

Understanding Employee Green Behavior in the Workplace: An AMO-Based Study of Office Employees in Ho Chi Minh City, Vietnam

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ABSTRACT

Employee green behavior (EGB) has become increasingly important for translating organizational sustainability commitments into everyday workplace practices. Drawing primarily on the Ability–Motivation–Opportunity (AMO) framework, this study examines how individual and organizational factors shape EGB among office employees in Ho Chi Minh City, Vietnam. Specifically, the study investigates the effects of Green Human Resource Management (GHRM), Green Organizational Culture (GOC), Green Leadership (GL), Environmental Concern (EC), and Environmental Knowledge (EK) on EGB. Data were collected from 251 office employees and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results support all five hypothesized relationships. Environmental Knowledge emerged as the strongest predictor of EGB ($\beta = 0.317$), followed by Green Human Resource Management ($\beta = 0.309$), Environmental Concern ($\beta = 0.221$), Green Organizational Culture ($\beta = 0.191$), and Green Leadership ($\beta = 0.092$). Together, these factors explained 60.4% of the variance in EGB ($R^2 = 0.604$). The findings highlight that green workplace behavior is shaped not only by organizational systems and environmental signals but also by employees' environmental capabilities and motivation. By integrating individual- and organizational-level antecedents within an AMO-based framework, the study extends understanding of EGB in an emerging-economy urban workplace context. Practically, the findings suggest that organizations should combine environmental education with green HR practices, supportive organizational norms, and environmentally oriented leadership to encourage sustainable behavior among office employees.

Keywords: Employee Green Behavior; Green Human Resource Management; Environmental Knowledge; Environmental Concern; Green Organizational Culture; Green Leadership; AMO Theory; Vietnam

INTRODUCTION

Environmental sustainability now sits at the center of economic and organizational agendas as climate change, resource scarcity, pollution, and ecosystem deterioration intensify. Rising greenhouse gas emissions from human activity are widely identified as a key driver (IPCC, 2023), with consequences visible through climate disruptions, floods, wildfires, and other extreme events carrying substantial costs (United Nations Environment Programme, 2024; World Meteorological Organization, 2025), while resource extraction pushes ecosystems beyond their regenerative capacity, threatening biodiversity and ecological stability (Richardson et al.; Steffen et al., 2015).

These developments have reshaped what society expects of business. Environmental responsibility is now embedded in regulatory frameworks, ESG reporting requirements, and sustainability standards (International Sustainability Standards Board, 2023; Organisation for Economic Co-operation and Development, 2024), pushing organizations beyond compliance toward integrating sustainability into strategy — a shift with strategic

weight, as environmental performance shapes efficiency, reputation, and competitiveness (Eccles et al., 2014; Porter & Kramer, 2011; World Economic Forum, 2025).

Yet organizational commitments do not automatically translate into greener workplaces; implementation rests with employees, whose routine decisions determine how resources are consumed. This has fueled interest in Employee Green Behavior (EGB) — work-related actions through which employees contribute to environmental protection and sustainability (Norton et al., 2015; Ones & Dilchert, 2012), from reducing energy and paper use to recycling and proposing green initiatives. Such actions accumulate into substantial impact, since technologies and formal programs alone are often insufficient without engaged employees (Ercantan & Eyupoglu, 2022; Foster et al., 2022; Saeed et al., 2019). Employees who consistently adopt green practices improve resource efficiency while supporting innovation and competitiveness (Alherimi et al., 2024; Widyanty et al., 2025; Zacher et al., 2023), positioning EGB as a key link between sustainability intentions and outcomes.

Vietnam offers a relevant setting for this inquiry. Despite growing policy attention to green growth, the country ranked 178th of 180 nations on the 2022 Environmental Performance Index, scoring just 20.1 out of 100 (Wolf et al., 2022), while rapid urbanization and industrial growth continue to strain air quality and emissions (Ministry of Natural Resources and Environment, 2021; World Bank Group, 2022) — suggesting that transition requires workplace-level change, not policy alone. Ho Chi Minh City, Vietnam's major economic hub, is a relevant context for studying office employees, whose footprint stems from electricity, air conditioning, paper, and equipment use that, across a large workforce, carries meaningful cumulative impact. Yet whether such employees behave sustainably depends on more than one factor: some possess knowledge but lack motivation, others care personally yet work in unsupportive organizations, while supportive leadership, HR practices, and culture make green behavior easier and more accepted.

While EGB research has grown substantially in China, Pakistan, Malaysia, and developed economies (Naz & Haider, 2023; Zhang et al., 2024), Vietnamese evidence on office employees remains limited, and few studies examine Green Human Resource Management, green organizational culture, green leadership, environmental knowledge, and environmental concern within one framework (Hong et al., 2024; Nga, 2021; Ngô Mỹ et al., 2023; Nguyen et al., 2024). The gap is thus not a shortage of studies on individual predictors, but a lack of integrated explanation for how readiness combines with organizational conditions.

The Ability–Motivation–Opportunity framework (Appelbaum et al., 2000) addresses this gap: environmental knowledge represents ability, environmental concern represents motivation, and Green Human Resource Management, green organizational culture, and green leadership together represent opportunity.

Accordingly, this study examines office employees in Ho Chi Minh City, investigating how these five antecedents relate to EGB. It aims to (1) identify the relevant antecedents, (2) estimate their relative influence, and (3) derive managerial implications for encouraging green workplace behavior — contributing theoretically by applying AMO as a mechanism linking capability and motivation with opportunity, and empirically by extending EGB research to a context still underrepresented in the Vietnamese literature.

Hypothesis Development

Green Human Resource Management and Employee Green Behavior

Green Human Resource Management (GHRM) represents the incorporation of environmental objectives into conventional human resource management systems. Rather than treating environmental responsibility as an issue confined to environmental departments, GHRM uses HR practices to develop employees' environmental awareness, competencies, and willingness to contribute to organizational sustainability (Opatha & Arulrajah, 2014). This orientation can be embedded across different HR functions, including environmentally oriented recruitment and selection, green training, performance appraisal incorporating environmental criteria, and reward systems that recognize employees' environmental contributions (Renwick et al., 2013; Tang et al., 2018).

The AMO framework provides a useful explanation for why such practices should influence employees' environmental behavior. Green HR practices can strengthen employees' ability to act sustainably by developing

relevant competencies, reinforce their motivation by signaling that environmental contributions are valued, and provide opportunities to participate in organizational environmental initiatives (Ercantan & Eyupoglu, 2022; Saeed et al., 2019; Veerasamy et al., 2023). In an office environment, these mechanisms may be reflected in relatively routine but collectively important actions, such as limiting unnecessary electricity and paper consumption, reducing workplace waste, complying with environmental procedures, and voluntarily participating in or suggesting green initiatives.

Empirical research provides considerable support for this relationship. Dumont et al. (2017) demonstrated that GHRM can shape employees' green workplace behavior by strengthening environmental awareness and responsibility. Similarly, different components of GHRM, including green recruitment, training, appraisal, and rewards, have been associated with stronger employee engagement in environmentally responsible behavior (Zhang et al., 2019). Subsequent studies have reported comparable evidence, consistently positioning GHRM as an important organizational antecedent of employees' environmental actions at work (Chen et al., 2021; Ercantan & Eyupoglu, 2022; Rahaman et al., 2023; Saeed et al., 2019). Thus, when organizations systematically embed environmental priorities into their HR systems, employees are more likely to incorporate these priorities into their everyday workplace behavior.

Accordingly, the following hypothesis is proposed:

H1: Green Human Resource Management positively influences Employee Green Behavior among office employees in Ho Chi Minh City.

Green Organizational Culture and Employee Green Behavior

Green organizational culture refers to a shared system of environmentally oriented values, assumptions, expectations, and behavioral norms that guides how organizational members interpret and respond to environmental issues (Harris & Crane, 2002). Its importance lies in making environmental responsibility part of the way an organization operates rather than merely a set of formal policies. When sustainability becomes embedded in organizational values and everyday practices, employees are more likely to perceive environmentally responsible conduct as an expected and legitimate component of their work roles (Al-Swidi et al., 2021; Zhu et al., 2021).

From an AMO perspective, such a culture contributes particularly to the opportunity environment within which green behavior takes place. Employees may possess environmental awareness and motivation, but these individual attributes are more likely to translate into action when organizational norms support and legitimize environmentally responsible choices. A green culture communicates these expectations through organizational routines, internal communication, managerial priorities, and the behavior of coworkers. Within office settings, these shared expectations may encourage employees to conserve energy, minimize paper use, recycle materials, reduce unnecessary consumption, and participate voluntarily in environmental programs (Chen et al., 2021; Norton et al., 2015).

More importantly, cultural influence can make green behavior self-reinforcing. When environmentally responsible actions are repeatedly practiced, recognized, and socially supported, they may become accepted workplace norms rather than isolated individual choices. Employees are consequently more likely both to maintain their own green practices and to encourage similar behavior among colleagues (Al-Swidi et al., 2021; Hasebrook et al., 2022; Ismail & Hilal, 2023). Previous empirical findings support this reasoning, demonstrating positive associations between environmentally oriented organizational cultures and employees' green behavior across different organizational settings (Ahmed et al., 2020; Al-Swidi et al., 2021; BaydenİZ & Kart, 2024; Saeed et al., 2019; Zhang et al., 2019).

Based on these theoretical arguments and empirical findings, the study proposes:

H2: Green Organizational Culture positively influences Employee Green Behavior among office employees in Ho Chi Minh City.

Green Leadership and Employee Green Behavior

Green leadership describes leadership behavior through which managers integrate environmental priorities into their influence on employees, communicate sustainability expectations, provide support for environmental initiatives, and encourage employees to contribute to organizational environmental goals (Robertson & Barling, 2013). Unlike formal environmental policies, leadership provides employees with direct and observable signals regarding which behaviors are genuinely valued within the workplace.

Social Learning Theory (Bandura, 1977) offers an important explanation for this relationship. Employees learn appropriate workplace behavior partly by observing individuals who possess authority and organizational influence. Leaders who consistently demonstrate environmental responsibility can therefore function as behavioral role models. Their actions signal that environmental protection is not simply symbolic organizational rhetoric but a legitimate expectation embedded in everyday work. In addition, leaders can reinforce these signals by articulating a green vision, supporting employee participation, recognizing environmental contributions, and encouraging employees to propose improvements (Hasebrook et al., 2022; Saleem et al., 2021; Zhang et al., 2024).

These leadership mechanisms can be particularly relevant in office environments, where many green behaviors are discretionary and difficult to regulate through formal procedures alone. When supervisors demonstrate a genuine commitment to sustainability, employees may become more attentive to the environmental consequences of their daily activities and more willing to conserve resources, reduce waste, follow environmental practices, and participate in voluntary green initiatives (Faraz et al., 2021; Katz et al., 2022; Saleem et al., 2020).

Existing evidence largely supports this theoretical expectation. Robertson and Barling (2013) showed that environmentally oriented leadership can stimulate employees' green behavior through role modeling and inspirational influence. Green transformational leadership has likewise been linked to greater engagement in environmentally responsible workplace behavior (Chen & Wu, 2022). More recent studies further identify green leadership as an important mechanism through which organizations can encourage voluntary employee participation in environmental activities (Alherimi et al., 2024; Komesty Sinaga et al., 2024; Nawaz Khan, 2023; Rahaman et al., 2023).

Therefore:

H3: Green Leadership positively influences Employee Green Behavior among office employees in Ho Chi Minh City.

Environmental Concern and Employee Green Behavior

Environmental concern captures the extent to which individuals recognize environmental problems, care about environmental protection, support actions intended to improve environmental quality, and are willing to contribute personally to addressing environmental challenges (Dunlap & Jones, 2002). It therefore reflects more than simple awareness of environmental issues; it indicates the degree of personal importance attached to environmental protection.

Within the AMO framework, environmental concern can be positioned primarily within the motivation dimension. Employees may understand how to behave sustainably, but knowledge alone does not necessarily provide sufficient motivation to alter established workplace routines. Individuals who are more concerned about environmental degradation are more likely to perceive environmental protection as personally meaningful and to accept some responsibility for reducing their own environmental impact. Environmental concern can therefore provide an internal motivational basis for translating environmental values into concrete behavior (Stern, 2000).

In office settings, this motivation may influence numerous everyday decisions over which employees retain considerable discretion. Employees with stronger environmental concern may be more willing to switch off unused equipment, minimize unnecessary printing, conserve electricity and other resources, reduce waste, reuse

materials, or participate voluntarily in organizational sustainability activities (Katz et al., 2022; McDonald, 2014). Such actions may occur even when direct organizational monitoring or rewards are absent because the motivation originates partly from employees' own environmental values.

Empirical findings generally support this association. Employees expressing stronger environmental concern have been found to participate more actively in environmentally responsible organizational activities (Thanh & Cong, 2025). Related studies also suggest that concern about environmental consequences can increase employees' propensity to engage in green behavior at work (Ahmed et al., 2020; Al-Swidi et al., 2021; Okumus et al., 2019; Rahaman et al., 2023; Sabbir & Taufique, 2022). Environmental concern can thus serve as an internal motivational force connecting employees' environmental values with their workplace conduct.

Accordingly:

H4: Environmental Concern positively influences Employee Green Behavior among office employees in Ho Chi Minh City.

Environmental Knowledge and Employee Green Behavior

Environmental knowledge concerns an individual's understanding of environmental problems, their underlying causes and consequences, and the actions through which environmental impacts can be prevented or reduced (Fryxell & Lo, 2003). It is conceptually distinct from environmental concern. Whereas concern captures the extent to which an individual cares about environmental issues, knowledge reflects whether the individual possesses sufficient understanding to identify environmentally appropriate courses of action (Galván-Mendoza et al., 2022).

This distinction is particularly relevant from an AMO perspective. Environmental knowledge represents the ability component because environmentally responsible intentions cannot consistently generate appropriate behavior when employees do not know what actions to take or why those actions matter. Greater knowledge enables employees to recognize the environmental implications of their work routines and to evaluate alternative behaviors more effectively.

For office employees, environmental knowledge may involve understanding the consequences of unnecessary energy consumption, excessive printing, inappropriate waste disposal, inefficient use of office materials, and other routine activities. Employees who possess such knowledge should be better able to recognize opportunities to reduce their environmental footprint and select appropriate actions, including conserving energy, sorting waste, reusing materials, and reducing unnecessary resource consumption (Okumus et al., 2019; Rahaman et al., 2023; Saeed et al., 2019). Knowledge therefore provides a cognitive basis through which general environmental awareness can be converted into practical workplace decisions (Ahmed et al., 2020; Galván-Mendoza et al., 2022).

Empirical evidence is broadly consistent with this mechanism. Galván-Mendoza et al. (2022) identified environmental knowledge as an important antecedent of environmentally responsible behavior. Other studies similarly indicate that individuals possessing greater environmental knowledge are more likely to undertake environmentally friendly actions because they better understand both environmental consequences and appropriate responses (Ahmed et al., 2020; Okumus et al., 2019; Rahaman et al., 2023; Saeed et al., 2019). Thus, increasing employees' environmental knowledge should strengthen their capacity to convert environmental intentions into concrete workplace behavior.

The study therefore proposes:

H5: Environmental Knowledge positively influences Employee Green Behavior among office employees in Ho Chi Minh City.

RESEARCH METHODOLOGY

Data Collection and Sampling

The empirical study targeted office employees working in Ho Chi Minh City, Vietnam. Respondents were full-time employees whose work was primarily office-based and represented different functional areas, such as administration, human resources, accounting and finance, sales and marketing, and other professional and support functions. Because several constructs in the proposed model require employees to evaluate their organizational environment, only individuals who had worked for their current organization for at least six months were eligible to participate. This criterion was intended to ensure that respondents had sufficient workplace experience to provide meaningful assessments of Green Human Resource Management, Green Organizational Culture, and Green Leadership, as well as their own environmental knowledge, concern, and green behavior.

A structured questionnaire was developed and administered primarily through Google Forms, supplemented by direct distribution where respondents could be accessed in person. Prior to the formal data collection, a pilot survey was conducted with a small group of office employees. Their feedback was used to refine ambiguous expressions, improve questionnaire readability, and ensure that the items were readily understandable without altering the conceptual content of the original measurement scales. Participation was voluntary, and respondents were informed about the academic purpose of the research. They were also assured that their information would remain confidential and that the collected data would be used exclusively for research purposes.

Because no comprehensive sampling frame of office employees in Ho Chi Minh City was available, probability-based respondent selection was not practically feasible. The study therefore adopted a non-probability approach that combined convenience sampling with snowball sampling. The questionnaire was initially distributed through accessible workplace and professional networks. Eligible participants were subsequently encouraged to share the survey with other office employees within their professional networks. The referral procedure helped broaden access beyond the initial group of respondents and facilitated participation by employees from different organizations and occupational functions.

Data collection took place from March to May 2026. All returned questionnaires were screened before statistical analysis. Cases containing substantial missing information or displaying inconsistent response patterns were excluded from the analytical dataset. Following this screening process, 251 usable responses were retained. The resulting sample was considered sufficient for estimating the proposed research model using Partial Least Squares Structural Equation Modeling (PLS-SEM), following established methodological recommendations for PLS-SEM applications (Hair et al., 2022).

Data Analysis

Data were analyzed using PLS-SEM with SmartPLS following a two-stage procedure (Hair et al., 2022). First, the measurement model was assessed for reliability and validity using Cronbach's alpha and Composite Reliability ($CR \geq 0.70$), outer loadings (≥ 0.70), Average Variance Extracted ($AVE \geq 0.50$), and the Heterotrait–Monotrait ratio ($HTMT < 0.85$) (Fornell & Larcker, 1981; Hair et al., 2022; Henseler et al., 2015). Second, the structural model was evaluated using collinearity statistics ($VIF < 5$), standardized path coefficients, the coefficient of determination (R^2), and effect sizes (f^2) (Chin, 1998; Cohen, 1988; Hair et al., 2022). The significance of the hypothesized relationships was tested through bootstrapping with 5,000 resamples, using $p < 0.05$ as the criterion for statistical significance.

Results

Sample Characteristics

A total of 251 valid responses from office employees working in small and medium-sized enterprises (SMEs) in Ho Chi Minh City were included in the final analysis. The demographic profile indicates that female respondents represented a larger proportion of the sample (61.2%) than male respondents (38.8%). In terms of age, employees

between 22 and 36 years old constituted the dominant group, accounting for 58.5% of all participants, suggesting that the sample was largely composed of relatively young working professionals.

Regarding educational attainment, respondents with a university degree accounted for 80.2% of the sample, indicating a predominantly well-educated office workforce. Work experience also varied across participants, although employees with between one and three years of tenure represented the largest group (49.2%). Overall, the respondents displayed variation in demographic and employment characteristics, providing an appropriate empirical basis for examining the factors associated with Employee Green Behavior among office employees in Ho Chi Minh City.

Table 1. Demographic Characteristics of Respondents

Characteristic	Category	Percentage (%)
Gender	Male	38.8
	Female	61.2
Age	22–36 years	58.5
	Other age groups	41.5
Education	University degree	80.2
	Other educational levels	19.8
Work tenure	1–3 years	49.2
	Other tenure groups	50.8

Note: Percentages may be subject to rounding.

Source: Authors

The measurement model

The measurement model exhibited satisfactory reliability and convergent validity across all constructs. Indicator loadings ranged from 0.762 to 0.891, all exceeding the recommended cutoff of 0.70. Internal consistency was further supported by Cronbach's alpha values between 0.810 and 0.901 and composite reliability (CR) values between 0.902 and 0.939, both well above the 0.70 benchmark. Convergent validity was likewise established, as average variance extracted (AVE) values ranged from 0.679 to 0.741, surpassing the 0.50 threshold recommended by Hair et al. (2022).

Table 2. Discriminant Validity Assessment Using the HTMT Criterion

Construct	EC	EGB	EK	GHRM	GL	GOC
EC	–					
EGB	0.659	–				
EK	0.366	0.491	–			
GHRM	0.337	0.775	0.569	–		

GL	0.331	0.706	0.461	0.455	–	
GOC	0.408	0.810	0.501	0.602	0.602	–

Source: Authors

The HTMT results provide evidence of adequate discriminant validity among the study constructs. As shown in Table 3, the HTMT values ranged from 0.331 to 0.810, with the highest value observed between Green Organizational Culture and Employee Green Behavior (HTMT = 0.810). Since all values remained below the recommended threshold of 0.85 (Henseler et al., 2015), discriminant validity was established for all constructs in the measurement model.

Structural model

Table 3. Structural Model Assessment and Hypothesis Testing

Hypothesis	Relationship	β	SD	t-value	p-value	f ²	Decision
H1	GHRM → EGB	0.309	0.051	5.776	< 0.001	0.201	Supported
H2	GOC → EGB	0.191	0.056	5.812	< 0.001	0.271	Supported
H3	GL → EGB	0.092	0.041	4.261	< 0.001	0.291	Supported
H4	EC → EGB	0.221	0.049	4.912	< 0.001	0.101	Supported
H5	EK → EGB	0.317	0.046	4.028	< 0.001	0.085	Supported

Source: Authors

The structural model explained 60.4% of the variance in Employee Green Behavior ($R^2 = 0.604$; adjusted $R^2 = 0.601$), indicating substantial explanatory power. The results further showed that all five predictors were positively and significantly associated with EGB, thereby supporting H1–H5. Environmental Knowledge exhibited the strongest relationship with EGB ($\beta = 0.317$, $p < 0.001$), followed by Green Human Resource Management ($\beta = 0.309$, $p < 0.001$), Environmental Concern ($\beta = 0.221$, $p < 0.001$), Green Organizational Culture ($\beta = 0.191$, $p < 0.001$), and Green Leadership ($\beta = 0.092$, $p < 0.001$). Overall, the findings suggest that both individual and organizational factors play important roles in shaping green workplace behavior among office employees in Ho Chi Minh City.

DISCUSSION

The findings demonstrate that both individual and organizational factors contribute significantly to Employee Green Behavior (EGB) among office employees in Ho Chi Minh City. All five proposed relationships were positive and statistically significant, although their relative strengths differed. Among the examined predictors, Environmental Knowledge (EK) showed the strongest association with EGB ($\beta = 0.317$, $p < 0.001$), followed closely by Green Human Resource Management (GHRM) ($\beta = 0.309$, $p < 0.001$). Environmental Concern (EC) also displayed a meaningful positive effect ($\beta = 0.221$, $p < 0.001$), whereas Green Organizational Culture (GOC) ($\beta = 0.191$, $p < 0.001$) and Green Leadership (GL) ($\beta = 0.092$, $p < 0.001$) exhibited comparatively smaller effects. Taken together, these results suggest that green workplace behavior is shaped by a combination of what employees know and value about environmental issues and the organizational conditions that support environmentally responsible action.

Environmental Knowledge emerged as the most influential predictor of EGB, supporting H5. This result highlights the importance of employees' ability to understand environmental problems and recognize how their

everyday workplace activities can either contribute to or reduce environmental impacts. This mechanism is particularly relevant to office work, where environmental consequences are often embedded in routine activities such as electricity consumption, printing, waste disposal, use of office supplies, and electronic equipment. Employees with greater environmental knowledge may be better equipped to identify opportunities to conserve resources and make environmentally responsible choices during their daily work. The finding is consistent with previous studies emphasizing environmental knowledge as an important cognitive foundation for pro-environmental behavior (Fryxell & Lo, 2003; Okumus et al., 2019; Galván-Mendoza et al., 2022). From an AMO perspective, the result reinforces the importance of the ability component: employees need to know not only that environmental protection matters, but also how their actions can contribute to it.

Green Human Resource Management had the second strongest relationship with EGB, providing support for H1. This finding indicates that incorporating environmental objectives into recruitment, training, performance management, and reward practices can encourage office employees to adopt environmentally responsible behaviors. GHRM can communicate organizational environmental expectations while simultaneously developing employees' competencies and providing incentives and opportunities for green participation. The result is consistent with the AMO framework, according to which HR practices can influence employee behavior by strengthening ability, motivation, and opportunity. It also supports earlier empirical evidence identifying GHRM as an important antecedent of employee green behavior (Dumont et al., 2017; Saeed et al., 2019; Zhang et al., 2019; Chen et al., 2021; Ercantan & Eyupoglu, 2022; Rahaman et al., 2023). In office environments, where many environmental actions are discretionary rather than formally prescribed, embedding environmental considerations into HR practices may therefore provide an effective mechanism for translating organizational sustainability objectives into everyday employee behavior.

Environmental Concern was also positively associated with EGB ($\beta = 0.221$, $p < 0.001$), supporting H4. Employees who attach greater importance to environmental protection appear more willing to incorporate environmental considerations into their workplace decisions. Environmental concern provides an internal motivational basis for actions such as reducing unnecessary resource consumption, limiting waste, recycling materials, and voluntarily participating in environmental activities. This result aligns with the motivational dimension of AMO and with previous research suggesting that environmental concern encourages pro-environmental action (Stern, 2000; Foster et al., 2022; Thanh & Cong, 2025). Importantly, the significant effects of both Environmental Knowledge and Environmental Concern indicate that employees are not merely passive recipients of organizational environmental policies. Their own cognitive understanding and environmental motivation play substantive roles in determining whether green behavior occurs.

Green Organizational Culture was found to positively influence EGB ($\beta = 0.191$, $p < 0.001$), supporting H2. This finding indicates that shared environmental values and norms can create a workplace environment in which environmentally responsible practices become socially accepted and encouraged. When resource conservation, waste reduction, and environmental responsibility are embedded in organizational routines and shared expectations, employees may be more inclined to incorporate such practices into their everyday work. The result is consistent with Harris and Crane (2002) and subsequent empirical studies emphasizing the behavioral influence of environmentally oriented organizational culture (Al-Swidi et al., 2021; BaydenİZ & Kart, 2024). For office workplaces in Ho Chi Minh City, cultivating shared environmental norms may be particularly valuable because many green actions depend on employees' voluntary participation rather than formal monitoring.

Finally, Green Leadership had a positive but comparatively weaker association with EGB ($\beta = 0.092$, $p < 0.001$), thereby supporting H3. Although its direct effect was smaller than those of the other predictors, the significant relationship indicates that leadership remains relevant to employees' environmental behavior. Leaders can communicate environmental priorities, demonstrate environmentally responsible conduct, encourage employee participation, and legitimize green practices through their own actions. This finding is compatible with Social Learning Theory (Bandura, 1977), which suggests that employees can learn appropriate behaviors by observing influential organizational actors. It is also consistent with previous evidence regarding environmentally oriented leadership and employee green behavior (Robertson & Barling, 2013; Faraz et al., 2021; Chen & Wu, 2022; Nawaz Khan, 2023). The relatively modest direct coefficient, however, suggests that leadership alone may be

insufficient to generate strong behavioral changes unless it is accompanied by employees' environmental capabilities, motivation, and supportive organizational systems.

Overall, the results provide an important insight into EGB among office employees in Ho Chi Minh City. The relatively strong effects of Environmental Knowledge and Environmental Concern indicate that individual-level factors should not be treated as secondary to organizational interventions. At the same time, the significant effects of GHRM, Green Organizational Culture, and Green Leadership demonstrate that employee characteristics operate within an organizational environment that can facilitate and reinforce green behavior. The findings therefore support an integrated perspective in which ability, motivation, and organizational opportunity jointly contribute to environmentally responsible workplace behavior.

CONCLUSION AND IMPLICATIONS

This study investigated the determinants of Employee Green Behavior among office employees in Ho Chi Minh City, Vietnam, drawing primarily on the Ability–Motivation–Opportunity framework and using Social Learning Theory as a complementary perspective for explaining the role of Green Leadership. Data from 251 valid respondents were analyzed using PLS-SEM to examine the effects of Green Human Resource Management, Green Organizational Culture, Green Leadership, Environmental Concern, and Environmental Knowledge on EGB.

The findings provide support for all five proposed hypotheses. Environmental Knowledge emerged as the strongest predictor of EGB ($\beta = 0.317$), closely followed by Green Human Resource Management ($\beta = 0.309$). Environmental Concern ($\beta = 0.221$), Green Organizational Culture ($\beta = 0.191$), and Green Leadership ($\beta = 0.092$) also showed positive and statistically significant relationships with EGB. Collectively, the predictors explained 60.4% of the variance in Employee Green Behavior ($R^2 = 0.604$; adjusted $R^2 = 0.601$). The explanatory capacity of the model indicates that EGB is not driven exclusively by either individual environmental orientation or organizational intervention; rather, it reflects the combined contribution of both.

Theoretical Implications

The study offers several theoretical implications. First, it extends empirical knowledge of Employee Green Behavior by providing evidence from office employees in Ho Chi Minh City, thereby contributing to the still developing literature on workplace environmental behavior in emerging economies. The office context is particularly relevant because environmental impacts in such workplaces are generated largely through repeated individual decisions concerning energy, paper, waste, transportation, and resource consumption rather than through direct production activities.

Second, the findings provide empirical support for applying the AMO framework to explain EGB. Environmental Knowledge represents employees' ability to identify and perform environmentally appropriate actions, whereas Environmental Concern provides the motivation to engage in such behavior. Green Human Resource Management and Green Organizational Culture contribute to an organizational environment that facilitates and reinforces green action. The significance of these factors demonstrates the usefulness of combining individual and organizational explanations rather than examining them separately.

Third, the particularly strong influence of Environmental Knowledge provides additional insight into the role of employee capability within the AMO framework. In this study, the ability-related individual factor exhibited a slightly stronger relationship with EGB than GHRM and a substantially stronger relationship than Green Leadership and Green Organizational Culture. This finding suggests that organizational sustainability initiatives may be more effective when employees possess sufficient knowledge to recognize the environmental implications of their daily work and understand the actions available to address them.

Finally, the positive relationship between Green Leadership and EGB lends additional support to the application of Social Learning Theory in environmental management research. Employees may respond to environmental signals communicated by their leaders and learn environmentally responsible practices through observation and behavioral modeling. However, the relatively small direct coefficient of Green Leadership suggests that

leadership may operate alongside, rather than substitute for, employees' environmental knowledge, motivation, and organizational systems.

Practical Implications

The findings provide several implications for organizations seeking to strengthen green behavior among office employees. Given that Environmental Knowledge exhibited the strongest relationship with EGB, organizations should prioritize environmental education and practical green training. Rather than relying solely on general sustainability messages, training should provide employees with specific guidance on how their everyday work can reduce environmental impacts. Examples include responsible energy use, minimizing unnecessary printing, appropriate waste separation, efficient use of office materials, and environmentally responsible use and disposal of electronic equipment.

Organizations should simultaneously strengthen Green Human Resource Management by incorporating environmental criteria throughout HR processes. Environmental awareness can be considered during recruitment and orientation, while green competencies can be strengthened through training. Environmental contributions may also be incorporated into performance appraisal and recognition systems. Such integration can help ensure that environmental responsibility becomes part of employees' work expectations rather than remaining an optional organizational initiative.

The significant role of Environmental Concern suggests that organizations should also seek to strengthen employees' personal engagement with environmental issues. Internal communication campaigns, environmental events, employee-led sustainability initiatives, and opportunities to participate in green projects can help employees connect broader environmental challenges with their own workplace practices.

Green Organizational Culture should be developed by embedding environmental responsibility into shared workplace norms and routines. Organizations can establish visible expectations regarding energy conservation, paper reduction, recycling, and responsible resource consumption while encouraging employees to share environmentally beneficial ideas. Repeated organizational support can gradually transform individual green actions into collective workplace norms.

Although Green Leadership showed the smallest direct coefficient, managers should not disregard its role. Leaders and supervisors should visibly demonstrate environmentally responsible practices, communicate the importance of sustainability, recognize employee contributions, and create opportunities for employees to propose green improvements. Leadership behavior is likely to be most effective when it reinforces rather than replaces formal HR systems, environmental knowledge, and supportive organizational culture.

Limitations and Future Research

Despite its contributions, this study has several limitations that provide opportunities for further research. First, the empirical investigation was limited to office employees in Ho Chi Minh City. The findings may therefore reflect the characteristics of a large and highly urbanized economic center and should not automatically be generalized to employees in other regions or occupational settings. Future research could extend the analysis to other Vietnamese cities and provinces or compare office employees with employees in manufacturing, hospitality, logistics, or other sectors.

Second, the study employed a cross-sectional design, with all variables measured at a single point in time. Although the hypothesized relationships were theoretically grounded, cross-sectional evidence limits strong causal interpretation. Longitudinal or multi-wave research designs could provide stronger evidence regarding how organizational interventions and changes in employees' environmental knowledge or concern influence green behavior over time.

Third, convenience and snowball sampling were used to access office employees. While these approaches facilitated the collection of data from respondents across different workplaces, non-probability sampling limits

the statistical generalizability of the findings. Future studies could employ probability-based sampling or more systematically stratified samples where appropriate sampling frames are available.

Fourth, the model focused on five antecedents of EGB. Other individual and organizational mechanisms may further explain why employees engage in environmentally responsible workplace behavior. Future research could incorporate constructs such as green psychological climate, environmental commitment, perceived organizational support for the environment, corporate social responsibility, or green organizational identity. Mediating and moderating mechanisms may also be explored to move beyond direct-effect models and provide a more detailed understanding of how and under what conditions organizational and individual factors influence Employee Green Behavior.

Finally, future studies could distinguish between different forms of EGB, particularly task-related green behavior and voluntary green behavior. Organizational policies may exert stronger effects on required environmental practices, whereas Environmental Knowledge and Environmental Concern may be particularly relevant to discretionary green actions. Examining these dimensions separately could provide a more nuanced understanding of green behavior among office employees.

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