated with increased pro-environmental behavior among employees (Nguyen et al., 2025).

However, the relationship between green recruitment and PEB is not necessarily linear or automatic. While environmentally inclined candidates may possess the motivation to act sustainably, their actual behavior at work depends on a variety of enabling conditions such as clarity of role expectations, institutional support, and access to environmental

knowledge (Omarova & Jo, 2022). In some cases, newly recruited employees may become demotivated if the organizational culture fails to support green initiatives beyond the hiring phase (Zafar & Suseno, 2024).

Thus, green recruitment is best understood not as a sufficient condition for PEB, but as a foundational input that requires complementary HR interventions to achieve behavioral outcomes. One such intervention is environmental training, which equips new recruits with the necessary skills and procedural knowledge to translate their values into effective workplace behaviors. Theoretically, recruitment primarily serves the “motivation” dimension of the AMO framework by bringing in individuals predisposed to environmental goals, while training serves the “ability” dimension by facilitating behavioral execution (W. Yu et al., 2020). This study follows that reasoning by proposing a mediated pathway from green recruitment to PEB via environmental training.

Green Rewards and Employee Green Behavior

Green rewards refer to the implementation of incentive systems monetary or non-monetary that recognize and reinforce environmentally responsible actions by employees. These may include bonuses for meeting environmental performance metrics, recognition programs for eco-initiatives, or promotions tied to sustainability leadership (Ojo et al., 2022; H. Zhang & Sun, 2021). As an extrinsic motivator, green rewards correspond to the “motivation” component of the AMO framework, signaling to employees that ecological performance is both valued and rewarded by the organization.

Empirical studies have shown that reward systems linked to environmental performance can lead to significant increases in both task-related and discretionary green behaviors (R. Hameed, Rehman, et al., 2023; Zaman et al., 2025). For instance, employees are more likely to engage in resource conservation, waste management, and eco-innovation when they perceive clear incentives for doing so. In addition, green rewards contribute to shaping an organization’s symbolic and psychological climate by highlighting what is considered normatively appropriate and institutionally supported (Nguyen et al., 2025).

Nevertheless, the use of extrinsic rewards in sustainability contexts is not without critique. Some researchers caution that rewards can undermine intrinsic motivation if they are perceived as controlling or misaligned with employees’ personal values (H. Zhang & Sun, 2021). Moreover, over-reliance on financial incentives may create compliance-based behavior that is not sustained once the rewards are removed. This risk is particularly pronounced in resource-constrained organizations, where long-term financial incentives may be difficult to maintain (Islam et al., 2020).

To address these limitations, scholars advocate for integrating green rewards within a broader HRM ecosystem that includes training, feedback, and participatory mechanisms (Veerasamy et al., 2023). Training, in particular, plays a crucial role by ensuring that employees understand not only what is rewarded but also why it matters and how it should be executed. This synergistic relationship suggests that the effect of green rewards on PEB is likely to be amplified when supported by structured environmental training programs.

Accordingly, this study posits that while green rewards can motivate employees to engage in sustainable behaviors, environmental training provides the cognitive infrastructure necessary to sustain and institutionalize these behaviors. The interaction between rewards and training reflects a dual activation of the motivation and ability components of the AMO framework, which in turn enhances the overall effectiveness of GHRM in promoting PEB.

Environmental Training as a Mediator

Environmental training encompasses structured learning interventions aimed at enhancing employees' knowledge, awareness, and competencies related to environmental issues. Within the framework of GHRM, training plays a dual function: it develops individual abilities and reinforces organizational values, thereby translating environmental intentions into consistent behavioral outcomes (Ahuja et al., 2023; Li & Li, 2025). It includes not only technical instruction such as waste management procedures or energy efficiency protocols but also cognitive and affective dimensions, such as fostering ecological mindfulness and collective responsibility.

Drawing upon the Ability-Motivation-Opportunity (AMO) framework, environmental training directly corresponds to the "ability" component, which posits that employees require the appropriate knowledge and skills to perform effectively. While green recruitment may secure individuals with high environmental motivation, and green rewards may reinforce their intentions, the absence of training undermines their capacity to act meaningfully (Yu et al., 2020). This is particularly crucial in settings such as conservation organizations, where environmental challenges are often complex and context-specific.

Multiple empirical studies affirm the importance of training in fostering PEB. For example, Li and Li (2025) demonstrated that green HRM practices enhance employee environmental mindfulness and knowledge sharing, both of which are facilitated through training. Similarly, Ahuja et al. (2023) showed that environmental training significantly mediates the relationship between green leadership and pro-environmental behavior, emphasizing its transformative role. Furthermore, Zafar and Suseno (2024) found that in

institutions where green culture is still emerging, training serves as a legitimizing and normative function that redefines environmental behavior as integral to job performance.

In this regard, environmental training is not merely an operational support mechanism but a strategic tool for behavioral change. It offers employees clarity on why sustainability matters, what actions are expected, and how they can contribute within their specific roles. Particularly in non-profit or under-resourced organizations where formal performance incentives may be weak, training serves as an alternative lever for engagement and alignment.

From a processual standpoint, environmental training is well positioned to act as a mediator between other GHRM practices and behavioral outcomes. Green recruitment, while helpful in attracting motivated individuals, may not result in desired behavior unless those individuals are equipped with actionable knowledge. Similarly, green rewards may incentivize environmentally responsible actions, but without proper training, employees may lack the procedural competence to meet expectations. Hence, this study conceptualizes environmental training as the mediating mechanism that enables the effective translation of both green recruitment and green rewards into sustained PEB.

Hypothesis Development

Grounded in the theoretical framework and extant empirical findings, the following hypotheses are proposed:

- **H1:** *Green recruitment has a positive effect on environmental training.* Organizations that recruit employees with environmental values are more likely to foster engagement in and receptivity to environmental training programs (Ahuja et al., 2023; Pham & Paillé, 2020).
- **H2:** *Green rewards have a positive effect on environmental training.* When rewards are explicitly linked to environmental outcomes, employees are more motivated to enhance their capabilities through training to qualify for such incentives (Veerasamy et al., 2023b; H. Zhang & Sun, 2021).
- **H3:** *Environmental training has a positive effect on pro-environmental behavior.* Training enhances cognitive and behavioral readiness, enabling employees to act effectively and confidently in support of sustainability goals (Ahuja et al., 2023; Li & Li, 2025).
- **H4:** *Environmental training mediates the relationship between green recruitment and pro-environmental behavior.*

- Employees recruited for their environmental orientation are more likely to benefit from training, which empowers them to act on their values behaviorally in the workplace (Iftikar et al., 2022; Y. Zhang et al., 2019).
- **H5:** *Environmental training mediates the relationship between green rewards and pro-environmental behavior.*
- Training provides the necessary procedural knowledge to fulfill environmentally incentivized performance goals, thereby reinforcing behavior through skill enhancement (Fawehinmi et al., 2024; Veerasamy et al., 2023).

These hypotheses reflect both direct and indirect effects within the AMO framework, providing a nuanced understanding of how GHRM practices interact to influence pro-environmental outcomes.

Conceptual Model

Based on the literature and hypothesis formulation, a conceptual model is developed to represent the relationships among green recruitment, green rewards, environmental training, and pro-environmental behavior (Figure 1). This model aligns with the AMO theory by positioning:

- **Ability** → Environmental training
- **Motivation** → Green rewards
- **Opportunity (Selection)** → Green recruitment

The model hypothesizes that green recruitment and green rewards exert both direct and indirect effects on PEB, with environmental training functioning as a mediating mechanism that channels these influences into consistent workplace behavior.

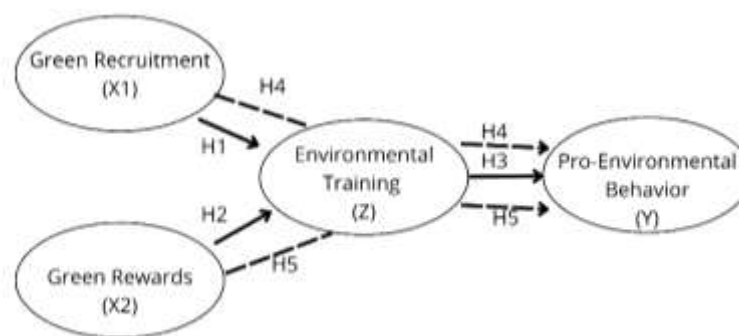


Figure 1. *Conceptual framework illustrating the mediating role of environmental training in the relationship between green recruitment, green rewards, and pro-environmental behavior.*

This integrative framework addresses several theoretical and empirical gaps. First, it moves beyond unidirectional models by proposing mediating pathways that explain *how* and *why* specific HR practices affect behavior. Second, it is responsive to contextual constraints faced by conservation organizations in Indonesia, which often lack the resources and formal structures found in corporate entities. Finally, it extends the applicability of the AMO framework to a conservation domain, thereby enriching its theoretical generalizability.

As highlighted throughout this review, while GHRM practices such as green recruitment and green rewards have been studied in isolation, their interactive and synergistic effects particularly when mediated by environmental training remain underexplored. By situating environmental training at the center of this behavioral transformation process, the proposed model advances both theoretical understanding and practical insights for sustainability-driven HRM in ecologically critical, under-researched regions like South Kalimantan.

The subsequent section outlines the methodological approach used to empirically examine these proposed relationships.

RESEARCH METHODOLOGY

Research Design

This study adopts a quantitative, cross-sectional design to examine the influence of green recruitment and green rewards on pro-environmental behavior (PEB), with environmental training serving as a mediating variable. This approach is appropriate for testing theoretical relationships derived from the Ability-Motivation-Opportunity (AMO) framework, particularly in non-experimental settings where causal inference is not the primary goal but theory extension is emphasized (Fawehinmi et al., 2024; W. Yu et al., 2020).

Cross-sectional designs are widely used in GHRM research for analyzing attitudinal and behavioral constructs in organizational contexts (Naz et al., 2023). They provide a practical method to explore associative relationships across multiple constructs simultaneously, particularly when temporal variation is minimal or difficult to manipulate.

The empirical setting is located in South Kalimantan, Indonesia, a region known for its ecologically significant wetland ecosystems, recurring environmental degradation, and fragmented governance structures (Apresian, 2024; Arisanty et al., 2024). The study focuses on conservation-related organizations, including non-governmental entities, public institutions, and research-based agencies involved in ecological protection, education, and sustainable policy advocacy. This context not only underscores the study's originality but also addresses the underrepresentation of Global South conservation sectors in GHRM scholarship (Azzahra et al., 2025).

Population and Sampling

The target population consists of employees actively engaged in environmental programs within conservation-focused organizations in South Kalimantan. These include personnel responsible for field conservation, environmental education, policy advocacy, and research dissemination.

A purposive sampling technique was employed, with inclusion criteria requiring respondents to have:

- At least six months of organizational tenure;
- Direct involvement in environmental projects or programs.

A total of 100 valid responses were collected using a combination of self-administered paper-based and online questionnaires. Although modest in size, the sample is methodologically defensible for several reasons:

- Suitability for PLS-SEM:
Partial Least Squares Structural Equation Modeling (PLS-SEM) is well-suited for exploratory research with small to medium sample sizes, particularly when mediation analysis is involved (Iftikar et al., 2022). Ahuja et al. (2023) note that a sample of 100 is sufficient for models containing up to five latent constructs.
- 10-Times Rule Compliance:
According to the widely accepted "10-times rule," the minimum sample size should be ten times the number of structural paths directed toward any single endogenous construct. In this model, PEB receives three such paths, requiring at least 30 observations well below the achieved sample size.
- Precedent in Similar Studies:
Prior studies in GHRM and PEB contexts in developing economies have reported sample sizes ranging from 80 to 120 (Pham & Paillé, 2019; Y. Zhang et al., 2019), placing this study within empirical norms.
- Population Homogeneity:
Given the homogeneity of the sample similar organizational focus, ecological mission, and employee roles the statistical power and generalizability within this niche context are preserved.

Instrumentation

Data were collected through a structured questionnaire, adapted from previously validated instruments in green HRM and PEB literature (R. Hameed, Rehaman, et al., 2023; Nguyen et al., 2025). The instrument was translated into Bahasa Indonesia, and the wording

was culturally adapted to the Indonesian conservation context. A 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree) was employed to ensure consistency and comparability across constructs.

The questionnaire consisted of the following measurement dimensions:

- **Green Recruitment (4 items)**
Measures the extent to which environmental criteria are embedded in hiring processes.
Sample item: "This organization considers environmental values when selecting new employees."
(Source: Pham & Paillé, 2020)
- **Green Rewards (4 items)**
Captures formal or informal incentives provided for pro-environmental actions.
Sample item: "I receive appreciation or rewards for engaging in environmentally friendly practices."
(Source: Zhang & Sun, 2021)
- **Environmental Training (4 items)**
Assesses access to and effectiveness of green-focused capacity building.
Sample item: "My organization provides training related to environmental sustainability."
(Source: Li & Li, 2025)
- **Pro-Environmental Behavior (5 items)**
Reflects voluntary behaviors promoting ecological outcomes in the workplace.
Sample item: "I actively help my colleagues adopt environmentally responsible practices at work."
(Source: Naz et al., 2023)

Validity and Reliability Assessment

Measurement quality was evaluated using the PLS-SEM measurement model assessment approach. Results indicated that all constructs met established thresholds:

- **Outer Loadings:** All indicators exceeded the recommended value of 0.70, suggesting good item reliability.
- **Composite Reliability (CR):** Values for all constructs were above 0.70, demonstrating internal consistency.
- **Average Variance Extracted (AVE):** Each construct's AVE exceeded the 0.50 threshold, confirming convergent validity.

Discriminant validity was confirmed via:

- The Fornell-Larcker criterion, whereby each construct's AVE square root exceeded its correlation with other constructs;
- The HTMT ratio, which fell below the conservative 0.85 threshold for all pairs, ensuring conceptual distinctiveness (Zaman et al., 2025).

All Variance Inflation Factor (VIF) values were below 3.0, indicating the absence of multicollinearity among predictor variables, thus validating the structural path coefficients' robustness.

Data Analysis Techniques

Analysis was conducted using SmartPLS 4, which enables simultaneous estimation of both the measurement and structural models, making it particularly effective for testing mediation hypotheses and extending theory in exploratory settings (Ahuja et al., 2023).

The analysis followed two key stages:

1. Measurement Model Evaluation

- Indicator reliability
- Internal consistency (CR)
- Convergent and discriminant validity

2. Structural Model Testing, including:

- Path coefficients (β)
- Coefficient of determination (R^2)
- Effect size (f^2)
- Predictive relevance (Q^2)
- Bootstrapping (5,000 resamples) for assessing the significance of direct and indirect paths

Mediation analysis was conducted using the bootstrapped indirect effects method. The presence of mediation was established when the 95% confidence interval of the indirect effect did not include zero (Veerasamy et al., 2023).

Ethical Considerations

This research complied with internationally accepted ethical standards for human subjects research. Participants were:

- Fully informed about the study's objectives,
- Guaranteed anonymity and confidentiality,
- Assured that participation was voluntary and that no risks were involved.

Institutional permissions were obtained from relevant organizational authorities, and the data collection procedures adhered to ethical guidelines approved for academic research in Indonesia.

RESEARCH AND RESULTS

Respondent Characteristics

Data were collected from 100 employees of conservation-oriented organizations in South Kalimantan, Indonesia. As shown in Table 1, the majority of respondents were male (63%), while females accounted for 37%, indicating gender asymmetry in the conservation workforce. The largest age group was 26–35 years (53%), followed by 36–45 years (30%), reflecting a relatively young and active professional cohort.

Educationally, most respondents held a bachelor's degree (60%), while 25% had a diploma, and 15% possessed graduate-level qualifications (master's or doctoral degrees), suggesting a well-educated respondent base. In terms of position, 54% were field staff, 28% supervisors, and 18% managers. Regarding tenure, 43% had served for 3–5 years and 35% for more than 5 years indicating substantial organizational experience and ecological engagement.

These demographic characteristics reflect a respondent base with adequate educational qualifications, field engagement, and work experience relevant to environmental and sustainability initiatives in South Kalimantan.

Table 1. Respondent Demographic Profile

Category	Subcategory	Frequency	Percentage (%)
Gender	Male	63	63%
	Female	37	37%
Age	< 25 years	17	17%
	26–35 years	53	53%
	36–45 years	30	30%
Education Level	Diploma	25	25%
	Bachelor's (S1)	60	60%
	Master's/Doctorate	15	15%
Position	Field Staff	54	54%
	Supervisor	28	28%
	Manager	18	18%
Work Tenure	< 3 years	22	22%

	3–5 years	43	43%
	> 5 years	35	35%

Construct Reliability and Convergent Validity

All constructs demonstrated acceptable reliability, as indicated by Cronbach's Alpha and Composite Reliability (CR) values exceeding the 0.70 threshold (Hair et al., 2021). Convergent validity was also confirmed, with Average Variance Extracted (AVE) values ranging from 0.624 to 0.754 well above the minimum standard of 0.50. These results suggest that the latent constructs adequately capture the variance of their respective indicators.

Table 2. Construct Reliability and Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Green Recruitment	0.891	0.924	0.754
Green Rewards	0.836	0.888	0.666
Environmental Training	0.859	0.905	0.705
Pro-Environmental Behavior	0.856	0.892	0.624

Discriminant Validity

The Fornell–Larcker criterion was used to assess discriminant validity. As shown in Table 3, the square root of each construct's AVE (diagonal values in bold) is higher than its correlations with other constructs (off-diagonal values), satisfying the required condition for discriminant validity (Hair et al., 2021). This confirms that each latent construct shares more variance with its indicators than with other constructs in the model.

Table 3. Fornell–Larcker Criterion

Construct	Environmental Training	Green Recruitment	Green Rewards	Pro-Environmental Behavior
Environmental Training	0.839			
Green Recruitment	0.457	0.868		
Green Rewards	0.409	0.466	0.816	
Pro-Environmental Behavior	0.520	0.395	0.378	0.790

All constructs in the model demonstrate satisfactory discriminant validity based on the Fornell–Larcker criterion. Each construct shares more variance with its indicators than with other constructs in the model.

Heterotrait-Monotrait Ratio (HTMT)

To further assess discriminant validity, the Heterotrait-Monotrait (HTMT) ratio of correlations was examined. According to Henseler et al. (2015), HTMT values below **0.85** indicate adequate discriminant validity, while a more lenient threshold of **0.90** may be applied in exploratory contexts.

As presented in Table 5, all HTMT values in this study range from **0.403 to 0.539**, which are well below the 0.85 threshold. This provides strong evidence for the discriminant validity of all latent constructs.

Table 4. Heterotrait–Monotrait Ratio (HTMT)

Construct	Environmental Training	Green Recruitment	Green Rewards	Pro-Environmental Behavior
Environmental Training	–			
Green Recruitment	0.520	–		
Green Rewards	0.457	0.540	–	
Pro-Environmental Behavior	0.539	0.403	0.402	–

Taken together with the Fornell–Larcker results, the HTMT analysis confirms robust discriminant validity, indicating that the measurement model effectively differentiates between the latent constructs.

Structural Model Evaluation

The structural model was assessed by examining the significance and strength of the hypothesized relationships using path coefficients, t-statistics, and p-values obtained through bootstrapping (5,000 subsamples). Table 6 summarizes the results of the hypothesis testing.

The structural model results reveal that Green Recruitment ($\beta = 0.341$, $p < 0.001$) and Green Rewards ($\beta = 0.250$, $p = 0.003$) significantly predict Environmental Training. This

aligns with the AMO framework, where recruitment reflects opportunity and rewards represent motivation both fostering training as an ability-enhancing mechanism.

Environmental Training, in turn, significantly influences Pro-Environmental Behavior ($\beta = 0.520, p < 0.001$), confirming its central role in enabling sustainable employee conduct. These findings empirically support hypotheses H1 to H3 and underscore the importance of integrated GHRM practices in behavioral transformation.

These findings provide empirical support for hypotheses H1, H2, and H3.

Table 5. Structural Model Path Coefficients

Path	β (O)	t-value	p-value	Result
Green Recruitment → Environmental Training	0.341	4.125	0.000	Supported
Green Rewards → Environmental Training	0.250	2.970	0.003	Supported
Environmental Training → Pro-Environmental Behavior	0.520	4.294	0.000	Supported

To visualize the structural relationships between the latent constructs, the final output of the PLS-SEM analysis is presented in Figure 2. This model illustrates the direction and strength of the hypothesized paths, along with the t-statistics derived from the bootstrapping procedure. As shown, all path relationships from Green Recruitment and Green Rewards to Environmental Training, as well as from Environmental Training to Pro-Environmental Behavior, are statistically significant. These results support the theoretical assumptions and provide empirical evidence for the proposed model.

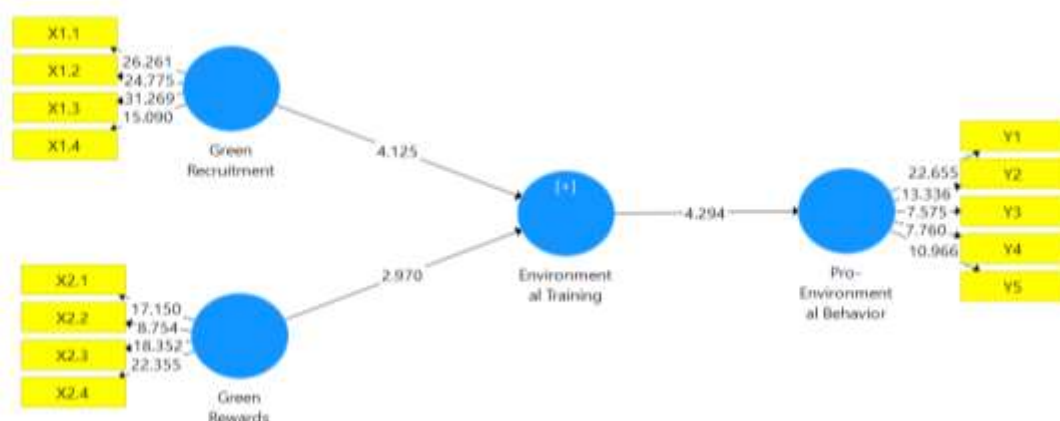


Figure 2. Final structural model output from SmartPLS, showing t-statistics for each path

Mediation Analysis (Indirect Effects)

Bootstrapped mediation analysis (5,000 resamples) was conducted to test indirect effects. Results show that Environmental Training partially mediates the relationship between Green Recruitment and PEB ($\beta = 0.177$, $p = 0.007$), and between Green Rewards and PEB ($\beta = 0.130$, $p = 0.029$). The significant indirect paths, along with still-significant direct paths, indicate a **partial mediation effect**, supporting hypotheses H4 and H5.

These findings provide empirical support for H4 and H5, confirming that Environmental Training partially mediates the relationships between both Green Recruitment and Green Rewards on Pro-Environmental Behavior. Since both the direct and indirect effects are significant, the mediation is classified as partial.

Table 6. Indirect Effects (Mediation Analysis)

Indirect Path	β (O)	t-value	p-value	Mediation Type
Green Recruitment → Environmental Training → PEB	0.177	2.686	0.007	Partial
Green Rewards → Environmental Training → PEB	0.130	2.182	0.029	Partial

Coefficient of Determination (R^2)

The coefficient of determination (R^2) indicates the model's explanatory power. As shown in Table 8, Green Recruitment and Green Rewards explain 25.8% of the variance in Environmental Training, and the combination of Environmental Training, Green Recruitment, and Green Rewards explains 27.0% of the variance in Pro-Environmental Behavior.

According to Chin (1998), R^2 values of 0.25 (weak), 0.50 (moderate), and 0.75 (substantial) provide a general guideline. Based on this, the current model exhibits a weak to moderate explanatory power.

Table 7. R^2 Values for Endogenous Constructs

Construct	R^2
Environmental Training	0.258
Pro-Environmental Behavior	0.270

While the R^2 values (Environmental Training: 0.258; Pro-Environmental Behavior: 0.270) suggest modest explanatory power, these values are acceptable for exploratory models, especially within organizational behavior research in emerging contexts. This reinforces the utility of the AMO framework in explaining employee behavior through green HR interventions.

DISCUSSION

This study investigated the influence of Green Human Resource Management (GHRM) practices namely Green Recruitment (GR), Green Rewards (GW), and Environmental Training (ET) on employees' Pro-Environmental Behavior (PEB) in conservation-focused organizations in South Kalimantan, Indonesia. It also examined the mediating role of ET in transmitting the effects of GR and GW onto PEB. This section interprets the findings in light of the Ability-Motivation-Opportunity (AMO) framework and relevant literature, thereby offering conceptual, contextual, and practical insights.

Direct Effects of Green HRM Practices

The results confirm that Green Recruitment significantly influences Environmental Training ($\beta = 0.341, p < 0.001$), suggesting that organizations that integrate environmental values in hiring processes are more likely to cultivate a workforce receptive to sustainability-oriented learning. This supports earlier research by Pham and Paillé (2020), which emphasized that environmentally inclined employees are more motivated to participate in capacity-building initiatives related to sustainability. From the AMO perspective, recruitment represents the "opportunity" that enables organizations to select individuals predisposed toward ecological engagement (Ba & Cao, 2023).

Likewise, the significant effect of Green Rewards on Environmental Training ($\beta = 0.250, p = 0.003$) aligns with the "motivation" component of AMO theory. Reward systems that explicitly link incentives to environmental performance signal organizational priorities and motivate employees to seek training that enhances their competencies and eligibility for recognition (Zhang & Sun, 2021; Fawehinmi et al., 2024). This finding suggests that green rewards not only reinforce desired behavior but also promote proactive learning as employees seek to meet performance expectations.

Environmental Training itself exhibited a strong direct influence on Pro-Environmental Behavior ($\beta = 0.520, p < 0.001$), affirming its critical role in fostering environmentally responsible conduct. This is consistent with prior findings emphasizing that knowledge acquisition, skills development, and environmental awareness are essential prerequisites for behavioral transformation (Ahuja et al., 2023; Veerasamy et al., 2023).

From an AMO lens, training serves as the “ability” mechanism, equipping employees with the tools to translate intentions into meaningful action (Yu et al., 2020).

Collectively, these results provide empirical validation for the integrated application of GHRM practices, wherein opportunity (GR), motivation (GW), and ability (ET) function synergistically to shape workplace sustainability behavior. Rather than treating each component in isolation, this study highlights their mutual reinforcement in facilitating pro-environmental outcomes.

Mediation Role of Environmental Training

The mediating role of Environmental Training was statistically supported for both Green Recruitment and Green Rewards. Specifically, ET partially mediated the effect of GR on PEB ($\beta = 0.177$, $p = 0.007$) and of GW on PEB ($\beta = 0.130$, $p = 0.029$). These findings underscore the critical role of structured learning as a conduit through which HR policies influence employee behavior. While recruitment and rewards may communicate an organization’s ecological commitment, it is training that operationalizes this commitment by building the necessary cognitive and behavioral capacity (Aboramadan, 2020; Li & Li, 2025).

This finding extends earlier conceptualizations of AMO theory by emphasizing the sequential activation of its three components. Employees recruited for their environmental values may still lack the procedural knowledge to act, while rewards can incentivize compliance but not ensure competence. Training bridges this gap by enabling employees to understand what is expected and how to achieve it (Iftikar et al., 2022). Hence, ET acts not only as a skills enabler but also as a mechanism that enhances the clarity, credibility, and internalization of other GHRM signals.

Moreover, the significance of this mediation effect helps reconcile conflicting findings in previous studies regarding the impact of green rewards. As noted by Zhang and Sun (2021), rewards alone can sometimes undermine intrinsic motivation if perceived as controlling. However, when paired with training, they contribute to an environment of guided autonomy where employees are motivated and equipped to act meaningfully. This highlights the interactive nature of GHRM elements and the importance of system-level thinking in designing sustainability strategies.

Theoretical Integration and Contextual Reflection

This study contributes to the broader theoretical discourse by affirming the utility of the AMO framework in the underexplored context of conservation organizations in the Global South. While the AMO model has been extensively validated in corporate and hospitality sectors (Farrukh et al., 2022; Jerónimo et al., 2020), its application in ecological,

resource-constrained, and socially complex environments has been limited. By situating this study in South Kalimantan where environmental degradation, wetland vulnerability, and sociopolitical fragmentation are prominent the research demonstrates that AMO mechanisms remain robust across diverse institutional settings.

Furthermore, the prominent role of ET as a behavioral enabler is especially salient in regions where formal HR systems may be underdeveloped, and where ecological knowledge varies significantly across individuals (Arisanty et al., 2024; Azzahra et al., 2025). This affirms the proposition that training is not merely a supplementary intervention but a transformative practice, particularly when ecological literacy and action are not naturally embedded in the workforce.

The results also provide a contextualized explanation for mixed findings in prior literature. For instance, Ishaque and Ansari (2025) observed that rewards sometimes fail to sustain green behavior. This study suggests that such outcomes may arise when rewards are decoupled from training, leading to shallow or inconsistent engagement. The current model, by contrast, positions training as the mediating mechanism that aligns motivational stimuli with behavioral capacity.

Contributions to the Literature

The study offers several contributions to academic scholarship:

- **Conceptual Integration:** It advances the conceptualization of GHRM by treating GR, GW, and ET as interdependent elements within an integrated system. This aligns with recent calls for holistic approaches to sustainable HRM (Fawehinmi et al., 2024; Yu et al., 2020).
- **Regional Relevance:** It addresses the underrepresentation of Southeast Asian and Global South contexts in GHRM-PEB research, providing empirical insights specific to Indonesia's conservation sector a domain rarely studied despite its ecological significance (Apresian, 2024; Rochwulaningsih et al., 2020).
- **Theoretical Enrichment:** The findings deepen the AMO framework by showing how its components interact not just additively, but sequentially and synergistically. This moves the theory beyond static classification toward dynamic activation pathways.
- **Behavioral Insight:** The mediation of ET offers a process-level understanding of how employees internalize and act upon green HR cues. This has implications for behavioral theories in organizational sustainability.
- **5.5 Summary of Key Insights**

- Green Recruitment and Green Rewards influence Environmental Training, highlighting the alignment between opportunity, motivation, and learning within sustainable HRM systems.
- Environmental Training is both a direct predictor of Pro-Environmental Behavior and a mediator that enhances the effect of other GHRM practices.
- The South Kalimantan context illustrates the relevance of AMO-based models in ecologically sensitive and institutionally complex environments.
- The findings reinforce the importance of treating GHRM as a system of mutually reinforcing practices rather than discrete interventions.

CONCLUSION AND RECOMMENDATIONS

This study empirically confirms the mediating role of **Environmental Training** in the relationship between **Green Recruitment**, **Green Rewards**, and **Pro-Environmental Behavior** (PEB) within conservation organizations in South Kalimantan. Grounded in the AMO (Ability-Motivation-Opportunity) framework, the findings reinforce the notion that environmental behavior change within organizations is most effective when HR practices are designed as an integrated system, rather than fragmented initiatives.

From a theoretical perspective, this research extends the application of the AMO model by showing that the “opportunity” component—represented by training—does not merely support but actively bridges the gap between ability (recruitment) and motivation (rewards). This positions Environmental Training as a central mechanism for transforming organizational intent into employee behavior, thereby contributing to the broader literature on Green Human Resource Management (GHRM) and sustainable organizational behavior.

From a practical standpoint, the study provides actionable insights for HR practitioners, especially in developing regions where formal HR systems may be limited. Specifically:

1. **Integrate Environmental Values** into all HR policies, from hiring to incentive structures.
2. **Recruit Environmentally-Oriented Candidates** to enhance training outcomes and long-term commitment to sustainability.
3. **Balance Rewards with Capacity Building** to prevent superficial compliance and foster genuine environmental ownership.
4. **Invest in Contextual Training** as a strategic intervention, particularly in resource-constrained or decentralized institutions.
5. **Align GHRM with Organizational Mission**, particularly for institutions with ecological or conservation mandates.

Despite these contributions, the study is subject to several limitations:

- The **cross-sectional design** restricts causal inference, highlighting the need for future longitudinal or experimental studies.
- The **context-specific sample** (South Kalimantan) limits generalizability; replication in other sectors or geographic settings is recommended.
- The **scope of GHRM variables** was limited to recruitment, rewards, and training; future research should incorporate other elements such as green leadership, performance appraisal, or participative decision-making.
- **Self-report measures** may introduce bias; multi-source data collection (e.g., supervisor assessments, behavioral observation) is encouraged in subsequent studies.
- The study did not examine **moderating factors** such as organizational culture or leadership style, which may influence the strength of the observed relationships.

Recommendations for Future Research

To strengthen and expand the findings:

- Employ longitudinal or experimental designs to examine long-term impact of GHRM practices on PEB.
- Broaden the sample across various types of organizations and regions to test the model's generalizability.
- Integrate additional constructs such as green climate, ethical leadership, and organizational support.
- Explore contextual moderators to better understand the conditional effects of GHRM strategies.
- Test practical interventions (e.g., training modules, green onboarding systems) to validate model applications in real-world settings.

By adopting an integrated, learning-oriented, and context-sensitive GHRM approach, organizations can serve as agents of environmental transformation. The findings call for sustained scholarly and managerial attention toward embedding ecological responsibility within the core of human capital development.

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