

Fostering Employee Green Behavior through Green Human Resource Management Practices: A Conceptual Framework for the Islamic Banking Sector in Malaysia

Nadzirah Nasir¹, Najihah Binti Mohammad Yusoff^{2*}

¹Faculty of Business, UNITAR University College Kuala Lumpur, Malaysia

²Faculty of Education and Humanities, UNITAR University College Kuala Lumpur, Malaysia

*Corresponding Author

DOI: <https://doi.org/10.47772/IJRISS.2026.100900099>

Received: 13 August 2026; Accepted: 18 August 2026; Published: 01 October 2026

ABSTRACT

Climate change and resource depletion have made environmental sustainability a strategic imperative for organizations worldwide, and the financial sector, despite its comparatively modest direct environmental footprint, is increasingly expected to model responsible practice. This paper develops and justifies a conceptual research framework that examines how Green Human Resource Management Practices (GHRMP) translate three antecedent factors, namely employee green culture, ethical leadership, and environmental knowledge, into employee green behavior (EGB) within Bank Islam Malaysia, a leading Islamic financial institution. Grounded in Social Exchange Theory and the Knowledge-Attitude-Behavior model, the framework proposes that GHRMP mediates the relationships between the three antecedents and EGB. A quantitative, positivist, cross-sectional research design is proposed, in which data will be collected from a stratified random sample of employees using a validated seven-point Likert-scale questionnaire and analyzed through Partial Least Squares Structural Equation Modelling (PLS-SEM). The paper details the theoretical justification for each hypothesized path, operationalizes all constructs, and specifies the measurement and structural model evaluation criteria that will be used to test the framework empirically in subsequent research. By integrating Islamic ethical principles with established green human resource management theory, the study is expected to extend GHRM scholarship beyond its current concentration in manufacturing, hospitality, and higher-education contexts into Islamic banking, and to offer actionable guidance for strengthening environmental, social, and governance (ESG) performance in the Malaysian financial sector. The anticipated results are positive direct effects of employee green culture, ethical leadership, and environmental knowledge on EGB, together with significant indirect effects through GHRMP, confirming GHRMP as the framework's central organizational mechanism.

Keywords: green human resource management; employee green behavior; ethical leadership; environmental knowledge; Islamic banking

INTRODUCTION

Background of the Study

Environmental sustainability has moved from the periphery of corporate strategy to its center, as climate change, resource depletion, and biodiversity loss impose escalating costs on economies and societies (Alam et al., 2023; Piwowar-Sulej et al., 2023). Organizations across sectors are consequently embedding environmental management systems and green initiatives into their operations, but the effectiveness of these initiatives ultimately depends on the willingness of individual employees to translate policy into everyday practice (Umrani et al., 2022). This discretionary, pro-environmental conduct at the workplace, commonly termed employee green behavior (EGB), has therefore become a central concern of contemporary human resource management (HRM) research (Cheng et al., 2022; Farrukh et al., 2022).

The banking sector occupies a distinctive position in this agenda. Although financial institutions are not resource-intensive in the manner of manufacturing or extractive industries, they nonetheless generate a substantial environmental footprint through energy consumption, paper use, business travel, and, more importantly, through the influence their financing and investment decisions exert on the wider economy (Hameed et al., 2023; Nisar et al., 2021). As Malaysia works towards its Nationally Determined Contribution of reducing greenhouse gas emissions intensity by 45 percent by 2030 relative to 2005 levels, financial institutions are being called upon to align their internal human resource strategies with national sustainability priorities (Malaysia, Ministry of Environment and Water, 2021). Islamic banks, whose operations are explicitly grounded in Shariah principles of stewardship (khalifah) and the prevention of harm (maslahah), arguably carry an additional ethical obligation to demonstrate environmental responsibility, making them a theoretically and practically important, yet underexplored, research setting (Green Human Resource Management in Islamic Finance, 2025).

Green Human Resource Management Practices (GHRMP), which embed environmental objectives into recruitment, training, performance appraisal, and compensation systems, have emerged as the principal organizational mechanism for cultivating EGB (Renwick et al., 2013; Dumont et al., 2017; Yong et al., 2020). A growing body of evidence confirms that GHRMP is associated with higher levels of in-role and extra-role green behavior across manufacturing (Zhang et al., 2019), hospitality (Kim et al., 2019; Pham et al., 2019), healthcare (Aboramadan et al., 2022), and higher-education settings (Aboramadan, 2022). However, GHRMP does not operate in isolation. Scholars increasingly argue that the antecedents that shape employees' willingness to engage with green initiatives, such as the organizational green culture that normalizes sustainable conduct (Aukhoon et al., 2024), the ethical example set by supervisors and leaders (Ahmad et al., 2021; Yang & Liu, 2022), and employees' own environmental knowledge (Farrukh et al., 2022; Hameed et al., 2023), must be examined together with GHRMP to build a fuller explanatory account of EGB. This paper responds to that call by proposing an integrated conceptual framework in which employee green culture, ethical leadership, and environmental knowledge are modelled as antecedents of EGB, with GHRMP serving as the mediating mechanism through which these antecedents are converted into observable green behavior.

Problem Statement

Malaysia's sustainability performance has been inconsistent relative to international benchmarks. The country's ranking on the Global Green Economy Index fell from 35th of 60 nations in 2014 to 65th of 80 in 2016, before recovering only partially to 55th of 130 in 2018 (Dual Citizen LLC, 2015, 2017, 2019), while its position on the Environmental Performance Index similarly declined across the same period (Environmental Performance Index, 2018). At the corporate level, a KPMG (2017) survey found that only 13 percent of Malaysia's top 100 companies had incorporated the United Nations Sustainable Development Goals into their reporting, and just 3 percent regarded climate change as a material business risk, both figures substantially below global averages. These indicators point to a persistent implementation gap between national environmental policy and organizational practice, a gap that is unlikely to close without deliberate investment in the workforce capabilities and behaviors that operationalize sustainability commitments.

Within the banking sector specifically, this gap is compounded by three interrelated shortcomings in the extant literature. First, empirical GHRM research remains disproportionately concentrated in China, the United States, and Western Europe, leaving developing economies such as Malaysia, which is still in the early stages of institutionalizing green human resource strategies, comparatively under-examined (Zhang, Luo, Zhang, & Zhao, 2019; Amrutha & Geetha, 2020). Second, within Malaysia the small number of available studies has focused predominantly on hospitality and manufacturing, so evidence on how GHRMP functions inside a Shariah-governed financial institution, where organizational values are explicitly anchored in ethical and religious principles, is scarce (Green Human Resource Management in Islamic Finance, 2025). Third, although ethical leadership, environmental knowledge, and green organizational culture have each been linked to EGB individually (Ahmad et al., 2021; Farrukh et al., 2022; Aukhoon et al., 2024), few studies have modelled all three antecedents simultaneously alongside GHRMP as a mediating mechanism, which limits understanding of their relative and combined explanatory power. Bank Islam Malaysia Berhad, which is currently ranked twelfth in the ESG Grading Band performance assessment produced by FTSE Russell (2024), offers a strategically

relevant setting in which to address these gaps, since the bank has both the scale (4,908 employees nationwide) and the institutional motivation to strengthen its environmental performance and ESG standing.

Research Objectives

RO1: To examine the influence of employee green culture, ethical leadership, and environmental knowledge on employee green behavior in the workplace.

RO2: To investigate the impact of employee green culture, ethical leadership, and environmental knowledge on Green Human Resource Management Practices (GHRMP) within organizations.

RO3: To examine the direct effect of GHRMP on employee green behavior.

RO4: To assess the mediating role of GHRMP in the relationships between employee green culture, ethical leadership, environmental knowledge, and employee green behavior.

RO5: To derive theoretical and practical implications for promoting sustainability and green behavior in the Malaysian banking sector.

Research Questions

RQ1: Do employee green culture, ethical leadership, and environmental knowledge influence employee green behavior in the workplace?

RQ2: What is the relationship between employee green culture, ethical leadership, environmental knowledge, and GHRMP?

RQ3: How does GHRMP contribute to employee green behavior?

RQ4: Does GHRMP mediate the relationships between employee green culture, ethical leadership, environmental knowledge, and employee green behavior?

RQ5: What theoretical and practical contributions can be drawn from integrating these constructs for the banking industry?

Significance of the Study

Theoretically, the study extends GHRM scholarship by testing a multi-antecedent mediation model in a Shariah-governed financial institution, a context in which organizational values, ethical leadership, and environmental stewardship are doctrinally intertwined. By combining Social Exchange Theory with the Knowledge-Attitude-Behavior model, the framework offers a more holistic account of how relational reciprocity and cognitive-affective processes jointly explain green behavior, addressing calls in the literature for greater theoretical integration in GHRM research (Renwick et al., 2013; Piwovar-Sulej et al., 2023). Methodologically, the study demonstrates the application of PLS-SEM to a large-scale employee survey in an emerging-market banking context, providing a template that can be replicated across other Islamic financial institutions in Malaysia and the wider region. Practically, the findings that this framework is designed to generate are expected to help HR practitioners and policymakers at Bank Islam Malaysia, and by extension other financial institutions, to design GHRM interventions, such as green recruitment criteria, green training curricula, and green performance incentives, that more effectively convert leadership commitment, organizational culture, and employee knowledge into measurable environmental outcomes, thereby supporting the bank's ESG ranking and Malaysia's broader Green Technology Master Plan and Nationally Determined Contribution targets.

Scope of the Study and Operational Definitions

The study is confined to full-time employees of Bank Islam Malaysia Berhad across management and operational levels nationwide, and it examines four specific dimensions of GHRMP, namely green recruitment and selection,

green training and development, green performance appraisal, and green compensation and benefits. The key operational definitions used throughout this paper are summarized below.

Employee Green Behavior (EGB): an individual employee's discretionary and required actions in support of environmental protection, shaped by organizational culture and environmental management practices (Umrani et al., 2022).

Green Human Resource Management Practices (GHRMP): the integration of environmental considerations into HR functions, including recruitment, training, performance appraisal, and compensation, to promote pro-environmental employee behavior (Renwick et al., 2013; Dumont et al., 2017).

Employee Green Culture (EGC): the shared values, beliefs, and practices within an organization that prioritize and normalize environmental sustainability (Aukhoon et al., 2024).

Ethical Leadership (EL): the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct among followers through communication and reinforcement (Brown, Trevino, & Harrison, 2005).

Environmental Knowledge (EK): an individual's understanding of environmental issues, including the causes and consequences of environmental harm and the actions required to mitigate them (Kollmuss & Agyeman, 2002; Fawehinmi et al., 2020).

Organization of the Paper

The remainder of the paper is structured as follows. Section 2 reviews the underpinning theories and constructs, culminating in the hypotheses and the proposed theoretical framework. Section 3 details the proposed research methodology, including research design, sampling, instrumentation, and the planned data analysis strategy. Section 4 discusses the anticipated findings and their theoretical and practical implications. Section 5 outlines the limitations of the proposed study and directions for future research, and Section 6 concludes the paper.

LITERATURE REVIEW

Underpinning Theories

This study integrates two complementary theoretical lenses. Social Exchange Theory (SET), introduced by Blau (1964) and elaborated by Cropanzano and Mitchell (2005), conceptualizes workplace relationships as a series of reciprocal exchanges in which employees respond to favorable treatment, such as ethical leadership and a supportive green culture, with commensurate positive behavior, including engagement in GHRM initiatives and voluntary green conduct. SET is well suited to explaining the pathways from ethical leadership and green culture to GHRMP and EGB because it captures the reciprocal, trust-based logic that underlies employees' willingness to “repay” organizational investment in sustainability with their own discretionary environmental effort (Robertson & Barling, 2013; Islam, 2021).

The Knowledge-Attitude-Behavior (KAB) model (Baranowski, Cullen, Nicklas, Thompson, & Baranowski, 2003) complements SET by explaining the cognitive pathway through which environmental knowledge is converted into behavior: knowledge builds awareness, awareness shapes attitudes, and attitudes, when reinforced by supportive organizational practices such as GHRMP, translate into action (Kollmuss & Agyeman, 2002; Farrukh et al., 2022). Combining SET and the KAB model allows the proposed framework to capture both the relational (leadership- and culture-driven) and cognitive (knowledge-driven) mechanisms that jointly explain how GHRMP mediates the emergence of EGB.

A clarification is warranted regarding how the attitude component of the KAB model is represented in the proposed framework. Rather than operationalizing attitude as a separate, directly measured latent construct, this study adopts a parsimonious application of the KAB sequence in which attitude is treated as an unmeasured intervening psychological state that links environmental knowledge to behavior, consistent with prior GHRM

studies that model the knowledge-to-behavior pathway without an explicit attitudinal mediator (Fawehinmi et al., 2020; Farrukh et al., 2022). Within this framework, GHRMP is theorized to be the organizational mechanism that reinforces and channels the attitudinal shift implied by the knowledge-attitude link, so that environmental knowledge, once it has shaped a pro-environmental attitude, is converted into observable behavior specifically when supported by formal green HR systems. This is a deliberate scope decision for the present conceptual framework rather than an oversight, and it is acknowledged as a simplification of the full KAB sequence. Explicitly measuring attitude as a distinct construct, and testing it as a formal mediator between environmental knowledge and EGB, would refine the cognitive pathway proposed here and is recommended as a priority extension in the empirical study that follows from this framework paper (see Section 5).

Employee Green Behavior

EGB refers to measurable actions that employees take, whether required by their job role (in-role green behavior) or performed voluntarily beyond formal job requirements (extra-role green behavior), to reduce the environmental impact of organizational operations, such as conserving energy, minimizing waste, and participating in recycling initiatives (Dumont et al., 2017; Umrani et al., 2022). Recent bibliometric evidence indicates that EGB research has grown rapidly since 2012, with green human resource management, ethical and transformational leadership, and organizational climate emerging as the dominant antecedent categories investigated in the literature (Employee Green Behavior: Bibliometric-Content Analysis, 2024). Within the banking and financial-services literature specifically, EGB has been linked to reduced energy and paper consumption, more conscientious handling of green financing products, and greater employee engagement with the institution's environmental, social, and governance agenda (Hameed et al., 2023; Green Human Resource Management in Islamic Finance, 2025).

Green Human Resource Management Practices

GHRMP embeds environmental management principles into the core functions of human resource management, namely recruitment and selection, training and development, performance appraisal, and compensation and benefits, with the explicit aim of cultivating an environmentally conscious workforce (Renwick, Redman, & Maguire, 2013). Green recruitment attracts and selects candidates who display pro-environmental values; green training builds employees' environmental competencies and awareness; green performance appraisal incorporates environmental criteria into evaluation systems; and green compensation rewards employees for environmentally responsible conduct (Dumont et al., 2017; Yong et al., 2020). A systematic review by Amrutha and Geetha (2020) synthesizing the sustainable-HRM literature confirms that these four practices consistently predict both employee-level green outcomes and organizational-level environmental performance across industries. In the banking context, GHRMP has been found to enhance service innovation capability and environmental performance in Islamic financial institutions in Southeast Asia (Green Human Resource Management in Islamic Finance, 2025), lending initial support to its relevance for Bank Islam Malaysia.

Employee Green Culture and Employee Green Behavior

Employee green culture reflects the extent to which environmental sustainability is embedded in an organization's shared values, norms, and everyday practices (Aukhoon, Iqbal, & Parray, 2024). A strong green culture normalizes environmentally responsible conduct, reduces the perceived cost of pro-environmental action, and signals to employees that such behavior is valued and expected (Robertson & Barling, 2013). Al-Swidi, Gelaidan, and Saleh (2021) found that the joint effect of green HRM, leadership, and organizational culture significantly predicted both employee green behavior and organizational environmental performance in a large-scale survey of manufacturing firms, while Aukhoon et al. (2024) demonstrated that green culture strengthens the translation of corporate social responsibility initiatives into employee-level green behavior through HRM practices. Building on SET, employees who perceive that their organization has cultivated a genuine green culture are expected to reciprocate through both direct green behavior and greater engagement with formal GHRM initiatives. Accordingly:

H1: Employee green culture is proposed to have a positive and significant influence on employee green behavior.

H1a: GHRMP is proposed to mediate the relationship between employee green culture and employee green behavior.

Ethical Leadership and Employee Green Behavior

Ethical leadership is defined as the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, reinforced through two-way communication and fair decision-making (Brown, Trevino, & Harrison, 2005). Ethical leaders model integrity and environmental responsibility, and, consistent with SET, employees reciprocate this ethical example with heightened pro-environmental effort (Ahmad, Islam, Sadiq, & Kaleem, 2021). Empirical support for this pathway is accumulating: Ahmad et al. (2021) found that ethical leadership predicted green behavior both directly and indirectly through GHRM and environmental knowledge in a sample of Pakistani manufacturing employees, while Yang and Liu (2022) reported that ethical leadership significantly enhanced employees' green innovation behavior in Chinese manufacturing firms through the mediating role of green organizational identity. Islam (2021) further showed that ethical leadership's effect on employees' environmentally-oriented citizenship behavior operated substantially through GHRM. These findings collectively justify the following hypotheses:

H2: Ethical leadership is proposed to have a positive and significant influence on employee green behavior.

H2a: GHRMP is proposed to mediate the relationship between ethical leadership and employee green behavior.

Environmental Knowledge and Employee Green Behavior

Environmental knowledge encompasses an individual's awareness of environmental problems, their causes, and the actions required to mitigate them (Kollmuss & Agyeman, 2002; Fawehinmi, Yusliza, Mohamad, Noor Faedah, & Muhammad, 2020). According to the KAB model, knowledge is the cognitive foundation upon which pro-environmental attitudes and, subsequently, behavior are built. Fawehinmi et al. (2020) found that environmental knowledge significantly predicted green behavior among Malaysian academics both directly and through GHRM, while Farrukh, Ansari, Raza, Wu, and Wang (2022) demonstrated that environmental knowledge moderated the relationship between green transformational leadership, GHRM, and employees' pro-environmental behavior. Similarly, Hameed, Rehman, Tufail, and Kiziloglu (2023) reported that environmental knowledge interacted with GHRM to shape employees' pro-environmental psychological climate and, ultimately, their support for green corporate social responsibility. These findings support the following hypotheses:

H3: Environmental knowledge is proposed to have a positive and significant influence on employee green behavior.

H3a: GHRMP is proposed to mediate the relationship between environmental knowledge and employee green behavior.

Green Human Resource Management Practices and Employee Green Behavior

The direct relationship between GHRMP and EGB is the most extensively documented path in the literature. Kim, Kim, Choi, and Phetvaroon (2019) found that GHRM significantly predicted hotel employees' eco-friendly behavior and environmental performance, and Saeed, Afsar, Hafeez, Khan, Tahir, and Afridi (2019) demonstrated a similar effect among Pakistani manufacturing employees, mediated by harmonious environmental passion. In a Malaysian hospitality context, Nisar, Haider, Ali, Jamshed, Ryu, and Gill (2021) confirmed that GHRM practices enhanced pro-environmental behavior through green intellectual capital, while Umrani, Channa, Ahmed, Syed, Pahi, and Ramayah (2022) found that green HR practices and green organizational culture jointly attracted and reinforced environmentally responsible conduct among hospitality employees. Given this consistent evidence across industries and geographic contexts, the framework proposes:

H4: GHRMP is proposed to have a positive and significant impact on employee green behavior.

Summary of Hypotheses

Table 1 summarizes the seven hypotheses developed from the preceding review. Because this paper is a conceptual and methodological framework rather than an empirical study, each relationship listed below is a theoretical proposition derived from prior literature and grounded in SET and the KAB model; none of these relationships has yet been tested with data collected for the present research, and the wording throughout this paper distinguishes such proposed relationships from the established findings of the cited empirical studies.

Table 1. Summary of Hypothesized Relationships

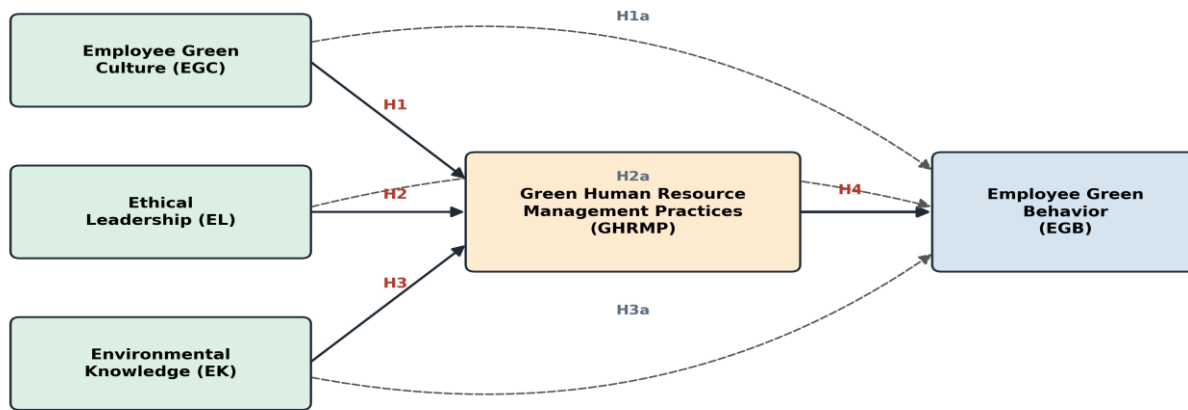
Hypothesis	Statement	Type
H1	Employee green culture is proposed to positively and significantly influence employee green behavior.	Direct
H1a	GHRMP is proposed to mediate the relationship between employee green culture and employee green behavior.	Mediation
H2	Ethical leadership is proposed to positively and significantly influence employee green behavior.	Direct
H2a	GHRMP is proposed to mediate the relationship between ethical leadership and employee green behavior.	Mediation
H3	Environmental knowledge is proposed to positively and significantly influence employee green behavior.	Direct
H3a	GHRMP is proposed to mediate the relationship between environmental knowledge and employee green behavior.	Mediation
H4	GHRMP is proposed to positively and significantly impact employee green behavior.	Direct

Note. All statements above are theoretical propositions to be tested empirically in future research; they do not represent confirmed relationships.

Proposed Theoretical Framework

Integrating the hypotheses above, Figure 1 presents the proposed theoretical framework. Employee green culture, ethical leadership, and environmental knowledge are modelled as exogenous constructs that influence employee green behavior both directly and indirectly through GHRMP, which functions as the mediating construct. Solid arrows represent the direct hypothesized paths (H1 to H4) and dashed arrows represent the indirect, mediated paths (H1a to H3a). It is emphasized that these paths represent theoretical propositions to be estimated once data collection is complete; the framework itself does not constitute empirical confirmation of the hypothesized relationships.

Social Exchange Theory (SET)



Knowledge-Attitude-Behavior (KAB) Model

— Direct hypothesized path - - - Mediation path (indirect effect)

Figure 1. Proposed Theoretical Framework of Employee Green Behavior

Chapter Summary

This section has established the theoretical foundation of the study by integrating Social Exchange Theory and the Knowledge-Attitude-Behavior model, reviewed the literature underpinning each construct, and derived seven hypotheses that collectively specify a mediation framework in which GHRMP is proposed to transmit the effects of employee green culture, ethical leadership, and environmental knowledge onto employee green behavior. As no data have yet been collected, these hypotheses remain theoretical propositions rather than established findings. The following section details the methodology proposed to test this framework empirically.

RESEARCH METHODOLOGY

Research Philosophy

This study is guided by the positivist research paradigm, which is appropriate given its objective of testing pre-specified hypotheses about measurable relationships among latent constructs (Creswell, 2018; Hair, Hult, Ringle, & Sarstedt, 2017). Positivism enables the formulation of formal, quantifiable propositions and supports statistical inference from a representative sample to the wider population of Bank Islam Malaysia employees (Saunders, Lewis, & Thornhill, 2019).

Research Design

A quantitative, deductive, cross-sectional research design is proposed. The design is descriptive-correlational in nature, aiming to profile the relationships among employee green culture, ethical leadership, environmental knowledge, GHRMP, and EGB rather than to manipulate any variable experimentally (Saunders et al., 2019). Data will be gathered in a non-contrived, natural field setting, namely the ordinary working environment of Bank Islam Malaysia branches and headquarters, using a single-wave, self-administered questionnaire distributed over an anticipated two-month fieldwork period.

Population, Sampling Frame, and Sample Size

The target population comprises the 4,908 employees of Bank Islam Malaysia Berhad nationwide (Bank Islam Malaysia, 2024), spanning frontline, back-office, and managerial roles across all branches. Using the Krejcie and Morgan (1970) table for determining sample size from a given population, a population of this size requires

a minimum of 357 respondents to achieve a 95 percent confidence level with a 5 percent margin of error (Table 2). A restricted probability sampling approach, specifically disproportionate stratified random sampling, will be used to ensure that key subgroups (for example, job role, department, and branch location) are adequately represented, consistent with recommendations for capturing heterogeneous perspectives on GHRM adoption within a single organization (Sekaran & Bougie, 2016).

Table 2. Sample Size Determination (Extract)

Population (N)	Sample (S)	Population (N)	Sample (S)
4,000	351	4,908 (target population)	≈ 357
4,500	354	5,000	357
6,000	361	7,000	364

Note. Adapted from Krejcie and Morgan (1970); degree of confidence = 95%.

Unit of Analysis and Data Collection Procedure

The unit of analysis is the individual employee. Primary data will be collected through a self-administered questionnaire distributed using a drop-off and collection method, facilitated by liaison officers (HR managers, department heads, and programme coordinators) appointed at each participating branch. Prior to data collection, formal approvals will be obtained from the Arshad Ayub Graduate Business School, the university's Research Ethics Committee, and, where applicable, the Ministry of Higher Education, together with the consent of Bank Islam Malaysia's management. Respondents will be assured of anonymity and voluntary participation, and completed questionnaires will be collected one to two weeks after distribution.

Questionnaire Design and Measurement

The questionnaire will comprise four sections. Part 1 measures the exogenous constructs (environmental knowledge, employee green culture, and ethical leadership); Part 2 measures the mediating construct (GHRMP); Part 3 measures the endogenous construct (EGB); and Part 4 captures respondent demographics. All substantive items will be adapted from previously validated scales and rated on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), which provides finer discrimination of response intensity than a five-point scale and reduces the forced-choice problem associated with narrower scales (Joshi, Kale, Chandel, & Pal, 2015). Table 3 summarizes the source, dimensionality, and reported reliability of each construct's measurement scale.

Table 3. Summary of Measurement Instruments

Construct	Source	No. of Items	Measurement Type	Reported Reliability
Employee Green Culture	Aukhoon, Iqbal, & Parray (2024)	5	Reflective	$\alpha = .84$
Ethical Leadership	Brown, Trevino, & Harrison (2005)	10	Reflective	$\alpha = .92$
Environmental Knowledge	Fawehinmi et al. (2020)	6	Reflective	$\alpha = .81$

GHRM Practices	Renwick, Redman, & Maguire (2013); Dumont et al. (2017)	16 (4 sub-dimensions)	Reflective	$\alpha = .88-.93$
Employee Green Behavior	Saeed et al. (2019); Dumont et al. (2017)	11 (in-role & extra-role)	Reflective	$\alpha = .85-.90$

Note. Reliability coefficients are as reported in the original source studies and will be re-verified during the pilot test.

Pilot Study

Consistent with the recommendations of Browne (1995) and Johanson and Brooks (2010), a pilot test involving at least 30 respondents will be conducted prior to full-scale data collection to assess face validity, item clarity, and preliminary reliability. Item loadings, internal consistency reliability, convergent validity, and discriminant validity will be evaluated using SmartPLS, and items that fail to meet the recommended thresholds will be revised or removed before the main survey is administered.

Data Analysis Strategy

Data analysis will proceed in two phases. In the preliminary phase, IBM SPSS (version 23 or later) will be used for data editing, coding, and descriptive analysis, including assessment of missing data, response patterns, skewness and kurtosis, and multivariate outliers using Mahalanobis distance (Tabachnick & Fidell, 2013). Common method variance will be assessed using Harman's single-factor test as a preliminary diagnostic and, more rigorously, through the full collinearity test recommended by Kock and Lynn (2012) and Kock (2015), in which variance inflation factors (VIFs) exceeding 3.3 would indicate potential contamination by common method bias.

In the second phase, Partial Least Squares Structural Equation Modelling (PLS-SEM) will be conducted using SmartPLS 4, following the two-step approach recommended by Hair, Risher, Sarstedt, and Ringle (2019): assessment of the measurement model followed by assessment of the structural model. PLS-SEM is selected over covariance-based SEM because the framework combines an established measurement theory with a relatively novel integration of ethical leadership, green culture, and environmental knowledge as joint predictors, a context in which PLS-SEM's prediction-oriented, distribution-free properties are advantageous (Hair et al., 2019, 2017). Table 4 summarizes the decision criteria that support this choice.

Table 4. Decision Criteria: PLS-SEM versus CB-SEM

Criterion	PLS-SEM	CB-SEM
Research objective	Prediction and theory extension (this study)	Confirmation and strict theory testing
Sample size requirement	Performs well with moderate samples	Requires larger samples for stable estimation
Data distribution	Robust to non-normal data	Assumes multivariate normality
Model complexity	Handles complex models with many indicators efficiently	Can be constrained by model complexity
Recommended approach	PLS-SEM (adopted)	Not adopted for this study

Note. Adapted from Hair, Risher, Sarstedt, and Ringle (2019) and Hair, Hult, Ringle, and Sarstedt (2017).

Measurement Model Assessment Criteria

The measurement model will be evaluated for internal consistency reliability using composite reliability ($CR \geq .70$) and, as a supplementary check, Cronbach's alpha ($\alpha \geq .70$) (Hair et al., 2019; Nunnally, 1978). Indicator reliability will be assessed through outer loadings, with items below .60 considered for removal (Hair et al., 2019). Convergent validity will be established through the Average Variance Extracted ($AVE \geq .50$) (Fornell & Larcker, 1981), and discriminant validity will be assessed using the Fornell-Larcker criterion, cross-loadings, and the Heterotrait-Monotrait ratio (HTMT), with HTMT values above .90 signalling a discriminant validity concern (Henseler, Ringle, & Sarstedt, 2015).

Structural Model Assessment Criteria

Following satisfactory measurement model results, the structural model will be assessed for collinearity ($VIF < 5$), the significance and relevance of path coefficients (via bootstrapping with 5,000 resamples), the coefficient of determination (R^2 , interpreted using Cohen's 1988 benchmarks of .10, .30, and .50 for small, medium, and large effects), and the effect size (f^2 , using Cohen's 1988 benchmarks of .02, .15, and .35). The mediating effects of GHRMP (H1a, H2a, H3a) will be tested using bootstrapped confidence intervals for the indirect effects, following Preacher and Hayes (2008); a mediation effect will be considered statistically significant where the 95 percent confidence interval for the indirect effect does not include zero.

Ethical Considerations

The study will adhere to the ethical principles outlined by Payne and Payne (2004), including informed consent, voluntary participation, anonymity, and confidentiality of respondent data. No sensitive or personally identifying information will be collected, and all data will be stored securely and used solely for academic purposes, consistent with the university's research ethics guidelines.

Research Process

Figure 2 summarizes the sequential stages of the proposed research process, from initial problem identification through to the interpretation of results and the formulation of policy recommendations.

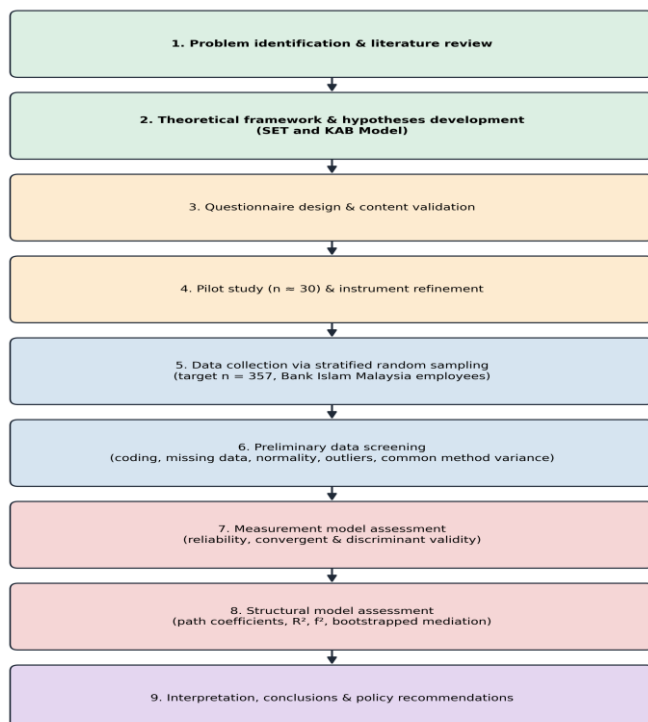


Figure 2. Proposed Research Process

Chapter Summary

This section has outlined a positivist, quantitative, cross-sectional research design employing stratified random sampling of Bank Islam Malaysia employees, a validated multi-section questionnaire, and a two-phase analytical strategy combining SPSS-based preliminary screening with PLS-SEM-based measurement and structural model testing. This design provides a rigorous basis for empirically testing the seven hypotheses specified in Section 2.

Expected Findings And Implications

Anticipated Relationships

Consistent with the reviewed literature, employee green culture, ethical leadership, and environmental knowledge are each expected to exert a positive and significant direct effect on employee green behavior (H1 to H3), and GHRMP is expected to exert a positive and significant direct effect on employee green behavior (H4). Furthermore, GHRMP is expected to partially or fully mediate the relationships between each of the three antecedents and employee green behavior (H1a to H3a), reflecting the theoretical proposition that formal HR mechanisms operationalize the relational and cognitive processes captured by SET and the KAB model, respectively. Should the empirical results depart from these expectations, for instance if ethical leadership shows a weaker direct effect than green culture, as has been reported in some manufacturing-sector studies (Adnan, 2021), this would itself constitute a meaningful contribution by highlighting boundary conditions specific to the Islamic banking context.

Theoretical Implications

If supported, the proposed framework would extend Social Exchange Theory and the Knowledge-Attitude-Behavior model by demonstrating their joint applicability to a Shariah-governed financial institution, a context in which reciprocal ethical exchange and religiously grounded environmental stewardship (khalifah) may reinforce one another in ways not yet captured in the predominantly secular GHRM literature (Green Human Resource Management in Islamic Finance, 2025). The framework also responds to calls for more integrative, multi-antecedent models of EGB (Employee Green Behavior: Bibliometric-Content Analysis, 2024) by simultaneously modelling cultural, leadership, and cognitive antecedents alongside a single mediating mechanism, rather than examining these pathways in isolation as much of the existing literature has done.

Practical and Managerial Implications

For Bank Islam Malaysia and comparable financial institutions, empirical confirmation of the framework would provide an evidence base for prioritizing investment across the four GHRMP dimensions. If green training and development emerges as the strongest driver of the GHRMP-EGB relationship, for example, HR departments could prioritize structured environmental-competency training over recruitment-based interventions. Similarly, evidence of a strong mediating role for GHRMP would indicate that leadership commitment and cultural initiatives alone are insufficient to drive EGB unless they are formally channeled through HR systems, an actionable insight for the bank's HR and sustainability functions as they design interventions to support the bank's ESG Grading Band performance (FTSE Russell, 2024).

Policy Implications

At the national level, findings from this framework, once empirically validated, could inform Bank Negara Malaysia's ongoing efforts to embed climate-related considerations into the financial sector, and could contribute evidence to support Malaysia's Green Technology Master Plan 2017 to 2030 and its Nationally Determined Contribution commitments by demonstrating a replicable model for translating leadership and cultural commitment into measurable workforce-level environmental outcomes within regulated financial institutions.

Limitations And Directions For Future Research

As a conceptual and methodological framework paper, this study does not itself report empirical results; its primary contribution lies in the theoretical justification, hypothesis development, and rigorous research design that will guide subsequent data collection and analysis. Because no data have been collected, every relationship discussed in this paper is a proposition awaiting empirical testing rather than a confirmed finding, and several limitations of the proposed design should be emphasized for the researchers who will conduct that empirical study.

Cross-sectional design. Once implemented, the proposed cross-sectional design will constrain causal inference, since all variables (employee green culture, ethical leadership, environmental knowledge, GHRMP, and EGB) will be measured at a single point in time from the same respondents. This precludes establishing the temporal precedence required for strong causal claims regarding the hypothesized direct and mediated paths. Future research could adopt a longitudinal or multi-wave design, or an experimental/quasi-experimental component, to strengthen causal inference regarding the GHRMP mediation pathways.

Single-organization setting. The proposed study is confined to a single institution, Bank Islam Malaysia Berhad. While this focus offers contextual depth and access to a Shariah-governed setting, it also means that findings will reflect the specific culture, leadership practices, and HR systems of one organization and may not transfer to other Islamic banks, conventional banks, or non-banking sectors. Comparative studies across multiple banks, or between Islamic and conventional banking contexts, represent a valuable extension once initial results are available.

Self-reported measures. All constructs, including EGB itself, will be captured through a single-source, self-administered questionnaire. This reliance on self-report raises the possibility of common method variance and of social-desirability bias, particularly for a construct such as green behavior that carries normative expectations within a Shariah-governed institution. Although procedural and statistical remedies are built into the proposed design (Section 3.7), future studies could triangulate self-reported EGB with supervisor ratings, peer assessments, or objective environmental performance indicators to reduce reliance on a single data source.

Restricted generalizability. Taken together, the cross-sectional design, single-organization setting, and self-reported measures mean that any results obtained from the proposed study should be interpreted as specific to Bank Islam Malaysia at a particular point in time, and generalized to other Islamic banks, conventional financial institutions, or other national contexts only with caution. Replication across additional organizations and, where feasible, additional time points would be needed before the framework's conclusions could be considered broadly generalizable.

Finally, future research could extend the framework by incorporating additional boundary conditions, such as religiosity, perceived organizational support, or green psychological climate, as moderators of the hypothesized relationships, and by explicitly measuring attitude as a distinct construct to more fully test the KAB pathway described in Section 2.1.

CONCLUSION

This paper has developed a conceptual framework for understanding how Green Human Resource Management Practices mediate the relationships between employee green culture, ethical leadership, environmental knowledge, and employee green behavior within Bank Islam Malaysia. Grounded in Social Exchange Theory and the Knowledge-Attitude-Behavior model, and supported by a rigorous quantitative methodology employing stratified random sampling and PLS-SEM, the framework addresses an identified gap in GHRM research concerning Islamic banking in a developing-economy context. Empirical testing of this framework is expected to generate theoretical insights into the joint operation of relational and cognitive pathways to green behavior, and to yield practical guidance for strengthening environmental, social, and governance performance in the Malaysian financial sector, thereby contributing to both the academic literature on sustainable human resource management and Malaysia's national sustainability agenda.

ACKNOWLEDGEMENT

The authors would like to thank UNITAR University College Kuala Lumpur for supporting this research.

Ethical Approval

Ethical approval was not required for this conceptual framework paper because it did not involve human participants, animals, or empirical data collection. Approval will be obtained from the relevant institutional research ethics committee before the proposed survey is administered.

Conflict Of Interest

The authors declare no conflict of interest.

Data Availability

No empirical dataset was generated or analyzed for this conceptual framework paper. Data from the proposed study will be managed and shared in accordance with institutional approval, participant consent, and confidentiality requirements.

REFERENCES

1. Aboramadan, M. (2022). The effect of green HRM on employee green behaviors in higher education: The mediating mechanism of green work engagement. *International Journal of Organizational Analysis*, 30(1), 7–23. <https://doi.org/10.1108/IJOA-05-2020-2190>
2. Aboramadan, M., Kundi, Y. M., & Becker, A. (2022). Green human resource management in nonprofit organizations: Effects on employee green behavior and the role of perceived green organizational support. *Personnel Review*, 51(7), 1788–1806. <https://doi.org/10.1108/PR-02-2021-0078>
3. Adnan, M. (2021). Employee green behavior as a consequence of green HRM practices and ethical leadership: The mediating role of green self-efficacy. *Journal of Business and Social Review in Emerging Economies*, 7(3), 725–736. <https://doi.org/10.26710/jbsee.v7i3.1857>
4. Ahmad, I., Ullah, K., & Khan, A. (2022). The impact of green HRM on green creativity: Mediating role of pro-environmental behaviors and moderating role of ethical leadership style. *The International Journal of Human Resource Management*, 33(19), 3789–3821. <https://doi.org/10.1080/09585192.2021.1931938>
5. Ahmad, S., Islam, T., Sadiq, M., & Kaleem, A. (2021). Promoting green behavior through ethical leadership: A model of green human resource management and environmental knowledge. *Leadership & Organization Development Journal*, 42(4), 531–547. <https://doi.org/10.1108/LODJ-01-2020-0024>
6. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
7. Alam, M. N., Mashi, M. S., Azizan, N. A., Alotaibi, M., & Hashim, F. (2023). When and how green human resource management practices turn to employees' pro-environmental behavior of hotel employees in Nigeria: The role of employee green commitment and green self-efficacy. *Journal of Quality Assurance in Hospitality & Tourism*, 1–28. <https://doi.org/10.1080/1528008X.2023.2249233>
8. Al-Swidi, A. K., Gelaidan, H. M., & Saleh, R. M. (2021). The joint impact of green human resource management, leadership and organizational culture on employees' green behaviour and organisational environmental performance. *Journal of Cleaner Production*, 316, 128112. <https://doi.org/10.1016/j.jclepro.2021.128112>
9. Amrutha, V. N., & Geetha, S. N. (2020). A systematic review on green human resource management: Implications for social sustainability. *Journal of Cleaner Production*, 247, 119131. <https://doi.org/10.1016/j.jclepro.2019.119131>
10. Aukhoon, M. A., Iqbal, J., & Parray, Z. A. (2024). Corporate social responsibility supercharged: Greening employee behavior through human resource management practices and green culture. *Evidence-based HRM*, 12(4), 796–814. <https://doi.org/10.1108/EBHRM-11-2023-0312>
11. Bank Islam Malaysia Berhad. (2024). Integrated annual report 2024. Bank Islam Malaysia Berhad.

12. Baranowski, T., Cullen, K. W., Nicklas, T., Thompson, D., & Baranowski, J. (2003). Are current health behavioral change models helpful in guiding prevention of weight gain efforts? *Obesity Research*, 11(S10), 23S–43S. <https://doi.org/10.1038/oby.2003.222>
13. Blau, P. M. (1964). *Exchange and power in social life*. John Wiley & Sons.
14. Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134. <https://doi.org/10.1016/j.obhdp.2005.03.002>
15. Cheng, Z., Wu, B., Deng, X., & Li, W. (2022). The impact of employees' pro-environmental behaviors on corporate green innovation performance: The mediating effect of green organizational identity. *Frontiers in Psychology*, 13, 984856. <https://doi.org/10.3389/fpsyg.2022.984856>
16. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
17. Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
18. Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
19. Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613–627. <https://doi.org/10.1002/hrm.21792>
20. Dual Citizen LLC. (2019). *The global green economy index (GGEI) 2018* (5th ed.). Dual Citizen LLC.
21. Farrukh, M., Ansari, N., Raza, A., Wu, Y., & Wang, H. (2022). Fostering employee's pro-environmental behavior through green transformational leadership, green human resource management and environmental knowledge. *Technological Forecasting and Social Change*, 179, 121643. <https://doi.org/10.1016/j.techfore.2022.121643>
22. Fawehinmi, O., Yusliza, M. Y., Mohamad, Z., Noor Faezah, J., & Muhammad, Z. (2020). Assessing the green behaviour of academics: The role of green human resource management and environmental knowledge. *International Journal of Manpower*, 41(7), 879–900. <https://doi.org/10.1108/IJM-07-2019-0347>
23. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
24. FTSE Russell. (2024). *FTSE4Good Bursa Malaysia index series: ESG ratings and rankings report*. London Stock Exchange Group.
25. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). SAGE Publications.
26. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
27. Hameed, R., Rehman, N., Tufail, S., & Kiziloglu, M. (2023). Green human resource management and environmental knowledge: A moderated mediation model to endorse green CSR. *Frontiers in Environmental Science*, 11, 1136957. <https://doi.org/10.3389/fenvs.2023.1136957>
28. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
29. Islam, T. (2021). Ethical leadership and environment specific discretionary behaviour: The mediating role of green human resource management and moderating role of individual green values. *Canadian Journal of Administrative Sciences*, 38(4), 442–459. <https://doi.org/10.1002/cjas.1637>
30. Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/BJAST/2015/14975>
31. Kim, Y. J., Kim, W. G., Choi, H. M., & Phetvaroon, K. (2019). The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *International Journal of Hospitality Management*, 76, 83–93. <https://doi.org/10.1016/j.ijhm.2018.04.007>
32. Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>

33. Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), 546–580. <https://doi.org/10.17705/1jais.00302>
34. Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239–260. <https://doi.org/10.1080/13504620220145401>
35. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
36. Malaysia, Ministry of Environment and Water. (2021). Malaysia's update of nationally determined contribution (NDC). Government of Malaysia.
37. Nisar, Q. A., Haider, S., Ali, F., Jamshed, S., Ryu, K., & Gill, S. S. (2021). Green human resource management practices and environmental performance in Malaysian green hotels: The role of green intellectual capital and pro-environmental behavior. *Journal of Cleaner Production*, 311, 127504. <https://doi.org/10.1016/j.jclepro.2021.127504>
38. Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
39. Pham, N. T., Tučková, Z., & Jabbour, C. J. C. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management*, 72, 386–399. <https://doi.org/10.1016/j.tourman.2018.12.008>
40. Piwowar-Sulej, K., Austen, A., & Iqbal, Q. (2023). Fostering three types of green behavior through green HRM in the energy sector: The conditional role of environmental managerial support. *Baltic Journal of Management*, 18(4), 509–524. <https://doi.org/10.1108/BJM-03-2023-0089>
41. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
42. Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>
43. Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1–14. <https://doi.org/10.1111/j.1468-2370.2011.00328.x>
44. Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34(2), 176–194. <https://doi.org/10.1002/job.1820>
45. Saeed, B. B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M. A. (2019). Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), 424–438. <https://doi.org/10.1002/csr.1694>
46. Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
47. Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). John Wiley & Sons.
48. Suherman, U. D., Wirdyansyah, D. M., Mighwar, M. A., & Syaie, A. N. K. (2025). Green human resource management in Islamic finance: A systematic review of sustainability strategies in Indonesia. *Economica: Jurnal Ekonomi Islam*, 16(1), 19–43. <https://doi.org/10.21580/economica.2025.16.1.25197>
49. Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson Education.
50. Umrani, W. A., Channa, N. A., Ahmed, U., Syed, J., Pahi, M. H., & Ramayah, T. (2022). The laws of attraction: Role of green human resources, culture and environmental performance in the hospitality sector. *International Journal of Hospitality Management*, 103, 103222. <https://doi.org/10.1016/j.ijhm.2022.103222>
51. Yang, L., & Liu, H. (2022). The impact of ethical leadership on employees' green innovation behavior: A mediating-moderating model. *Frontiers in Psychology*, 13, 951861. <https://doi.org/10.3389/fpsyg.2022.951861>
52. Yong, J. Y., Yusliza, M. Y., Ramayah, T., Chiappetta Jabbour, C. J., Sehnem, S., & Mani, V. (2020). Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green

- human resource management. *Business Strategy and the Environment*, 29(1), 212–228. <https://doi.org/10.1002/bse.2359>
53. Zhang, J., & Huang, R. (2019). Employees' pro-environmental behaviours (PEBs) at international hotel chains (IHCs) in China: The mediating role of environmental concerns (ECs). *Journal of Hospitality and Tourism Management*, 39, 129–136. <https://doi.org/10.1016/j.jhtm.2019.03.007>
54. Zhang, X., Panatik, S. A., & Zhang, N. (2024). Employee green behavior: Bibliometric-content analysis. *Heliyon*, 10(10), e31045. <https://doi.org/10.1016/j.heliyon.2024.e31045>
55. Zhang, Y., Luo, Y., Zhang, X., & Zhao, J. (2019). How green human resource management can promote green employee behavior in China: A technology acceptance model perspective. *Sustainability*, 11(19), 5408. <https://doi.org/10.3390/su11195408>