# Influence of Green Transformational Leadership on Environmental Citizenship Behaviors via Green HRM Practices. Application of Resource-Based View Theory in the Tourism Industry of Pakistan

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**Abstract:** This research examines the social and psychological processes that cause people in organizations to participate in environmental citizenship behaviors. The study aims to examine the impact of green transformational leadership on environmental citizenship behavior and explore the mediating effects of green HRM practices. Data was collected through a self-administered questionnaire survey from 312 employees from four and five-star hotels located in Islamabad/Rawalpindi, Pakistan. The data were subjected to statistical analysis using the SPSS and SmartPLS software. The demographic analysis was conducted using SPSS, while the measurement model and structural model were validated using PLS-SEM. The findings suggest that green transformational leadership positively affects environmental citizenship behavior and green HRM practices. Furthermore, this research provides evidence that the association between green transformational leadership and environmental citizenship behavior is partly mediated by green HRM practices. Green transformational leadership can positively impact environmental citizenship behavior both directly and indirectly via green HRM practices. The practical uses of this study for hotel management consist of the significance of cultivating a culture that prioritizes environmental awareness, offering training and materials to assist green activities, and enabling leaders to demonstrate and encourage green practices among employees.

**Keywords:** Green Transformational Leadership; Green HRM; Green Behaviors; Environmental Citizenship Behavior
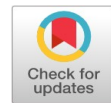
## INTRODUCTION

Environmental problems have emerged as a focal point in worldwide discussions due to the growing recognition of the effects of human actions on the environment (Sidney et al., 2022). Increasing demand from key players to adopt environmental management measures (Bhat et al., 2024; Niazi et al., 2023), has made green operations and commodity creation the norm among organizations across industries and geographies (Singh et al., 2020). It requires the organization to utilize intangible resources to navigate the complexity of sustainability concerns to react in a way that accommodates a variety of stakeholder demands (Singh & El-Kassar, 2019). Prior research indicates that employees at various levels and functions within an organization have a substantial impact on its environmental outcomes (Arshad, 2021; Del Giudice & Della Peruta, 2016). However, upper management plays a crucial role in influencing the environmental performance of the organization, as they possess significant authority and decision-making power (Singh & El-Kassar, 2019).

Organizations require novel styles of leadership that transcend selfish motives and take on leadership obligations in light of the environmental challenges posed by global sustainability (Begum et al., 2022). Green transformational leadership (GTL) has achieved the most significant progress among these types of initiatives to achieve environmental objectives (Çop et al., 2021). GTL has placed a high priority on cultivating inspiration and understanding within the company to achieve ecological goals (Cahyadi et al., 2022). GTL is a leadership approach that strives to inspire, support, and equip employees with a unique vision while also addressing their progress needs to assist the firm in achieving its green goals (Zhou et al., 2018). Moreover, this notion delineates the behaviors of leaders who motivate

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others to go beyond their expected duties concerning environmental matters (Kusi et al., 2021). Moreover, the use of GTL has had a positive impact on employee psychology and the environmental performance of organizations (Alreahi et al., 2022).

Transformational leadership (TL) involves creating an innovative culture and inspiring, involving, and motivating people to have faith in their leader or share their vision, which impacts the organization's efficiency and innovation (Ng, 2017).

The research has emphasized the significance of understanding how workers initiate creative and spontaneous behaviors aimed at creating a better environment (Raineri & Paillé, 2016). Corporate greening operations may cause organizational operational shifts beyond conventional management techniques, systems, and technology (Gattiker & Carter, 2010). Employees' willingness to embrace ongoing transformation and take voluntary obligation for the company's environmental effect often determines the effectiveness or lack of measures to manage the environment (Smith & O'Sullivan, 2012). Thus, this research sought to investigate the social–psychological mechanism behind inventive and impulsive employee behavior to enhance the workplace environment, termed "environmental citizenship behaviors" (ECB) (Boiral, 2009; Daily et al., 2009). To evaluate the level at which employed individuals are eager to participate in environmental citizenship behaviors, we designed a conceptual framework that incorporates an organization's Green human resource management (HRM) practices to the environmental concerns prevalent in the workplace.

The "Resource-Based View Theory" (RBV) states that a company's competitive edge and efficiency are contingent upon its strategic resources, which must be worthwhile, rare, and difficult for rivals to imitate in competition (Barney, 1991). If these strategic resources are challenging for competitors to replicate or substitute with less costly options that can achieve similar objectives, the organization also benefits from enhanced future success and a sustained ongoing edge (Amit & Schoemaker, 1993; Wu & Morschett, 2023). According to the RBV theory, leadership is regarded as a crucial asset for the ecological administration of an organization (Zhou et al., 2018). TL is associated with improved organizational performance when firms engage in innovation to acquire a competitive advantage and increase productivity (Della Peruta et al., 2018). In the TL approach leaders define a necessary transformation and stimulate the workforce to accomplish a goal by emphasizing principles such as justice, equality, and independence (Avolio et al., 1999). Furthermore, TL has an impact on change and transformation and fosters inventive behavior in the workplace (Jiang & Yang, 2015).

We propose that the organizations' top management should implement GTL (Elshaer et al., 2024) and green HRM practices (Jia et al., 2018) to establish and sustain the internal abilities required for the environmental citizenship behavior of employees (Singh et al., 2020). Our investigation endeavors to address two pertinent research questions, specifically, (a) What is the impact of GTL on ECB, both directly and indirectly, via green HRM? (b) What is the direct effect of GTL on Green HRM? Thus, the present research aims to utilize the RBV theory (Barney, 1991) to elucidate how GTL as strategic resources and green HRM practices assist the hotel industry in attracting, developing, retaining, and sustaining green employees, thereby enabling them to engage in environmental citizenship behavior (Raineri & Paillé, 2016). Our research contributes to enhancing the understanding of the association between GTL, green HRM, and ECB of employees in the hotel industry, particularly in response to growing demand from stakeholders. Our research enhances the RBV theoretical frameworks by examining how GTL and green HRM practices in the hotel industry contribute to the development of internal skills for environmental citizenship behavior.

## LITERATURE REVIEW

### Green Transformational Leadership and Environmental Citizenship Behavior

Transformational leaders inspire others and stimulate minds to foster innovation within their organizations (Elkins & Keller, 2003), and may enhance the emergence of novel concepts by offering a clear vision and inspiring motivation among followers (Mumford, 2000). "Green transformational leadership" is defined as "behaviors of leaders who motivate followers to achieve environmental goals and inspire followers to perform beyond expected levels of environmental performance" (Chen & Chang, 2013). Conversely, "environmental citizenship behaviors" are defined as "individual and discretionary social behaviors that are not explicitly recognized by the formal reward system and that contribute to a more effective environmental management by organizations" (Boiral, 2009). GTL

has the responsibility to provide training and motivation to its employees to promote and engage in innovative environmental practices (Zhou et al., 2018). Buil et al. (2019) discovered that transformational leadership can foster a high-quality association with followers. As a result, the followers' concern and devotion towards their organization will grow, leading them to willingly adopt and display constructive behaviors and attitudes. Hence, advocating for the adoption of ECB from the standpoint of TL is a very efficient approach to expedite environmental transformation.

Through the use of TL practices, GTL demonstrates its environmental vision with its followers and motivates them to participate in actions that promote environmental protection (Chen et al., 2014; Robertson & Barling, 2017). Hence, the followers possess a strong understanding of the significance of safeguarding the natural environment to their leader, and they are dedicated to executing actions that are advantageous to the environment. Research has shown a positive relationship between GTL and ECB, which is independent of the overall transformational leadership style (Althnayan et al., 2022). The primary cause of this phenomenon is that GTL can stimulate employees' environmentally conscious drive, ecologically friendly passion, and pro-environmental mindset in the workplace (Robertson, 2018; Robertson & Carleton, 2018). In addition, Robertson (2018) illustrates that GTL also fosters a pro-environmental work atmosphere by raising the proportion of employees who value and advocate for environmental problems. According to the RBV theory, leadership has a significant role in shaping the behavior and performance of environmentally aware personnel. Based on the RBV theory, GLT encourages, motivates, and inspires employees to demonstrate ECB. Thus, We may propose the following hypothesis:

*Hypothesis 1 (H₁). GTL positively influences the environmental citizenship behavior of employees in the hotel industry*

## Green Transformational Leadership and Green HRM Practices

Transformational leaders have a distinct and well-defined vision for the present and upcoming activities of the organization, particularly in the face of constantly changing markets (Bass & Avolio, 1995). Leaders must develop a forward-thinking vision, possess unwavering confidence in that vision, and effectively express and convey it to their employees, to inspire belief in the vision, generate enthusiasm among the employees, and promote motivation, reliability, unity, dedication, and efficiency (Zhu et al., 2005). Alternatively, the organization's green HRM focuses on green HRM practices with the objective is to assisting the organization in promoting and maintaining green employee job behaviors in the work environment (Dumont et al., 2017). According to Renwick et al. (2013), green HRM practices may be defined as "the HRM aspects of environmental management." Several studies have referred to green HRM practices as tasks, systems (Tanova & Bayighomog, 2022), rules, techniques (Darvishmotevali & Altinay, 2022), initiatives, procedures (Yusoff et al., 2020), occurrence, behavior (Mousa & Othman, 2020). These practices incorporate HRM with environmental concerns among employees (Mwita, 2019).

The concept of GTL embodies the values and beliefs of the higher management and significantly shapes the organization's green HRM (Farrukh et al., 2022). Consequently, we assume that GTL in an organization is instrumental in the development of encouraging green HRM procedures and guidelines (Jia et al., 2018) to assist the organization in achieving its objectives and visions (Singh et al., 2020) to accomplish environmental sustainability. To clarify, GTL's focus on addressing the specific requirements of their employees can encourage them to use green HRM methods to maintain the motivation and empowerment of their employees. Consequently, it is anticipated that GTL will have a greater responsibility in promoting and facilitating green HRM practices, including hiring and selecting, training and development, evaluations of performance, and compensation and reward mechanisms. This will serve as a way for GTL to encourage, activate, and inspire employees to accomplish corporate objectives (Farrukh et al., 2022; Zhu et al., 2005). We may come up with this hypothesis:

*Hypothesis 2 (H₂). GTL positively influences Green HRM Practices in the hotel industry*

## Green HRM Practices and Environmental Citizenship Behavior

Green HRM encompasses strategies and practices in HRM that are focused on promoting sustainable use of resources, improving environmental efficiency, and fostering employees' understanding and dedication to environmental management (Tang et al., 2018). Many Green HRM components will enhance the employee ECB, e.g. training and development (Salleh et al., 2020), employee reward system (Daily & Huang, 2001), and performance management system (Steg & Vlek, 2009) cultivate and improve the attainment of ECB of employees.

Regarding the framework of environmental citizenship behavior, "we explore voluntary actions undertaken by members of an organization, actions neither mandated nor incentivized but directed towards fostering environmental improvements" (Daily et al., 2009). The effectiveness of environmental management in an organization is dependent on employed individuals' green behavior, which increases the firm's environmental performance (Ali et al., 2022). Therefore, firms must evaluate how green HRM influences employees' environmentally acceptable behavior (Kim et al., 2020).

The adoption of green HRM significantly and positively affects both employees' environmental behavior and the ecological efficiency of firms (Zaid et al., 2018). According to Cabral and Jabbour (2020), it enhances employees' inclination to participate in environmentally conscious behaviors. In the current period of growing awareness about environmental management and sustainability, Green HRM emphasizes standards for environmental management and promotes employees' adoption of environmentally friendly behaviors (Singh et al., 2020). Previous research conducted by Cheema et al. (2020) discovered a significant and positive relationship between green HRM and environmental performance in the hotel industry. According to the RBV theory (Hambrick & Quigley, 2014), green HRM is a significant resource for organizations since it focuses on enhancing the organization's green performance and assisting the organization in achieving a sustainable competitive advantage (Md. Sahidur Rahman et al., 2020). We may put forward the following hypothesis:

*Hypothesis 3 ($H_3$). Green HRM Practices positively influence environmental citizenship behavior in the hotel industry*

**Green HRM Practices as a Mediator**

Leadership is crucial in any business (Singh et al., 2020), and human capital is the most valuable asset of enterprises (Cillo et al., 2019). Leadership involves comprehending, forecasting, and managing individual and interpersonal relationships that influence how individuals collaborate toward common objectives (Northouse, 2016). On the other hand, HRM is responsible for overseeing an organization's structures and procedures to effectively guide employees in an organized way, usually on a larger level (Saks, 2022). Thus, we propose that leadership and HRM collaborate in overseeing personnel in the workplace, although from distinct viewpoints (Leroy et al., 2018). However, there is a lack of research examining the impact of green HRM practices in mediating the relationship between GTL and employee green behavior (Cahyadi et al., 2022). Prior research has consistently found that GTL has a positive impact on green HRM practices (Huelgas & Arellano, 2021; Singh et al., 2020), and green HRM practices have a positive impact on employee green behavior (Fawehinmi et al., 2020; Gill et al., 2021; Karmoker et al., 2021), GTL indirectly influences employee green behavior (Peng et al., 2020).

Referring to the RBV theory, leaders and followers play a crucial role as valuable assets for an organization and the primary objective of green HRM is to concentrate on enhancing, motivating, and offering opportunities to employees to demonstrate exceptional behaviors that contribute to improving environmental performance and maintaining the organization's green competitive edge (Md. Sahidur Rahman et al., 2020). There is a contention that human resources and leaders fulfill the specified criteria of the RBV theory to create and sustain an exceptional degree of performance. The GTL effectively incorporates the convictions, attitudes, principles, and behaviors of senior management, and significantly influences the firm's green HRM practices (Renwick et al., 2013). Thus, we anticipate that GTL will have a crucial impact on the development of green HRM procedures and regulations (Marshall et al., 2005). Furthermore, Jia et al. (2018) propose that green HRM acts as a mediator for the impact of transformational leadership on organizational green outcomes. Considering the existing literature, we may propose the following hypothesis:

*Hypothesis 4 ($H_4$). Green HRM mediates the positive relationship between GTL and environmental citizen-ship behavior in the hotel industry*
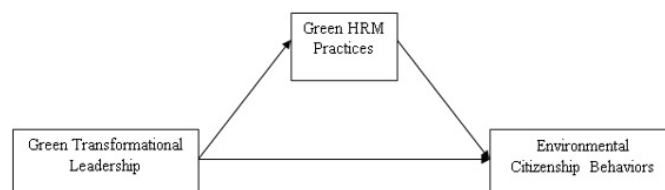
Figure 1: Conceptual framework

## METHODS

### Sample and Procedure

The survey of this research consists of staff from the hotels that fall in the category of four and five-star, situated in the twin city (Islamabad and Rawalpindi), Pakistan. The study hypotheses were investigated by using convenience sampling to reach employees. Despite the limitations of the convenience sampling strategy in terms of generalizability, we chose to use this method for many reasons. Firstly, it is a very efficient and uncomplicated approach that minimizes time consumption and grants researchers the most convenient means of obtaining the required data (Stratton, 2021). Furthermore, previous studies in hospitality have often used a similar methodology (Aboramadan et al., 2022). We adhered to the criteria established by Stratton (2021) to improve the validity of the sampling approach and minimize biases related to it. We used simple and uncomplicated study objectives, a reliable questionnaire, and research measures. Additionally, ensuring that the questionnaire is easy to comprehend, brief, and approachable for respondents was another strategy used to minimize non-response bias (Churchill & Iacobucci, 2006). Furthermore, based on statistical analysis, Harman's single factor had a score of 34.70%, which is below 50%. This suggests that common method bias (CMB) is not found in this investigation (Podsakoff et al., 2003).

Before distributing the questionnaire, higher-level executives of the hotels were approached to obtain permission, enabling the workforce to take part. The survey questionnaires were issued in English as It is the language that is considered to be the standard language in the corporate sector. Many previous scholars have used the same language for data collection purposes (e.g., Abbas et al., 2024; Fatima et al., 2018; Masih, 2022). A total of 480 survey questionnaires were dispersed across eight hotels located in Rawalpindi/Islamabad (each hotel received 60 surveys. The diligent researcher successfully gathered 343 of these surveys. The completed version of the disseminated questionnaires comprised the demographic data of these employees as well as the numerical ratings of GTL, GHRM, and ECB. A total of 31 surveys were excluded due to incomplete data. Therefore, the distribution procedure yielded a total of 312 questionnaires, representing a ratio of 65%. The respondents consisted of 64.1% male and 35.9% female, and 57.4% fall in age bracket of 18-25. Additionally, 41% have 0-5 years and 38.5% have 6-10 years of work experience.

### Measures

All the variables of this study were measured on a "5-point Likert Scale". According to Zhang et al. (2020), green transformational leadership was assessed with an adjusted version of the six items developed by Chen and Chang (2013). Previous studies in hotel corporations have also used these six items (see Elshaer et al., 2024; Suliman et al., 2023). A sample item is "The leader of the green innovation project inspires the project members with environmental plans." The green HRM was measured by the instrument having 6 items developed by Dumont et al. (2017). Previously, Rubel et al. (2021) also employed the same scale to assess the green HRM. A sample item includes "My company sets green goals for its employees". Finally, the environmental citizenship behavior of employees was measured by a 7-item scale developed by Boiral and Paillé (2012). The sample item includes "I encourage my colleagues to adopt more environmentally conscious behaviors." This instrument was chosen due to its broad and non-specific nature, making it applicable to a wide range of organizations and situations.

## ANALYSIS AND RESULTS

This study used the SPSS 25 for demographic analysis and SmartPLS 4.1.0.0 to validate the measurement and structural model (Ringle et al., 2022).

### Measurement Model

We conducted the confirmatory factor analysis to validate the measurement model, as shown in Figure 2. Furthermore, Figure 2 and Table 1 explain the results of the measurement model.
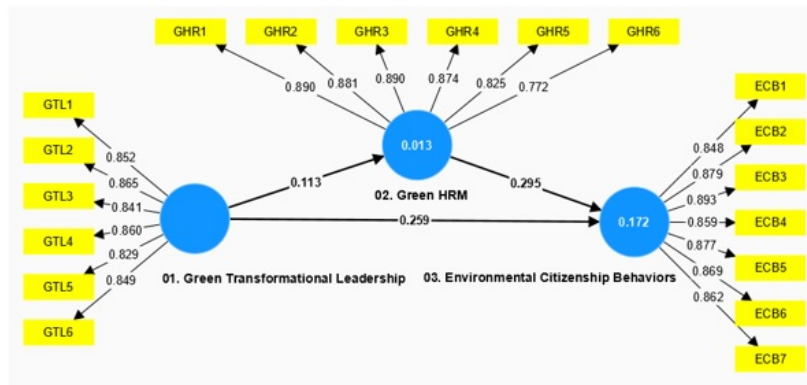


Figure 2: Measurement model

Cronbach's alpha and composite reliability were used to verify the internal consistency reliability, and their values were within the acceptable range, as all the values were above the threshold point of 0.70 (Hair et al., 2019). Similarly, for validating the convergent validity, factor loading, and AVE were used, and the results indicated that the values were within the acceptable range (factor loading higher than 0.70 and AVE greater than 0.50). Table 1 contains all of the information that pertains to consistency reliability, and convergent validity specifically. Since the values were within an acceptable range, the discriminant validity was proved by using the Fronell-Larcker criterion and Heterotrait-Monotrait ratio (HTMT). The findings of the discriminant validity analysis are shown in detail in Table 2. It was also observed that there is no issue of collinearity, as the inner VIF values (as shown in Table 2) are less than 3, which is a more conservative threshold point. Finally, Table 3 explains the model fit, revealing that the goodness of fit has been accomplished, as the values fall within the acceptable range.

Table 1: Factor Loading, Construct Reliability, and Validity

| Items | Loadings | CA | CR | AVE |
|---|---|---|---|---|
| Green Transformational Leadership | | 0.923 | 0.94 | 0.722 |
| GTL1 | 0.852 | | | |
| GTL2 | 0.865 | | | |
| GTL3 | 0.841 | | | |
| GTL4 | 0.86 | | | |
| GTL5 | 0.829 | | | |
| GTL6 | 0.849 | | | |
| Green HRM | | 0.927 | 0.943 | 0.733 |
| GHR1 | 0.89 | | | |
| GHR2 | 0.881 | | | |
| GHR3 | 0.89 | | | |
| GHR4 | 0.874 | | | |
| GHR5 | 0.825 | | | |
| GHR6 | 0.772 | | | |
| Environmental Citizenship Behaviors | | 0.946 | 0.956 | 0.756 |
| ECB1 | 0.848 | | | |
| ECB2 | 0.879 | | | |
| ECB3 | 0.893 | | | |
| ECB4 | 0.859 | | | |
| ECB5 | 0.877 | | | |
| ECB6 | 0.869 | | | |
| ECB7 | 0.862 | | | |

*"CA: Cronbach's Alpha, CR: composite reliability, AVE: average variance extracted"*

Table 2: Discriminant validity and variance inflation factor

| Variables | Fornell and Larcker | | | Heterotrait-Monotrait Ratio | | | Inner VIF | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| 01. Green Transformational Leadership | 0.849 | | | | | | 1 | | 1.013 |
| 02. Green HRM | 0.113 | 0.856 | | 0.119 | | | | | 1.013 |
| 03. Environmental Citizenship Behaviors | 0.293 | 0.324 | 0.87 | 0.31 | 0.345 | | | | |

Table 3: Model fitness

| | Saturated model | Estimated model |
|---|---|---|
| SRMR | 0.038 | 0.038 |
| d_ULS | 0.277 | 0.277 |
| d_G | 0.17 | 0.17 |
| Chi-square | 317.374 | 317.374 |
| NFI | 0.933 | 0.933 |

**Structural Model**

The structural model (shown in Figure 3) in the present research analyzed two distinct approaches: a direct association approach and a mediation approach using the bootstrapping of 5000 samples (Hair et al., 2017). The structural model, sometimes referred to as the "inner model" in PLS-SEM, involves analyzing the association between latent components.
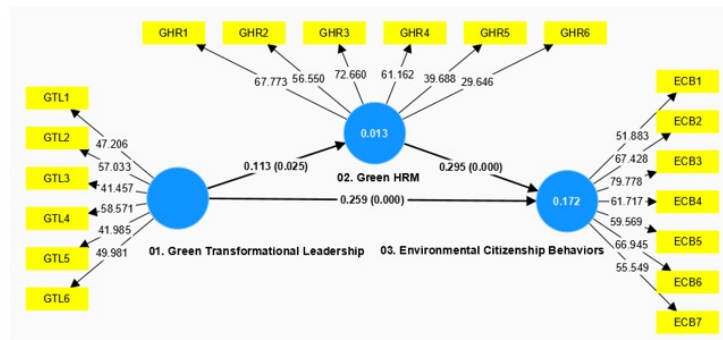
Figure 3: Structural Model

According to the evaluation of the path coefficient displayed in Table 4, all of the proposed hypotheses have t-values greater than or equal to 1.645 at a significance level of 0.05, and all the hypotheses were accepted in this study. Hypothesis 1 ($H_1$) proposed that GTL positively influences environmental citizenship behavior. Figure 3 and Table 4 provide evidence of a significant positive relationship between GTL and ECB at ($\beta$= 0.259, $t$= 5.027, $p$- value< 0.05) supporting Hypothesis 1 ($H_1$). Hypothesis 2 ($H_2$) posits that GTL positively influences green HRM Practices. Figure 3 and Table 4 illustrate a positive significant relationship between GTL and green HRM at ($\beta$= 0.113, $t$= 1.957, $p$-value < 0.05) supporting Hypothesis 2 ($H_2$). Hypothesis 3 ($H_3$) states that green HRM practices positively influence environmental citizenship behavior. Figure 3 and Table 4 provide evidence of a positive significant association between green HRM and ECB at ($\beta$= 0.295, $t$ = 5.362, $p$-value < 0.05) supporting Hypothesis 3 ($H_3$). Hypothesis 4 ($H_4$) states that green HRM mediates the positive relationship between GTL and environmental citizenship behavior. The bootstrapping analysis results presented in Table 5 indicate that the indirect effect ($\beta$= 0.033) is significant with a $t$-value of 1.842 and $p$-value< 0.05.

Table 4: Direct relationships

| Hypotheses | Path | Coefficient | $t$ statistics | $p$ values | Status |
|---|---|---|---|---|---|
| $H_1$ | 01. Green Transformational Leadership -> 03. Environmental Citizenship Behaviors | 0.259 | 5.027 | 0 | Supported |
| $H_2$ | 01. Green Transformational Leadership -> 02. Green HRM | 0.113 | 1.957 | 0.025 | Supported |
| $H_3$ | 02. Green HRM -> 03. Environmental Citizenship Behaviors | 0.295 | 5.362 | 0 | Supported |

Table 5: Indirect relationships

| Hypotheses | Path | Coefficient | $t$ statistics | $p$ values | Status |
|---|---|---|---|---|---|
| $H_4$ | 01. Green Transformational Leadership -> 02. Green HRM -> 03. Environmental Citizenship Behaviors | 0.033 | 1.842 | 0.033 | Supported |

## DISCUSSIONS

### Major Findings

This research investigates the relationship between GTL and environmental citizenship behavior through green HRM in the hotel industry of Pakistan. The primary objective of this study is to examine the association between

GTL and ECB within the mediating relationship of Green HRM. It also contributes to our knowledge of the positive aspects of transformational leadership by introducing a new research framework. Empirical research reveals that there is a positive relationship between GTL and ECB, and green HRM mediates positive relationships between GTL and ECB. The findings corroborate our hypotheses. Based on the hypotheses investigated in this research, the following significant outcomes may be inferred.

First, the results demonstrated that GTL positively and significantly influences the environmental citizenship behavior of employees. This indicates that when transformational leaders are open and honest regarding environmental concerns and actions, it is likely to have a significant influence on how environmentally aware followers are towards a range of ecological standards, with the most important being environmental citizenship behavior. This is achieved by the ongoing supervision of leaders, who closely monitor employees to guarantee adherence to protocols and their timely execution. This is consistent with the assumptions obtained from the RBV Theory. These results support previous empirical research in the hotel sector, indicating that pro-environmental leadership behaviors have an impact on employee green behavior (e.g., Elshaer et al., 2024; Zhang et al., 2020).

Secondly, results revealed that GTL positively and significantly influences green HRM in the organization. GTL plays a crucial role in developing supportive green HRM rules and regulations (Jia et al., 2018) that assist firms in implementing their strategies and visions (Carton et al., 2014) to promote environmental citizenship behavior. GTL focuses on addressing the particular demands of the employees, so they set up and implement green HRM practices to maintain the motivation and empowerment of their employees. Our study supports the RBV theory and is consistent with the prior research that has shown the impact of GTL on green HRM practices (e.g., Carton et al., 2014; Jia et al., 2018; Singh et al., 2020).

Thirdly, the findings of this study indicate that green HRM practices positively and significantly influence the environmental citizenship behavior of employees. Green HRM enhances workers' environmental consciousness (Renwick et al., 2013), fosters innovative thinking towards environmental issues (Jia et al., 2018), and improves the overall environmental performance of the organization (Chen & Chang, 2013). The findings are consistent with the previous studies (e.g., El-Kassar & Singh, 2019; Singh & El-Kassar, 2019).

Fourthly, our research builds upon and enhances previous studies that have shown the impact of GTL on green HRM practices (e.g., Carton et al., 2014; Jia et al., 2018), as well as the influence of green HRM on green innovation within an organization (e.g., El-Kassar & Singh, 2019; Singh & El-Kassar, 2019). Moreover, the study's findings provide evidence that green HRM practices function as a mediator between GTL and environmental citizenship behavior. Based on the paradigm of BRV Theory, the results of our study build upon and enhance prior research (e.g., Jia et al., 2018; Renwick et al., 2013; Singh et al., 2020) that has shown the significant impact of leadership on HRM practices, which in turn predicts green citizenship behavior within organizations. In summary, the findings obtained from the present study confirm all direct and indirect hypotheses and have significant theoretical and practical consequences.

## THEORETICAL CONTRIBUTIONS

There are various theoretical contributions that our study has provided. Our work adds to the advancement of the RBV theory given by Barney (1991) by providing a deeper understanding and explanation of the factors that drive the environmental citizenship behavior of employees. This study's suggested framework that analyzes the association between GTL and ECB, considering the mediating role of green HRM, filled a gap in studies on these topics, particularly in developing countries (Darvishmotevali & Altinay, 2022). Only a few hospitality research has examined how GTL enhances hotel workers' ecological efficiency (e.g., Elshaer et al., 2024; Suliman et al., 2023). Furthermore, the study addressed the suggestions made by earlier research by emphasizing the need to examine the factors that influence employees' environmentally friendly actions, rather than just focusing on the factors that contribute to eco-friendly organizational outcomes (Luu, 2017). This study illustrated the significance of GTL in promoting environmentally friendly behavior among hotel employees. According to this research, those who embrace transformational leaders and possess a strong awareness of environmental practices are significantly impacted by the leaders' activities. The study's findings showed that green HRM had a crucial part in mediating the association between GTL and employees' environmental citizenship behavior. Therefore, this research enhances and broadens the existing literature on green hospitality management, addressing a gap that has been missed by many previous studies. These findings may serve as a valuable basis for researchers researching hospitality to have

a deeper understanding of the variables that impact employees' environmentally friendly green behavior in the hotel industry.

**PRACTICAL IMPLICATIONS**

Our research findings have substantial practical implications that might provide recommendations to hospitality organizations. Given that this leadership style promotes positive green behavioral outcomes in an organization, such as dealing with client issues about the environment, carrying out recycling practices, and imparting knowledge about green initiatives, it is advisable for management in the hotel industry to incorporate the GTL concept into its plan of action. According to hospitality studies, it is widely accepted that the green behaviors exhibited by hotel employees are mostly done willingly, not mandated by institutional guidelines, and are driven by environmental citizenship behaviors. Therefore, it is recommended that GTL practices be implemented to encourage employees to embrace and implement environmental citizenship behaviors in the workplace (Elshaer et al., 2022).

Additionally, recruiters should consider choosing leaders who prioritize transparency and accessibility in addressing and resolving environmental challenges related to staffing rules in the hospitality business. In addition, to address environmental initiatives, hospitality businesses could provide directors with training and mentoring on how to promote a transformational atmosphere by being more accessible, open, and accessible. Specifically, HR departments need to closely cooperate with leaders to clarify the importance of environmentally friendly activities and how leaders may support the adoption of such practices. Furthermore, to foster the required behaviors, we recommend that hotels enhance their performance assessment systems to assess leaders' performance following their GTL behaviors.

Furthermore, the study's findings demonstrate that green HRM effectively played a crucial role in mediating the relationship between GTL and environmental citizenship behaviors. This suggests that GTL requires HRM assistance to fully enhance the green behavior of employees inside hotels. Therefore, this research highlights the need to implement green HRM practices among hotel employees, as it promotes their engagement in environmental citizenship behaviors. We stress that acknowledging employees' efforts for the environment in an organization will foster an atmosphere that promotes good environmental performance. Furthermore, it is important for hotel management to recognize and praise staff who exhibit exceptional proficiency in environmental procedures. Furthermore, to ascertain employees realize the impact of their efforts, managers should cultivate a stimulating and supportive environmentally-friendly work environment, while also providing incentives and assistance. Moreover, managers have the option to engage their staff in green strategy efforts to promote a feeling of responsibility and active participation. Providing training and learning initiatives may enhance employees' awareness of their potential contributions to creating a more environmentally friendly workplace. Therefore, we strongly encourage the hotel industry to be open and responsive to the environmentally conscious ideas and actions of their employees and to convey our appreciation for their efforts.

**LIMITATIONS AND FUTURE RECOMMENDATIONS**

The current study has several constraints, however, these weaknesses may guide future research. The primary concern is the presence of CMB since the same group of respondents completed all surveys including predictor (GTL), mediator (green HRM), and outcome (ECB). To lessen the problem of CMB in the questionnaire, both independent and outcome variables need to be examined from various respondent points of view. Two tiers of replies may be included in future research: those from workers or supervisors, and those from HRM personnel. Furthermore, this research primarily gathered data from four and five-star hotels located in the Islamabad/Rawalpindi region of Pakistan. Future researchers should exercise caution when attempting to reproduce or generalize the results of the current study in other situations since it does not account for cultural variations. In future research, it would be beneficial to explore other factors at both the individual and organizational levels that contribute to eco-friendly behavior in corporate sectors. These factors may include self-efficacy and the role of supervisors in promoting green behavior among workers. Understanding and addressing these factors could lead to persistent competitive benefits that are sustainable.

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