

## Exploring the Antecedents of Employee Green Behaviors: A Conceptual Framework

*Explorando los antecedentes de los comportamientos ecológicos de empleados: un marco conceptual*

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**Abstract:** The emergence of sustainable design has brought attention to the consideration of human behavior in creating environmentally-friendly operations. This study examines the role of the Theory of Planned Behavior (TPB) and the Value-Identity-Personal Norm (VIP) model in shaping green employee behavior (EGB). It explores how green human resource management (GHRM) practices impact EGB. Based on a review of 40 scholarly articles, the study proposes a conceptual model that integrates individual-level constructs from TPB and VIP, and highlights GHRM as an antecedent of EGB at the organizational level, with psychological capital and organizational identity as mediators. The study suggests a multilevel approach to examining EGB, incorporating person-environment interaction, job performance, and motivation theory. Ultimately, the study aims to provide a research agenda encouraging further investigation.

**Keywords:** Employee Green Behavior; Green Human Resource Management; Sustainability; Theory of Planned Behavior; Value-Identity-Personal Norm Model.

**Resumen:** La aparición del diseño sostenible ha llamado la atención sobre la consideración del comportamiento humano en la creación de operaciones respetuosas con el medio ambiente. Este estudio examina el papel de la Teoría del Comportamiento Planificado (TPB) y el modelo Valor-Identidad-Norma personal (VIP) en la configuración del Comportamiento Ecológico de los Empleados (EGB) y explora cómo las prácticas ecológicas de gestión de recursos humanos (GHRM) impactan en EGB. Basado en una revisión de 40 artículos académicos, el estudio propone un modelo conceptual que integra construcciones a nivel individual de TPB y VIP, y destaca GHRM como un antecedente de EGB a nivel organizacional, con capital psicológico e identidad organizacional como mediadores. El estudio sugiere un enfoque multinivel para examinar EGB, incorporando la interacción persona-entorno, el desempeño laboral y la teoría de la motivación. En última instancia, el estudio tiene como objetivo proporcionar una agenda de investigación que fomente una mayor investigación del tema.

**Palabras clave:** Comportamiento ecológico de los empleados; Gestión Verde de Recursos Humanos; Sostenibilidad; Teoría del Comportamiento Planificado; Modelo Valor-Identidad-Norma Personal.

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## 1. Introduction

Sustainability is a topic of great importance for organizations, scientists, and the public and has been the subject of various definitions (Luna-Nemecio et al., 2020). The triple bottom line concept, which consists of environmental integrity, social justice, and economic prosperity, has become a widely accepted notion of sustainability (Hallin et al., 2021). Environmental integrity refers to the ecosystem's limited capacity for regeneration, social justice to the rights of all stakeholders to access resources, economic prosperity to the standard of living achieved through a system's productive capacity, and equity to the distribution of value creation (Henaio et al., 2019; Muñoz-Pascual et al., 2019; Carmona-Moreno et al., 2012; Molina-Azorin et al., 2021).

Organizations are encouraged to adopt responsible production patterns connected with Sustainable Development Goals (SDGs) to address the most significant sustainability issues (International Council for Science, 2017). The 2030 Agenda for Sustainable Development, which comprises 17 goals and 169 targets, aims to integrate sustainability concerns into a country's economic, environmental, and social framework (Cai & Choi, 2020; Fritz et al., 2019; Kutty et al., 2020). Environmental sustainability has received increasing attention worldwide as climate change, natural degradation, pollution, and waste have become global crises (Bebbington & Unerman, 2018; Wankel, 2021). It has been realized that environmental challenges directly impact best business practices (Ababneh, 2021), making sustainability a critical issue among organizational leaders (Ruiz-Real et al., 2018; World Bank, 2021).

Encouraging employees to adopt green behavior that aligns with an organization's environmental objectives is critical, given that employees are responsible for implementing the business's green policies. To this end, more and more companies are adopting green human resource management (GHRM) practices that encompass "green HRM management elements" to promote environmentally responsible behavior among employees (Aboramadan, 2022; Adnan, 2021; Yan & Hu, 2022). Employee green behavior (EGB) refers to the actions taken by employees in the workplace that either support or undermine environmental sustainability goals (Zheng et al., 2021). As Ahmed et al. (2020) have noted, EGB is a crucial factor in promoting environmental sustainability in an organization.

Several theories have been used to explain employee green behavior (EGB), such as the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), Norm Activation Model (NAM) (Schwartz, 1977), Theory of Planned Behavior (TPB) (Ajzen, 1991), Value, Belief & Norm (VBN) model (Stern et al., 1999), and the Value-Identity-Personal Norm (VIP) model (van der Werff et al., 2014). Among these, TPB is commonly employed as a theoretical framework to understand why people engage in pro-environmental behavior, including EGB. According to TPB, employee attitudes, norms, and perceptions of behavioral control influence their intentions, ultimately influencing their behavior (Ajzen, 1991). Similarly, the VIP model has been used to investigate the factors that lead to ecologically responsible behavior.

Studying the environmental and psychological factors influencing green behavior is important because such behavior can directly impact the environment (Ababneh, 2021; Zhang et al., 2021; Zheng et al., 2021). Much research focuses on green employee behavior (EGB) and its antecedents, such as demographic characteristics, individual differences, job-related perceptions, and work attitudes (Katz et al., 2022). The Theory of Planned Behavior (TPB) is commonly used to predict EGB and employee green behavior intention (EGI), and it has proven to be effective in most studies (Delle, 2016). Recently, the Value-Identity-Personal Norm (VIP) model has been used for the same purpose. Some studies have combined TPB and VIP in their models (Ateş, 2020; van der Werff & Steg, 2016; Zeiske et al., 2021). However, whether this combination will result in a more robust research model in a specific industry context is still unknown. Wang et al. (2018) and Zhang et al. (2021) identified four categories of EGB correlates: demographic characteristics, individual diffe-

rences, job-related perceptions, and work attitudes. To our knowledge, no studies have combined all of these elements. It would be beneficial to build models that explore how demographic characteristics (employment level, education), individual differences (Psychological Capital), job-related perceptions (perceptions of green human resource management), and work attitudes (Organizational Identification) influence EGI and EGB.

### **1.1. Research Objective**

This research aimed to develop an influence model of employee green behavior (EGB) by combining individual-level and organizational-level constructs based on a systematic literature review. Individual-level constructs were taken from the Theory of Planned Behavior (TPB) and the Value-Identity-Personal Norm (VIP) model. In contrast, organization-level constructs were represented by green human resource management (GHRM) and some of its moderating variables.

## **2. Methodology**

This study utilized a systematic literature review approach with two main objectives: to identify the current trends in employee green behavior research and to create a contextual model for such behavior. This method is valuable because it provides a comprehensive, structured, exhaustive collection of current information and focuses on flexible work arrangements. Systematic literature reviews have become increasingly popular in management research, as they involve an extensive search of research databases, cross-referencing between journals and researchers, and applying inclusion/exclusion criteria to produce theoretically sound and methodologically rigorous research. This enables scholars and practitioners to make reliable decisions and act accordingly (Balundè et al., 2019; Fries et al., 2021; Lai et al., 2021; Phillips et al., 2014; Pedrini & Ferri, 2019). Figure 1 illustrates the research process.

In this study, the author used secondary data from the Scopus database, a recommended source for systematic literature analysis (Lauretta & Ferreira, 2018). The researcher defined the research base and search keywords and developed questions to reflect the primary study goals. The search phrases included various terms related to employee green behavior (EGB) (Tranfield et al., 2003). A number of EGB-related phrases were featured in the keywords: "Behavior for Sustainability" OR "Eco Initiative" OR "EGB" OR "Employee Green Behavior" OR "Environmentally Friendly Behavior" OR "Environmentally Specific Discretionary Behavior" OR "ESB" OR "Green Behavior" OR "Green Workplace Behavior" OR "OCB-E" OR "Organizational Citizenship Behavior for Environment" OR "PEB" OR "Pro-Environmental Behavior" OR "Employee Sustainability Behavior" OR "Employee Sustainable Behavior". The initial keyword search was conducted without any constraints or limitations this study, the author used secondary data from the Scopus database, a recommended source for systematic literature analysis (Lauretta & Ferreira, 2018). The researcher defined the research base and search keywords, and developed research questions to reflect the primary study goals. The search phrases included various terms related to employee green behavior (EGB).

### **2.1. Search Keywords**

( TITLE-ABS-KEY ( "Behavior for Sustainability" OR "Eco Initiative" OR "EGB" OR "Employee Green Behavior" OR "Environmentally Friendly Behavior" OR "Environmentally Specific Discretionary Behavior" OR "ESB" OR "Green Behavior" OR "Green Workplace Behavior" OR "OCB-E" OR "Organizational Citizenship Behavior for Environment" OR "PEB" OR "Pro-Environmental Behavior" OR "Employee Sustainability Behavior" OR "Employee Sustainable Behavior" ) AND TITLE-ABS-KEY ( "Company" OR "Corporate" OR "Employee" OR "Work" OR "Workplace" ) AND TITLE-ABS-KEY ( "Activate" OR "Affect" OR

“Antecedent” OR “Associate” OR “Determine” OR “Effect” OR “Elicit” OR “Impact” OR “Implication” OR “Increase” OR “Influence” OR “Link” OR “Predict” OR “Promote” OR “Relate” ) ) AND ( LIMIT-TO ( DOCTYPE , “ar” ) OR LIMIT-TO ( DOCTYPE , “re” ) ) AND ( LIMIT-TO ( SUBJAREA , “BUSI” ) OR LIMIT-TO ( SUBJAREA , “PSYC” ) ) AND ( LIMIT-TO ( LANGUAGE , “English” ) ) AND ( LIMIT-TO ( SRCTYPE , “j” ) ) AND ( LIMIT-TO ( PUBSTAGE , “final” ) ) ).

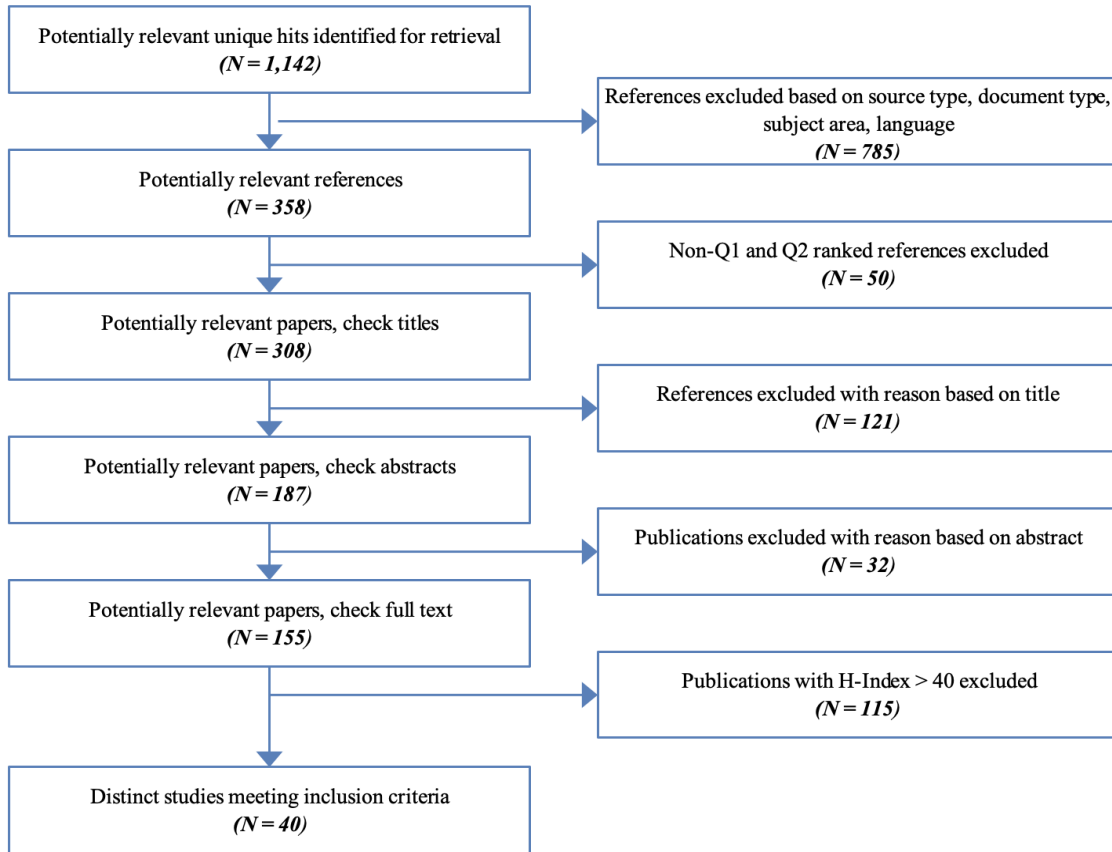


Figure 1. Systematic Literature Review Process

### 3. Results and discussion

#### 3.1. Employee-Level EGB Antecedents

The literature on human resource management (HRM) has grown significantly and now includes research on how HRM strategies can be employed to promote Employee Green Behavior (EGB) and Corporate Social Responsibility (CSR) (Herrera & Heras-Rosas, 2020; Wen et al., 2022). Green HRM refers to using specific HRM practices to achieve an organization’s green objectives as part of a CSR initiative. These practices include recruitment, selection, onboarding, training, performance management, incentives, retention, and separation. Green HRM practices are increasingly being adopted by businesses, especially in regions such as the European Union, where environmental regulations are stricter, or where environmental issues such as air pollution in Asia are more prevalent (Cooke et al., 2020; Yan & Hu, 2022).

Research has found that sustainability parameters such as organizational identity, pro-environmental psychological climate, and organizational ethics of caring influence EGB, in addition to green HRM practices (Fawehinmi et al., 2020a; Fawehinmi et al., 2020b). CSR initiatives can promote

EGB by enhancing employee well-being, company identity, moral and environmental contemplation, and colleague environmental activism. However, CSR alone may not be sufficient to encourage using environmentally friendly logistical and organizational techniques to boost EGB participation. In volatile and dynamic environments, flexible EGBs consistent with paternalistic and/or fragmented CSR structures could function as resilient, dynamic capacities (Podgorodnichenko et al., 2022; Sarvaiya et al., 2021). A cohesive structure in which CSR is embedded across the enterprise and employee involvement will be required to maintain sustained dynamic capacity. While previous research has mainly focused on determining effective organizational approaches for EGB, recent studies suggest that understanding the interaction between micro and macro factors is important in promoting EGB (Diaz-Carrion et al., 2021; Ehnert et al., 2016).

Additionally, research has found that green HRM practices have a stronger influence on non-green employees than on green employees. Green HRM promotes EGB in non-green hotels but not in green hotels, and supervisor support is driven by apathy (Yajid et al., 2020; Yong et al., 2019). While previous studies have primarily viewed EGB as a top-down process, recent evidence suggests that it is crucial to consider the interaction between macro and micro factors as organizational factors influence work and can influence and change them (Ababneh, 2021; Davis et al., 2020). Unfortunately, most research has focused on identifying effective organizational approaches for EGB, rather than understanding the reasons behind the varying degrees of efficacy. Initial findings indicate that green HRM practices are more effective in promoting EGB among non-green employees than green ones. Moreover, green HRM is found to encourage EGB in non-green hotels but not in green hotels. Finally, supervisor support for EGB is driven by apathy towards personal green behavior, with low personal green behavior but high workplace green behavior.

### **3.2. Value-Identity-Personal Norm Model**

According to the VIP model, personal norms, or feelings of moral obligation to engage in environmentally responsible activities, significantly impact environmental behavior. Environmental self-identity (ESI), or the degree to which an individual sees themselves as environmentally conscious, is also a key factor affecting personal norms (Ateş, 2020; van der Werff & Steg, 2016; Zeiske et al., 2021). ESI is influenced by biospheric values, with stronger biospheric values leading to stronger ESI (van der Werff & Steg, 2016). The VIP model differs from the VBN hypothesis in two key ways. First, the VIP model is more concise, as personal norms are behavior-specific variables, while environmental values and self-identity are generic predictors of environmental action.

#### **3.2.1. Biospheric Value**

Values are abstract and stable concepts that guide people's lives, and biosphere values encourage people to think about the environment and prioritize its quality (Frederick, 2018). Biosphere values emphasize the intrinsic value of nature, which leads to a moral obligation to act responsibly toward the environment (Costanza et al., 1997; Shin et al., 2017). Self-identity is linked to values, beliefs, and attitudes, and several studies suggest a positive relationship between biosphere values and environmental self-identity (Steg & de Groot, 2012). People with high biosphere values stress the inherent value of nature, which translates into a moral imperative to engage in environmentally responsible conduct (Frederick, 2018; Kraus et al., 2014).

Several studies hypothesize a connection between self-identity and values (Lu et al., 2019). According to Sparks and Shepherd (1992), a person's self-identity is represented in their beliefs, values, and attitudes. Empirical data demonstrates the favorable effect of biosphere values on ESI in environmental research (Kamalanon et al., 2022; Yadav & Pathak, 2017). For instance, van der Werff et al. (2013b) revealed that biosphere values explained 25% of the variation in ESI, meaning that the higher the biosphere values of a person, the higher their ESI. Similarly, Gatersleben et al. (2014)

observed that those with strong biosphere values identify as ecologically conscious. Therefore, it is proposed that:

H1: Biospheric value (BIO) positively relates to environmental self-identity (ESI).

### 3.2.2. Environmental Self-Identity

This paragraph discusses the concept of personal norms, which refer to a sense of moral responsibility to engage in or avoid certain actions, according to Doran & Larsen (2016) and Wu et al. (2022). Personal norms are formed by individuals and represent their self-expectations in specific contexts (Ünal et al., 2018). Individuals with strong personal norms related to environmental behavior feel ethically obligated to act pro-environmentally (de Groot et al., 2021). Kim & Seock (2019) argue that personal norms are linked to green behavior, meaning that individuals with a higher moral imperative to behave pro-environmentally are more likely to engage in green activities. Thus, it can be hypothesized that:

H3: Personal norm (PNO) positively relates to employee green behavior (EGB).

Previous research has established that an individual's ecological values affect their attitude toward green activity, as demonstrated by the Theory of Planned Behavior (TPB) and the Value-Identity-Personal Norm (VIP) model (Ateş, 2020). According to value-based theory, biosphere values prioritize human-nature harmony and are particularly relevant for examining the link between ecological values and attitudes (Barney et al., 2021; Slater, 1997). Biosphere values have positively influenced pro-environmental sentiments, but their impact on subjective norms has been explored less often. However, van der Werff et al. (2014) found that Vietnamese residents' biosphere values positively affected their subjective consumer norms. Soyez (2012) found that ecocentric value orientation was the biggest predictor of subjective norms about purchasing organic food in several countries. People with biosphere values may develop more favorable impressions of pro-environmental behavior standards due to their care for nature. Although perceived barriers may impact pro-environmental behavior, studies have found that people with biosphere values are still likely to purchase environmentally friendly products despite perceived obstacles (Ajzen, 2019; Qi & Ploeger, 2021; van der Werff et al., 2013). Individuals with strong ecological values also overlook the negative repercussions of renewable energy usage, such as additional labor and higher costs (Perlaviciute & Steg, 2015). Therefore, based on prior research, the following hypotheses are proposed:

H4: Biospheric value (BIO) positively relates to attitudes towards pro-environmental behavior (ATT).

H5: Biospheric value (BIO) positively relates to the subjective norm (SNO).

H6: Biospheric value (BIO) is positively related to perceived behavioral control (PBC).

### 3.3. Theory of Planned Behavior

The Theory of Planned Behavior (TPB) proposes that intention drives behavior, which is influenced by attitudes, personal norms, and perceived behavioral control (Ajzen, 2019). TPB provides a framework for understanding how certain factors can impact desired behavior. Behavioral beliefs, normative views, and control beliefs are the key factors that drive behavior. Behavioral beliefs create positive or negative attitudes about the behavior; normative beliefs provide perceived social pressure or subjective norms; control beliefs produce perceived behavioral control or self-efficacy (Ajzen, 2020; Riza, 2021). Perceived behavioral control moderates the impact of attitudes on behavior and subjective norms on intentions. Individuals are generally more likely to perform the activity if they have positive attitudes, subjective norms, and a strong sense of control. Individuals

with enough control over their actions will likely carry out their intentions. Therefore, the intention is considered the direct cause of the behavior. Perceived behavioral control can serve as a proxy for actual control and contribute to predicting desired behavior (Ajzen, 2019a).

### **3.3.1. Attitude**

The evaluation of a specific activity as positive or negative is known as attitude (Husain et al., 2021; Tomczyk et al., 2020). Bamberg (2003) defines attitudes in the environmental context as “cognitive and emotional assessments of environmental protection objects.” Previous research has demonstrated that attitude is a critical component of EGI (Windschnurer et al., 2022). Individuals with a more favorable view of EGI are expected to be more motivated to engage in environmental conservation activities (Al-Ghazali & Afsar, 2020; Norton et al., 2017). Therefore, this study proposes that:

H7: Attitude (ATT) is positively related to employee green behavioral intention (EGI).

### **3.3.2. Subjective norm**

The concept of subjective norms pertains to an individual’s perception of social pressure to perform or refrain from performing a behavior and can be influenced by various factors, including family, friends, and coworkers (Ham et al., 2015; Widjaja et al., 2020). EBI (pro-environmental behavior intention) utilizes subjective norms. Research has shown that subjective norms positively impact environmental consciousness and the desire to engage in sustainable practices, such as using bicycles (Bananuka et al., 2020; Barbera & Ajzen, 2020). Specifically, Yadav & Pathak (2016) discovered that their subjective standards impact young customers’ willingness to purchase environmentally friendly products. Dewanti et al. (2021) and Santos & Liguori (2020), who did a more recent study, verified that subjective norms had a beneficial influence on the desire to use bicycles sustainably. Due to this, research has shown that persons who consider high-value individuals to have strong subjective standards also have high levels of environmental consciousness (Abashah et al., 2018). The following is postulated in light of the empirical evidence:

H8: Subjective Norm (SNO) positively relates to employee green behavioral intention (EGI).

### **3.3.3. Perceived Behavior Control**

According to Schepers & Wetzels (2007), Perceived Behavioral Control (PBC) is the perception of how easy or difficult it is to accomplish a task based on past experiences and predicted obstacles. PBC evaluates an individual’s ability to understand the underlying factors that enable or hinder actions necessary to address certain challenges (Moshi et al., 2020; Siallagan et al., 2017). The reason why environmentally conscious individuals may not purchase eco-friendly products could be attributed to the higher pricing and reduced availability of such products in certain environmental conditions. People with higher PBC are better able to overcome such obstacles and discomforts (Siallagan et al., 2017; Wardhani et al., 2020), which leads to a higher level of Ecologically Green Behavior (EGB) (Ko & Jin, 2017). Previous research has shown that PBC is essential to understanding EGB, as Bamberg (2003) and Wang et al. (2018) demonstrated. To examine the proposed connection, a hypothesis will be formulated.

H9a: Perceived behavioral control (PBC) is positively related to employee green behavioral intention (EGI).

H9b: Perceived behavioral control (PBC) is positively related to employee green behavior (EGB).

Coskun & Erburg (2014) explain that the Theory of Planned Behavior (TPB) is utilized in an environmentally friendly setting to address user diversity for sustainable behavior. Additionally, TPB is used to investigate intentions toward sustainability in a workplace setting (Greaves et al., 2013).

The TPB states that behavioral intention is the primary predictor of behavior, indicating that the stronger the intention to act, the more likely it is to be carried out (Ajzen, 1991). Several studies have shown that the behavioral intention linked to specific environmental activities is highly correlated with actual behavior in the environmental domain (e.g., Lai & Cheng, 2016; Laudenslager et al., 2004). For example, de Leeuw et al. (2015) found a significant correlation between high school students' perceived environmental behavior and their intentions to engage in pro-environmental activities.

H10: Employee green behavioral intention (EGI) is positively related to employee green behavior (EGB).

### **Organizational-Level EGB Antecedents**

#### **3.4. Green Human Resource Management**

Mousa & Othman (2020) state that Green Human Resource Management (GHRM) can significantly aid in the successful development and implementation of environmental management systems by aligning HRM practices, such as recruitment and selection, training and development, performance management, and compensation management, with the organization's environmental objectives. GHRM practices may include selecting and recruiting environmentally conscious employees (green recruitment and selection), creating a learning and development system to improve employees' environmental awareness and skills in environmental management (green training), evaluating employee performance based on their contribution to the organization's environmental goals (green performance management), and distributing compensation based on their contribution to the organization's environmental objectives, along with other practices (Bombiak, 2019; Kim et al., 2019).

Perceived behavioral control (PBC) refers to an individual's perception of potential challenges in performing specific activities. In the Theory of Planned Behavior (TPB) framework, PBC is one of the factors that influence behavioral intention. PBC represents a person's belief that various factors can either facilitate or hinder action, evaluated against his or her perceived control over these factors (Chen-Cheng, 2019). PBC has been suggested to directly impact behavior (Ajzen, 1991; Armitage & Conner, 1999). As PBC includes self-efficacy and the ease of performing actions, effective implementation of GHRM practices is expected to enhance employees' PBC, resulting in an increased intention to perform and actual pro-environmental behavior (EGB) performance.

Previous research has shown that HRM practices can positively impact employees' attitudes, motivation, and behavior (Alola et al., 2022). To promote environmental management, organizations must implement green HRM practices that integrate environmental issues into various HRM functions and encourage eco-friendly behavior among employees (Alola et al., 2022; Mousa & Othman, 2020). Renwick et al. (2013) suggest that green HRM practices primarily involve incorporating environmental awareness into recruitment, training, performance evaluation, and compensation management. By recruiting environmentally conscious employees, providing environmental training, increasing employees' environmental knowledge, and aligning pay with environmental performance, organizations can encourage employees to adopt environmentally responsible behaviors (Ehnert et al., 2016; Scarbrough, 2003). As employees become familiar with these green HRM practices, their eco-friendly behavior is expected to increase.

According to several studies (Ababneh, 2021; Al-Ghazali & Afsar, 2020; Davis et al., 2020), GHRM practices can influence employee green behavior through several means. Firstly, organizations can articulate their commitment to environmental sustainability during recruitment and evaluate potential employees' environmental values. This can increase the green knowledge and awareness of employees. Secondly, involving employees in implementing green initiatives and providing them



with green training can increase their knowledge and psychological receptivity towards green behavior. Thirdly, according to HRM theory, the effectiveness of HRM practices in promoting proper workplace conduct is based on employees' recognition of the necessity and urgency of adopting such practices. Therefore, implementing GHRM policies can demonstrate the organization's commitment to environmental preservation and encourage employees to work towards achieving green objectives. Lastly, promotions and awards recognizing and rewarding green performance can incentivize employees to participate in and contribute to green initiatives (Davis et al., 2020; Norton et al., 2017). Based on this, GHRM practices are hypothesized to positively influence employee green behavior.

H11a: Green human resource management (GHR) is positively related to perceived behavioral control (PBC).

H11b: Green human resource management (GHR) is positively related to employee green behavior (EGB).

### **3.5. Mediating Role of Organizational Identification**

Organizational identification is when individuals feel emotionally attached to and have a sense of belonging to an organization (Laub, 1999a; Pazireh et al., 2019). The desire to sustain emotionally satisfying interactions with the organization leads to organizational identification. When employees identify with their organization, they are more likely to support and engage in activities beneficial to the organization. Furthermore, identification with the organization encourages ecologically responsible behavior and enhances environmental performance. Workers who positively identify with their organizations perform better, are more motivated and satisfied with their profession and demonstrate positive and constructive organizational behavior. Green identification with a company can create a green culture, which promotes the organization's sustainability and increases employee engagement and satisfaction. Greater organizational identification is likely to lead to favorable action and contribute to achieving the organization's sustainable goals. GHRM strengthens corporate identity and boosts green performance behavior, increasing employee green performance habits (Chaudary, 2019).

H12: Organizational identification (OID) positively relates to employee green behavior (EGB).

H13: Green human resource management (GHR) positively relates to organizational identification (OID).

H16: Organizational identification (OID) mediates green human resource management (GHM)-employee green behavior (EGB) relationship.

### **3.6. Mediating Role of Psychological Capital**

The engagement of workers in green behavior at work may have a crucial role in reducing climate change. Recent research into employee green behavior has revealed that positive variables like personal values and positive affect greatly influence such behavior. However, the link between positive organizational psychology and green employee behavior has been largely overlooked. Employee green behavior can be assessed in two ways: by measuring the extent to which personnel carries out their organizational duties in an environmentally responsible manner or by determining the degree to which employees engage in pro-environmental activities like recycling or conserving resources. Studies have shown that employees' green behavior positively impacts an organization's overall environmental performance, indicating that employees who act environmentally friendly and encourage others to do the same can significantly benefit their organization (Bockorny & Youssef-Morgan, 2019; Gao et al., 2020; Luthans & Youssef-Morgan, 2017; Nguyen & Ngo, 2020; Wang et al., 2018).

Although various articles have examined the predictors of EGB from a positive psychology perspective, we believe that applying positive psychology theory systematically to EGB research could enhance our understanding of who engages in EGB, in what situations, and for what reasons. As a result, we aim to encourage much-needed research on the intersection of positive organizational psychology and EGB. In pursuit of this goal, we provide an extensive evaluation of the literature on EGB predictors, explicitly mapping all studied variables to a positive psychology framework. This framework encompasses three positive psychology principles: positive subjective experiences, positive traits, and positive institutions (Grözinger et al., 2022; Lei et al., 2020).

H14: Psychological Capital (PSC) is positively related to employee green behavior (EGB).

H15: Green human resource management (GHR) positively relates to Psychological Capital (PSC).

H17: Psychological Capital (PSC) mediates green human resource management (GHM)-employee green behavior (EGB) relationship.

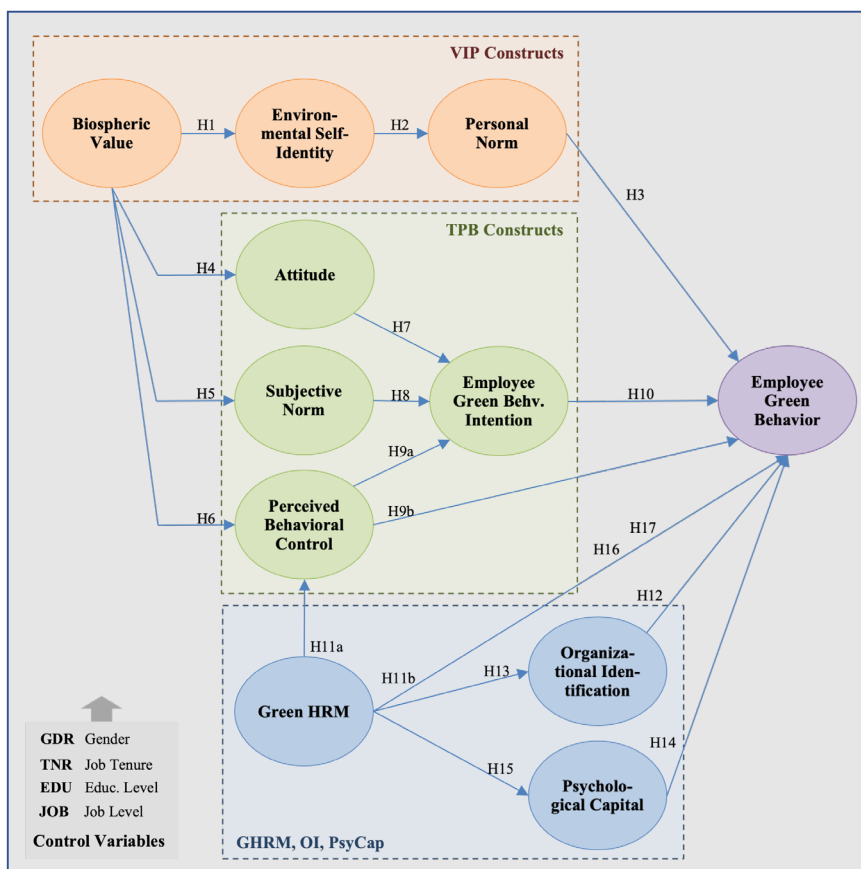


Figure 2. Research Model

#### 4. Conclusions

Despite the increasing recognition of the impact of organizational activities on the natural environment and the pressing need for sustainable ecosystem management, current research on employee green behavior (EGB) in management and organizational science is lacking integration and remains fragmented. This paper provides an overview of the current state of research on EGB and establishes a comprehensive framework for evaluating empirical studies at different levels of analysis and using various approaches. The framework draws on the Theory of Planned Behavior (TPB) and the Value-Identity-Personal Norm (VIP) model to examine the relationship between Green Human Resource Management (GHRM) and EGB. EGB refers to pro-environmental behavior that is specific to the workplace, including activities such as conserving water, reducing waste, saving energy,

and recycling. It is categorized into two types: duty green behavior and voluntary green behavior, the latter of which involves personal initiative that goes beyond what is expected of an employee in their job duties. The paper concludes by highlighting the implications of EGB for environmental sustainability in organizations and suggesting areas for future research.

### Limitations and Future Directions

One potential limitation of this study is the reliance on a literature review as the primary source of data. While a comprehensive review of 40 scholarly articles is a rigorous approach to developing a conceptual model, it may not fully capture the nuances and complexities of actual employee behaviors in specific organizational contexts. Additionally, the study proposes a conceptual model without empirical testing, which may limit the generalizability of its findings. Furthermore, the study focuses on individual-level constructs from the TPB and VIP models, while organizational-level factors such as culture, leadership, and communication may also play a significant role in shaping EGB. Future research could address these limitations by using mixed-methods approaches to gather data from both employees and organizational leaders, and by incorporating a more comprehensive set of variables into the conceptual model.

### Author contributions

**Venansius Bangun Nuswanto:** Conceptualization, Data Analysis, Methodology, Investigation, Resources, Writing the Original Draft, Review, and Editing.

**Aurik Gustomo:** Conceptualization, Data Analysis, Methodology, Investigation, Writing the Original Draft, Review, and Editing.

**Atik Apriansih:** Conceptualization, Methodology, Investigation, Resources, Review, and Editing.

**Hary Febriansyah:** Methodology, Investigation, Resources, Writing the Original Draft, Review, and Editing.

### Competing interests

The authors declared no potential conflicts of interests with respect to the research, authorship, and/or publication of this article.

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