



## Greening the Workplace: Understanding the Link between Organizational Culture and Pro-Environmental Behaviour in Pakistan's Tourism and Hospitality Sector

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### ABSTRACT

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In contemporary discourse, scholars increasingly emphasize the pivotal role of cultivating a green organizational culture (GOC) to drive environmental sustainability within workplaces. However, a significant research gap exists in understanding how GOC influences employees' promotion of environmentally friendly behavior (PEB). Drawing on social identity theories, this study investigates the intricate relationship between GOC and employees' PEB, with a particular focus on the mediating role of employees' environmental self-identity (ESI). Conducted across Pakistan's vibrant hospitality and tourism industries, data from 450 employees were meticulously analyzed using structural equation modeling to scrutinize hypotheses. The findings illuminate a robust and positive correlation between GOC and PEB, underscoring the transformative potential of organizational culture in shaping employees' environmental conduct. Furthermore, the analysis reveals the pivotal intervening role of ESI, elucidating how employees' identification with environmental values mediates the influence of GOC on their behavior. This research not only addresses a critical void in the literature but also offers actionable insights for organizations seeking to enhance their environmental sustainability efforts. By highlighting the centrality of GOC in fostering PEB, this study contributes to advancing our understanding of organizational dynamics and sustainability initiatives in contemporary workplaces.

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## **1.0 Introduction**

Environmental degradation, driven by pollution and the intensifying impacts of global warming, has reached a critical juncture, posing significant threats to human well-being (Al-Swidi et al., 2021; Irani et al., 2022; Luu, 2020). This reality has catalyzed heightened public awareness and societal concern, prompting the implementation of stricter environmental regulations (Du et al., 2021; Zhao et al., 2020). These developments underscore the urgent need for a collective and proactive approach to mitigating environmental risks and ensuring the long-term sustainability of our planet.

The tourism and hospitality industry wields a double-edged sword in the realm of sustainable development. On one hand, it acts as a robust engine for worldwide economic progress, producing an estimated 25% of jobs in 2019 (Toubes & Araújo-Vila, 2022). Its significant contribution to employment and GDP exceeds 10% in both categories (Škare et al., 2021). However, this unquestionable economic footmark comes at an ecological cost. The hotel sector alone accounts for approximately 21% of the industry's ecological impact (Amado dos Santos et al., 2020; Fatoki, 2023; Kuo & Chen, 2009). Aware of this unstable balance, the industry progressively incorporates “green practices” and develops an increased level of environmental consciousness (Chan & Hsu, 2016). Through prioritizing ecological programs and assuming responsible behavior, the tourism and hospitality industry can maintain its leading role in driving development while substantially reducing its harm to the environment. Although the rapid spread of green practices in the tourism and hospitality sector is laudable, the ability of such practices to guarantee comprehensive environmental sustainability is still in question (Zibarras & Coan, 2015). To truly address ecological issues in the sector, it is critically important to propose such solutions, which will be transformative and require the active engagement of employees (Jang et al., 2017). Thorough development of environmental plans and programs will not be sufficient, as their successful implementation will largely depend on the simultaneous actions of employees (Yuriev et al., 2020). As a result, the pro-environmental behavior of employees receives primary attention. It is irrefutable that environmental performance is affected by the employees’ perceptions of environmental issues and their ability to convert such an understanding into responsible behavior (Chen et al., 2015; Uddin et al., 2021). Consequently, the development of eco strategies is directly proportional to the actions of employees in an organization (Omarova & Jo, 2022). Undeniably, employees occupy a pivotal role in an organization's green initiatives. The effectiveness of sustainability-related policies critically relies on employee behavior, particularly task-related pro-environmental behavior (TPEB) mandated by formal job obligations (Bissing-Olson et al., 2013). Kollmuss & Agyeman, (2002), define PEB as "adaptive actions undertaken by individuals to mitigate harm to nature and the built environment".

Recognizing the central importance of PEB in addressing problems such as climate change and other environmental issues, leads to interest in discovering what incentivizes employees to participate in the process. Nonetheless, numerous questions and challenges remain unresolved: It is a matter of demand creation for PEB, and the individual approach recognizes the relevance of both organizational and personal aspects (Farrow et al., 2017; Soares et al., 2021).

While the previous studies have explored the impact of green organizational culture on employee behavior in the context of its promotion of extra-role commitments (Ahmad et al., 2023), the particular role of GOC in the formation of PEB has not been researched well (Muisyo et al., 2022; Pham et al., 2018). However, it is critical in Pakistan, where environmental factors are especially challenging (Abbas et al., 2015; Iqbal et al., 2020), the results of such an investigation may reveal valuable insights. Thus, the current study seeks to examine the relationship between GOC and employee PEB within the unique Pakistani context.

In addition to organizational aspects, individual factors also importantly affect the environmental decisions and behaviours among employees in the workplace. Understanding PEB according to Social Identity Theory, we explore the role of the self-identity concept. Rooted in Social Identity Theory, the self-definition perspective, suggests that individuals constantly strive to reconcile their self-image with their behavior (Christensen et al., 2004; Murnieks et al., 2014; Stets & Burke, 2000). Individuals strive to reduce the cognitive dissonance between their identity and actions. The concept of ESI – the feeling of being ecologically aware and responsible (Van der Werff et al., 2013) – may be understood using this model. As employees realize that their behavior benefits the environment, ESI becomes stronger. Over time, the strong ESI contributes to an increase in PEBs among employees in organizations (Cheng et al., 2021). Moreover, SIT emphasizes how social groups and connections play a significant role in influencing how each person views themselves (Glassner & Tajfel, 1985; Stets & Burke, 2000). These groups include organizations, which have distinct cultures and have a big impact on how employees identify themselves (Pham et al., 2018). When it comes to ecological action, GOC has a substantial effect on how the workforce perceives the environment. Because workers are inclined to grasp the principles that their enterprise supports (Bouman et al., 2021; Fielding & Hornsey, 2016). A positive feedback loop is generated when individual ESI and organizational cultural norms match, which increases PEB enthusiasm on an individual basis.

The current research has two significant contributions to the body of knowledge regarding green organizational culture and pro-environmental behavior. First, we use social identity theory as a lens around which we explore the link between GOC and PEB. This offers new insight on the understanding of how to mold individual behaviour to environmentally friendly behavior in an organizational context. Secondly, we integrate the idea of ESI as an intervein element to further increase the rubberiness of the theoretical framework. This extends our understanding of how GOC shapes workers' judgments of themselves and, in turn, shapes their environmental behavior at work.

## **2.0 Literature Review**

### **2.1 Green Organizational Culture and Pro-Environmental Behavior**

Researchers have highlighted different variables that affect employee PEB, such as values (Afsar & Umrani, 2020), leadership (Robertson & Barling, 2013), and green HRM practices (Ansari et al., 2021). However, there is a crucial knowledge gap about how an organization may effectively grow a greener workforce since the precise role that organizational culture plays in initiating and steering employee PEB has not received enough attention. Organizational culture

serves as a crucial intangible asset, contributing significantly to the development of an organization's strength. As per Hatch, (1993), organizational culture is commonly perceived as comprising a set of fundamental values and belief systems. In line with this perspective, a green organizational culture, characterized by its commitment to environmental issues as a core organizational value, can be conceptualized as encompassing assumptions, values, symbols, and artifacts that mirror the pursuit of environmentally sustainable development within organizations. Some researchers propose deriving the definition of GOC from studies on organizational culture. In this context, GOC can be characterized as “the set of values, principles, and beliefs that guide all organizational practices towards the goal of becoming an environmentally friendly organization” (Qu et al., 2022; Tahir et al., 2019). Furthermore, an organization is considered to have a green culture when its members go beyond solely profit-driven objectives, organizations distinguished by a "green" culture prioritize optimizing their positive environmental contributions while simultaneously mitigating their negative impacts (Aggarwal & Agarwala, 2021). While the perception within some management circles may be that pro-environmental efforts are primarily driven by societal pressures (Farrow et al., 2017), research indicates that meaningful environmental progress necessitates a collaborative approach involving both management and employees (Muisyo et al., 2022). Consequently, fostering shared green values through the cultivation of an environmentally conscious GOC becomes an essential element for establishing successful environmental management practices within organizations (Aggarwal & Agarwala, 2021; Galpin et al., 2015).

Organizational culture plays a significant role in either promoting or discouraging motivation for environmental sustainability (Fernández et al., 2003). Culture exerts influence on individuals by shaping and encouraging specific types of behavior (Triandis, 1989). Within companies that prioritize "green" values, employees are expected to act in ways that benefit the environment. Everything from the company's overall culture to its structure and identity influences how employees think and behave (Al-Swidi et al., 2021). Ultimately, fostering a "green" culture can drive employees to actively choose environmentally friendly behaviors (Chwialkowska et al., 2020). Based on this research the below hypothesis was developed.

H1: GOC has a significant positive impact on task-related PEB of employees.

## **2.2 Mediating Role of Environmental Self-identity**

In the contemporary labour force, workers frequently view their company as a person with a unique personality, characterized by a range of principles, objectives, and drives that are apparent in its behavior and regulations. When an employee's own values and the goals of the organization coincide, this view becomes even more meaningful since it helps the employee reinforce their unique identity in a synergistic way (Eisenberger & Stinglhamber, 2011). This phenomenon is particularly powerful when considered in the context of environmental consciousness. The ultimate goal of initiatives to develop an eco-centric organizational culture is to reduce environmental impact and promote the use of renewable sources. These initiatives are characterized by the acceptance of sustainable practices and resource-efficient procedures (Aggarwal & Agarwala, 2023; Tahir et al., 2019). Three major levers can be used to enrich a green

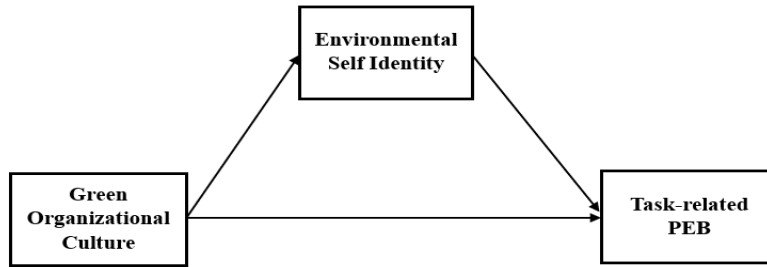
workplace culture: redefining staff roles to include environmental duties, initiating competitive play to foster pro-environmental behavior, and building performance assessments on green standards. This complete strategy has the ability to redesign employee identities. Employees may discover that their identities are becoming more and more entwined with their environmental contributions as they embrace their new positions and participate in competitive green projects (Ahmad et al., 2023).

Fostering a GOC can have a substantial impact when employees have a strong sense of purpose and commitment to their roles within the company. It could support PEBs and include them in workers' self-concepts as central components, in addition to supporting them (Alina M. Udall et al., 2020; Alina Mia Udall et al., 2021). This attractive connection between our inner sense of self and our actions is confirmed by research on self-identity (Alina Mia Udall et al., 2021). Research has exhibited that certain identities, such as "employees with a strong environmental self-identity," can get entwined with particular behaviors, such as taking environmentally accountable actions. Put differently, those who consider themselves to be ecologically sensitive have a higher likelihood of participating in PEB. On the other hand, entities who have a poorer self-insight about taking environmental action normally participate in less of it (Alina Mia Udall et al., 2021).

Furthermore, ecological values and an ESI function as convincing catalysts for environmental alternatives and action intentions (Ateş, 2020). The association between internal desire to apparent behavior is indicated when these inclinations are displayed in tangible acts (Song et al., 2023). Interestingly, proactive and supportive environmental measures inside the firm considerably boost the important relationship between increasing pro-environmental behaviors (PEBs) in employees and robust ESI. Applying identity theory, we can understand that individuals who strongly identify with a group tend to feel more positive when their actions align with the group's norms (Christensen et al., 2004). In the context of organizations, employees with a strong ESI perceive a shared understanding amongst their colleagues regarding environmental values, goals, and a natural inclination towards responsible actions. This collective mindset fosters a supportive environment for PEBs to flourish. In fact, studies have consistently shown a positive correlation between employee perception of an organization's commitment to environmental responsibility and their own engagement in PEBs (Ateş, 2020; Bouman et al., 2021). Based on these observations, we hypothesize that.

H2: ESI has a significant positive impact on task-related PEB.

H3: ESI significantly mediates the relationship between GOC and task-related PEB.



*Fig 1. Research Framework*

### 3.0 Methodology

#### 3.1 Data Collection

To test our hypotheses, we used a quantitative survey method (Leavy, 2022). Employees filled out a self-administered questionnaire designed to measure the key concepts under study (Hardesty & Bearden, 2004). Before collecting data, three academics reviewed the questionnaire for clarity and accuracy. We even tested it on a small group of 30 employees to ensure the questions were clear, took a reasonable amount of time to complete, and didn't have any major problems. Based on the positive results, we didn't need to change the questionnaire. The survey had two main parts: basic information about the respondents and questions related to the study's variables. We sent out 550 questionnaires and received 472 completed ones, giving us a strong response rate of 86%. To ensure data quality, we followed Hair et al., (2021) guidelines. We dismissed any surveys with more than 15% missing information, missing a whole variable, or missing important variables. After applying these criteria, we were left with 450 valid questionnaires, exceeding the minimum sample size of 384 suggested by (Krejcie & Morgan, 1970) for populations of unknown size. Data was gathered in 2023 between July and September.

#### 3.2 Measures

The measure used for the current study is adopted from literature and all responses were measured using a “five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree”.

**Table 1: Measures**

Constructs	Items	References
Green Organizational Culture (GOC)	6	(Shahriari et al., 2022)
Environmental Self Identity (ESI)	3	(Van der Werff et al., 2014)
Task-Related Pro-Environmental Behavior (TPEB)	3	(Bissing-Olson et al., 2013)

#### 3.3 Data Analysis

The current study used Smart PLS 4 software and the partial least squares (PLS) technique to explore the insights from the collected data. Because it is so good at unraveling

elaborate direct and indirect connections between variables, this investigative method is commonly used in organizational and individual behavior studies (Gimeno-Arias et al., 2021; Guenther et al., 2023; Joe F. Hair et al., 2011). To achieve the objective of the current study, smart PLS software is an effective tool since it provides strong statistical models without requiring any particular assumptions about the distribution of the data (Joseph F. Hair et al., 2021)

#### 4.0 Results and Discussion

##### 4.1 Sample Profile

According to the participant's demographic characteristics, 85.7% of the sample is male and 14.3% is female. The respondents were divided into the following age groups: under 20 (7.4%); 21–29 (30.8%); 30–39 (28.7%); 40–49 (23.6%); and above 50 (9.5%). 23% of participants had less than an intermediate degree, 44.6% had an intermediate degree, 28% had a bachelor's degree, and 7% had a master's degree or more. The split of job experience is as follows: less than a year (8.3%); one to three years (21.3%); four to six years (19.9%); seven to nine years (39.1%); and ten years or more (11.3%).

##### 4.2 Convergent Validity and Composite Reliability

To ensure convergent validity, this study evaluated reliability through measures of CR and AVE. Following the criteria set by (Gefen & Straub, 2005), factor loadings for each item of each variable were required to exceed 0.6. The requirement for factor loadings exceeding 0.6 was satisfied for all questions in the questionnaire. For instance, in the case of the GOC variable, the factor loadings for questions 1–6 were 0.801, 0.768, 0.775, 0.738, 0.820, and 0.830, all surpassing the 0.6 threshold. Additional factor loadings for other questions are detailed in Table 2.

**Table 2: Measurement model Validity and Reliability.**

Constructs	Items	Loadings	VIF	Cronbach's alpha	Composite Reliability CR	Average variance extracted (AVE)
Green Organizational Culture	GOC1	0.801	3.413	0.879	0.908	0.623
	GOC2	0.768	4.739			
	GOC3	0.775	2.382			
	GOC4	0.738	3.288			
	GOC5	0.820	2.504			
	GOC6	0.830	2.072			
Environmental Self Identity	ESI1	0.882	2.068	0.831	0.899	0.747
	ESI2	0.835	1.780			
	ESI3	0.875	1.946			
Task-Related Pro-Environmental Behavior	TPEB1	0.822	1.644	0.758	0.861	0.674
	TPEB2	0.859	1.653			
	TPEB3	0.779	1.391			

Reliability was assessed using CA and CR. The results for all constructs are presented in Table 2. The Cronbach’s alpha and CR values were 0.879 and 0.908 for the GOC variable, 0.831 and 0.899 for ESI, 0.758 and 0.861 for TPEB. As recommended by (Joe F. Hair et al., 2011), for a model to be reliable, both CA and CR should exceed 0.7. Since these criteria were met, the developed model demonstrated reliability. Moreover, Table 2 indicates that the AVE values for all constructs surpass the threshold value of 0.5 (Byrne, 2013; Joe F. Hair et al., 2020). Therefore, convergent validity is established for the entire sample.

### 4.3 Discriminant Validity

The discriminant validity of the variables was evaluated through the Heterotrait-Monotrait ratio (HTMT). According to (Franke & Sarstedt, 2019), for validity to be established, all HTMT ratios should be less than 0.9. The findings presented in Table 3 demonstrate that all computed HTMT ratios were below 0.9, affirming divergent validity.

**Table 3: Heterotrait-Monotrait Ratio**

	ESI	GOC	TPEB
ESI			
GOC	0.792		
TPEB	0.654	0.887	

### 4.4 Assessment of Structural Model

Path coefficients were determined using the PLS bootstrapping method to examine the hypotheses of the study. Table 4 outlines the results of the direct effects. Hypotheses H1 and H2 investigate the causal relationship between OGC and ESI with task-related PEB respectively. The results indicate a positive association between OGC and task-related PEB ( $\beta = 0.353$ ,  $p < 0.001$ ) and ESI and task-related PEB ( $\beta = 0.259$ ,  $p < 0.00$ ), providing support for H1 and H2.

**Table 4: Results of bootstrapping.**

Path	Path Coefficient (Beta)	Standard deviation	T statistics	P values	95% CI	Impact
ESI → TPEB	0.259	0.050	5.227	0.000	0.162-0.351	Supported
GOC → ESI	0.646	0.034	19.214	0.000	0.580-0.712	Supported
GOC → TPEB	0.409	0.050	8.180	0.000	0.315-0.502	Supported

The mediation analysis results, as presented in Table 5, reveal that the association between GOC and task-related PEB is mediated by SEI ( $\beta = 0.182$ ,  $p < 0.001$ ). Consequently, H3 is confirmed. The analysis shows that GOC indirectly influences task-related PEB through ESI. This means that as an organization embraces green values, employees develop a stronger identity as environmentally conscious individuals, which then motivates them to take green actions at work.



**Table 5: Mediation analysis.**

<b>Path</b>	<b>Path Coefficient (Beta)</b>	<b>Standard deviation</b>	<b>T statistics</b>	<b>P values</b>	<b>95% CI</b>	<b>Impact</b>
GOC → ESI → TPEB	0.168	0.033	5.110	0.000	0.106-0.230	Supported

## 5.0 Discussion and Conclusion

Our research dives deep into the under-explored territory of employee environmental behavior. By examining how a supportive green organizational culture shapes employees' sense of self as environmentally conscious individuals (ESI), this study sheds new light on the driving forces behind pro-environmental actions at work. With this information, managers and researchers may create work environments that not only support employee growth but also promote environmental health.

This investigation supports an increasing amount of research that argues that organizational culture has a major impact on several aspects of employee behavior, such as pro-environmental behavior, attitudes (Shah et al., 2019), and innovation (Hogan & Coote, 2014). These findings extend and confirm previous research in this area by providing empirical confirmation for the idea that a GOC has a substantial effect on employee behavior (Ahmad et al., 2023; Al-Swidi et al., 2021; Azhar & Yang, 2021). According to Roscoe et al., (2019), institutional policies and practices that enhance environmental sustainability must be linked to the organization's values, norms, and operative framework rather than being seen as optional add-ons. This enhances the creation of a strong and comprehensive GOC. The findings of this study are also in line with Zientara & Zamojska, (2018), who highlighted the role that GOC plays in motivating employees to act in an environmentally friendly manner. This stresses the idea that an organizational culture that is focused on ecological sustainability, has the power to significantly influence employee behavior. Furthermore, the current study is consistent with the research of Wang, (2019) that highlighted the critical role that a GOC plays in fostering and supporting employees' environmentally conscious behavior.

Second, the results shed light on the "how" underlying this association in addition to confirming that a GOC promotes PEB. The finding shows that ESI functions as a mediator for GOC and PEB (Bouman et al., 2021; Alina Mia Udall et al., 2021). When an organization places high importance on environmental concerns, its employees feel more strongly that they are environmentally responsible people, which encourages them to act sustainably in the workplace. This is consistent with past research that suggests that by endorsing GOC through altering organizational roles, applying green competition among employees, and performance evaluation according to environmental values employees' identities inside the organization can be gradually shifted towards environmental consciousness. In a similar vein, Yuriev et al., (2020) stress that employees can be slowly stimulated to make environmentally friendly decisions by an organization's GOC. A robust GOC fosters ESI by deeply embedding environmentally conscious behavior into employees' core identity. When employees strongly identify with their roles within

a green culture, their self-perception as environmentally conscientious individuals naturally translates into positive environmental actions.

### **Conclusion**

Addressing the current environmental challenges faced by the organization this study provides fresh insight on how organizations can reduce environmental impacts of organization through GOC and PEB. By using quantitative data and structural equation modeling the finding shows a substantial impact of GOC on the PEB of employees. The findings also confirm that the ESI of employees mediates the connection between GOC and PEB. The findings provide important information for organizations seeking to reduce their environmental footprint and enhance environmental sustainability.

### **Theoretical Contributions**

By using of social identity theory, presented by Ashforth & Mael, (1989), the study offers a new picture of how GOC affects employees' task-related PEB. The finding of the current study confirms a strong relationship between GOC and task-related PEB. These findings propose that organizations should focus on making all of their policies and procedures efficient in developing a GOC to promote PEB and enhance environmental performance among employees (Chwialkowska et al., 2020). The study supports the trend of a GOC and highlights how influential it is for organizational values, norms, and daily practices to be in line with the environmental management system (EMS) (Ahmad et al., 2023). The findings are in line with previous studies, emphasizing the crucial impact of GOC in affecting an individual's PEB. (Amrutha & Geetha, 2021; Hooi et al., 2022; Piwowar-Sulej, 2020).

This study extends the previously documented connection between organizational culture in influencing pro-environmental behavior (Khalil et al., 2022) by investigating how GOC enhances employees' PEB through the lens of ESI. While there is abundant evidence connecting individual ESI and PEB in family contexts (Gkargkavouzi et al., 2019), this study increases this knowledge to the crucial area of workplace behavior in line with growing calls for broader application of ESI (Bouman et al., 2021). Additionally, this study fills in a major theoretical vacuum by shedding light on how GOC supports particular ESI components in workers. We significantly advance our understanding of PEB antecedents by elucidating this important mechanism through empirical data, providing fresh perspectives for scholars and practitioners alike. Furthermore, by clarifying the variables impacting employees' PEB, in the context of developing countries like Pakistan, this study significantly adds to the body of literature. The main conclusions highlight the significance of environmental self-identity and green organizational culture as crucial factors that are essential in encouraging employees' pro-environmental behavior and, eventually, improving environmental organizational performance.

### **Practical Implications**

The study's findings have important ramifications for managers and legislators alike. Organizations should make sure that their strategies, policies, and practices support the creation of a supportive overall system to effectively inspire pro-environmental behavior among employees and improve environmental performance, especially by fostering a green organizational culture.

Such a culture develops as a result of various reasons. For instance, the organization's goals, values, mission, and vision should all be focused on developing an eco-friendly corporate culture. These fundamental components ought to be manifested in concrete actions, such as hiring people who have a strong sense of environmental awareness, putting environmental issues into training programs, praising and rewarding staff members for their eco-friendly efforts, and allocating the required funds and infrastructure. It is possible to foster a GOC through organized activities, which will ultimately increase the PEB of employees. Employees become more productive in the setting of a GOC that is supported by a training and incentive program, which creates opportunities to minimize resource utilization, and increased productivity of employees ultimately improves the organization's general performance and upsurges its competitiveness in the respective industry.

The findings also demonstrate the substantial impact of values and identity on employees' PEB, providing important information for businesses. It follows that organizations must reassess their hiring and selection methods, focusing more weight on assessing applicants according to their environmental values. Employees who have higher environmental values in these circumstances are more expected to show a superior commitment to accompanying the organization's sustainability objectives. Their inclination for employing sustainable work practices is consistent with the organization's environmental values and enhances a mutual dedication to ecologically conscious conduct.

### **Limitations and Future Research**

It is valuable to identify some limitations when interpreting our findings and to suggest possible guidance for future investigation. Similar to extant literature on pro-environmental behavior, our research, is dependent on cross-sectional data, which reduces our ability to draw inferences about cause and effect (Ma et al., 2021). Therefore, to provide robust findings we suggest future studies must adopt longitudinal data collection methods. Empirical data of the current study is collected from Pakistan's tourism and hospitality sector, the findings may vary depending on industry-specific factors. Therefore, to strengthen the generalizability of our findings and to validate them further future studies should focus on certain industries, like manufacturing. Finally, future studies could explore potential mediators, such as team green knowledge sharing and environmentally harmonious passion, to enrich the depth of this connection. Additionally, it would be intriguing for future research to incorporate other individual values, such as altruistic values and biospheric values, as potential moderators within the proposed framework. A more comprehensive and nuanced understanding of the variables influencing pro-environmental behavior would result from taking these elements into account

**Syed Muhammad Abbas:** Problem Identification and Theoretical Framework

**Muhammad Shahid Tufail:** Drafting and Supervision

### **Conflict of Interests/Disclosures**

The authors declared no potential conflicts of interest in this article's research, authorship, and publication.

### **References**

Abbas, A., Amjath-Babu, T. S., Kächele, H., & Müller, K. (2015). Non-structural flood risk mitigation under developing country conditions: an analysis on the determinants of

- willingness to pay for flood insurance in rural Pakistan. *Natural Hazards*, 75(3), 2119–2135. <https://doi.org/10.1007/s11069-014-1415-x>
- Afsar, B., & Umrani, W. A. (2020). Corporate social responsibility and pro-environmental behavior at workplace: The role of moral reflectiveness, coworker advocacy, and environmental commitment. *Corporate Social Responsibility and Environmental Management*, 27(1), 109–125. <https://doi.org/10.1002/csr.1777>
- Aggarwal, P., & Agarwala, T. (2021). Green Organizational Culture: An Exploration of Dimensions. *Global Business Review*, 09721509211049890. <https://doi.org/10.1177/09721509211049890>
- Aggarwal, P., & Agarwala, T. (2023). Relationship of green human resource management with environmental performance: mediating effect of green organizational culture. *Benchmarking*, 30(7), 2351–2376. <https://doi.org/10.1108/BIJ-08-2021-0474>
- Ahmad, J., Al Mamun, A., Masukujjaman, M., Mohamed Makhbul, Z. K., & Mohd Ali, K. A. (2023). Modeling the workplace pro-environmental behavior through green human resource management and organizational culture: Evidence from an emerging economy. *Heliyon*, 9(9). <https://doi.org/10.1016/j.heliyon.2023.e19134>
- Al-Swidi, A. K., Gelaidan, H., & Saleh, R. M. (2021). The joint impact of green human resource management, leadership and organizational culture on employees' green behaviour and organisational environmental performance. *Journal of Cleaner Production*, 316, 128112. <https://doi.org/10.1016/j.jclepro.2021.128112>
- Amado dos Santos, R., Méxas, M. P., Meiriño, M. J., Sampaio, M. C., & Costa, H. G. (2020). Criteria for assessing a sustainable hotel business. *Journal of Cleaner Production*, 262, 121347. <https://doi.org/10.1016/j.jclepro.2020.121347>
- Amrutha, V. N., & Geetha, S. N. (2021). Linking organizational green training and voluntary workplace green behavior: Mediating role of green supporting climate and employees' green satisfaction. *Journal of Cleaner Production*, 290, 125876. <https://doi.org/10.1016/j.jclepro.2021.125876>
- Ansari, N. Y., Farrukh, M., & Raza, A. (2021). Green human resource management and employees pro-environmental behaviours: Examining the underlying mechanism. *Corporate Social Responsibility and Environmental Management*, 28(1), 229–238. <https://doi.org/10.1002/csr.2044>
- Ashforth, B. E., & Mael, F. (1989). Social Identity Theory and the Organization. *Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.5465/amr.1989.4278999>
- Ateş, H. (2020). Merging Theory of Planned Behavior and Value Identity Personal norm model to explain pro-environmental behaviors. *Sustainable Production and Consumption*, 24, 169–180. <https://doi.org/10.1016/j.spc.2020.07.006>
- Azhar, A., & Yang, K. (2021). Examining the Influence of Transformational Leadership and Green Culture on Pro-Environmental Behaviors: Empirical Evidence From Florida City Governments. *Review of Public Personnel Administration*, 42(4), 738–759. <https://doi.org/10.1177/0734371X211027347>

- Bissing-Olson, M. J., Iyer, A., Fielding, K. S., & Zacher, H. (2013). Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. *Journal of Organizational Behavior*, 34(2), 156–175. <https://doi.org/10.1002/job.1788>
- Bouman, T., van der Werff, E., Perlaviciute, G., & Steg, L. (2021). Environmental values and identities at the personal and group level. *Current Opinion in Behavioral Sciences*, 42, 47–53. <https://doi.org/10.1016/j.cobeha.2021.02.022>
- Byrne, B. M. (2013). Structural Equation Modeling with Mplus. In *Structural Equation Modeling with Mplus*. routledge. <https://doi.org/10.4324/9780203807644>
- Chan, E. S. W., & Hsu, C. H. C. (2016). Environmental management research in hospitality. *International Journal of Contemporary Hospitality Management*, 28(5), 886–923. <https://doi.org/10.1108/IJCHM-02-2015-0076>
- Chen, Y., Tang, G., Jin, J., Li, J., & Paillé, P. (2015). Linking Market Orientation and Environmental Performance: The Influence of Environmental Strategy, Employee's Environmental Involvement, and Environmental Product Quality. *Journal of Business Ethics*, 127(2), 479–500. <https://doi.org/10.1007/s10551-014-2059-1>
- Cheng, Z., Liu, W., Zhou, K., Che, Y., & Han, Y. (2021). Promoting employees' pro-environmental behaviour through empowering leadership: The roles of psychological ownership, empowerment role identity, and environmental self-identity. *Business Ethics, Environment and Responsibility*, 30(4), 604–618. <https://doi.org/10.1111/beer.12366>
- Christensen, P. N., Rothgerber, H., Wood, W., & Matz, D. C. (2004). Social norms and identity relevance: A motivational approach to normative behavior. *Personality and Social Psychology Bulletin*, 30(10), 1295–1309. <https://doi.org/10.1177/0146167204264480>
- Chwialkowska, A., Bhatti, W. A., & Glowik, M. (2020). The influence of cultural values on pro-environmental behavior. *Journal of Cleaner Production*, 268, 122305. <https://doi.org/10.1016/j.jclepro.2020.122305>
- Du, K., Cheng, Y., & Yao, X. (2021). Environmental regulation, green technology innovation, and industrial structure upgrading: The road to the green transformation of Chinese cities. *Energy Economics*, 98, 105247. <https://doi.org/10.1016/j.eneco.2021.105247>
- Eisenberger, R., & Stinglhamber, F. (2011). Perceived organizational support: Fostering enthusiastic and productive employees. In *Perceived organizational support: Fostering enthusiastic and productive employees*. American Psychological Association. <https://doi.org/10.1037/12318-000>
- Farrow, K., Grolleau, G., & Ibanez, L. (2017). Social Norms and Pro-environmental Behavior: A Review of the Evidence. *Ecological Economics*, 140, 1–13. <https://doi.org/10.1016/j.ecolecon.2017.04.017>
- Fatoki, O. (2023). Green transformational leadership and employee pro-environmental behavior: The role of green thinking and green psychological climate. *International Journal of Management and Sustainability*, 12(1), 13–25. <https://doi.org/10.18488/11.v12i1.3260>
- Fernández, E., Junquera, B., & Ordiz, M. (2003). Organizational culture and human resources in

- the environmental issue: A review of the literature. *International Journal of Human Resource Management*, 14(4), 634–656. <https://doi.org/10.1080/0958519032000057628>
- Fielding, K. S., & Hornsey, M. J. (2016). A social identity analysis of climate change and environmental attitudes and behaviors: Insights and opportunities. *Frontiers in Psychology*, 7(FEB), 121. <https://doi.org/10.3389/fpsyg.2016.00121>
- Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*, 29(3), 430–447. <https://doi.org/10.1108/IntR-12-2017-0515>
- Galpin, T., Whittington, J. L., & Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corporate Governance (Bingley)*, 15(1), 1–17. <https://doi.org/10.1108/CG-01-2013-0004>
- Gefen, D., & Straub, D. (2005). A Practical Guide To Factorial Validity Using PLS-Graph: Tutorial And Annotated Example. *Communications of the Association for Information Systems*, 16(1), 5. <https://doi.org/10.17705/1cais.01605>
- Gimeno-Arias, F., Santos-Jaén, J., Palacios-Manzano, M., & Garza-Sánchez, H. H. (2021). Using pls-sem to analyze the effect of csr on corporate performance: the mediating role of human resources management and customer satisfaction. An empirical study in the spanish food and beverage manufacturing sector. *Mathematics*, 9(22), 2973. <https://doi.org/10.3390/math9222973>
- Gkargkavouzi, A., Halkos, G., & Matsiori, S. (2019). Environmental behavior in a private-sphere context: Integrating theories of planned behavior and value belief norm, self-identity and habit. *Resources, Conservation and Recycling*, 148, 145–156. <https://doi.org/10.1016/j.resconrec.2019.01.039>
- Glassner, B., & Tajfel, H. (1985). Social Identity and Intergroup Relations. In *Contemporary Sociology* (Vol. 14, Issue 4). Cambridge University Press. <https://doi.org/10.2307/2069233>
- Guenther, P., Guenther, M., Ringle, C. M., Zaefarian, G., & Cartwright, S. (2023). Improving PLS-SEM use for business marketing research. *Industrial Marketing Management*, 111, 127–142. <https://doi.org/10.1016/j.indmarman.2023.03.010>
- Hair, Joe F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, Joe F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, Joseph F., Astrachan, C. B., Moiescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, C. M. (2021). Executing and interpreting applications of PLS-SEM: Updates for family business researchers. *Journal of Family Business Strategy*, 12(3), 100392. <https://doi.org/10.1016/j.jfbs.2020.100392>
- Hardesty, D. M., & Bearden, W. O. (2004). The use of expert judges in scale development. Implications for improving face validity of measures of unobservable constructs. *Journal*

- of Business Research*, 57(2), 98–107. [https://doi.org/10.1016/S0148-2963\(01\)00295-8](https://doi.org/10.1016/S0148-2963(01)00295-8)
- Hatch, M. J. (1993). The Dynamics of Organizational Culture. *Academy of Management Review*, 18(4), 657–693. <https://doi.org/10.5465/amr.1993.9402210154>
- Hogan, S. J., & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, 67(8), 1609–1621.
- Hooi, L. W., Liu, M. S., & Lin, J. J. J. (2022). Green human resource management and green organizational citizenship behavior: do green culture and green values matter? *International Journal of Manpower*, 43(3), 763–785. <https://doi.org/10.1108/IJM-05-2020-0247>
- Iqbal, N., Khan, A., Gill, A. S., & Abbas, Q. (2020). Nexus between sustainable entrepreneurship and environmental pollution: evidence from developing economy. *Environmental Science and Pollution Research*, 27(29), 36242–36253. <https://doi.org/10.1007/s11356-020-09642-y>
- Irani, F., Kiliç, H., & Adeshola, I. (2022). Impact of green human resource management practices on the environmental performance of green hotels. *Journal of Hospitality Marketing and Management*, 31(5), 570–600. <https://doi.org/10.1080/19368623.2022.2022554>
- Jang, Y. J., Zheng, T., & Bosselman, R. (2017). Top managers' environmental values, leadership, and stakeholder engagement in promoting environmental sustainability in the restaurant industry. *International Journal of Hospitality Management*, 63, 101–111. <https://doi.org/10.1016/j.ijhm.2017.03.005>
- Khalil, S. I., Farhan, O. M., & Hamad, H. A. (2022). the Role of Digital Leadership in Achieving Organizational Excellence an Applied Study At the University of Tikrit. *World Economics and ...*, 12(July), 85–94. <https://scholarexpress.net/index.php/wefb/article/view/1184%0Ahttps://scholarexpress.net/index.php/wefb/article/download/1184/1072>
- Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239–260. <https://doi.org/10.1080/13504620220145401>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
- Kuo, N. W., & Chen, P. H. (2009). Quantifying energy use, carbon dioxide emission, and other environmental loads from island tourism based on a life cycle assessment approach. *Journal of Cleaner Production*, 17(15), 1324–1330. <https://doi.org/10.1016/j.jclepro.2009.04.012>
- Leavy, P. (2022). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Publications.
- Luu, T. T. (2020). Integrating green strategy and green human resource practices to trigger individual and organizational green performance: the role of environmentally-specific servant leadership. *Journal of Sustainable Tourism*, 28(8), 1193–1222.

- <https://doi.org/10.1080/09669582.2020.1729165>
- Ma, Y., Faraz, N. A., Ahmed, F., Iqbal, M. K., Saeed, U., Mughal, M. F., & Raza, A. (2021). Curbing nurses' burnout during COVID-19: The roles of servant leadership and psychological safety. *Journal of Nursing Management*, 29(8), 2383–2391. <https://doi.org/10.1111/jonm.13414>
- Muisyo, P., Su, Q., Ho, T. H., Julius, M. M., & Usmani, M. S. (2022). Implications of green HRM on the firm's green competitive advantage: the mediating role of enablers of green culture. *Journal of Manufacturing Technology Management*, 33(2), 308–333. <https://doi.org/10.1108/JMTM-01-2021-0033>
- Murnieks, C. Y., Mosakowski, E., & Cardon, M. S. (2014). Pathways of Passion: Identity Centrality, Passion, and Behavior Among Entrepreneurs. *Journal of Management*, 40(6), 1583–1606. <https://doi.org/10.1177/0149206311433855>
- Omarova, L., & Jo, S. J. (2022). Employee Pro-Environmental Behavior: The Impact of Environmental Transformational Leadership and GHRM. *Sustainability (Switzerland)*, 14(4), 2046. <https://doi.org/10.3390/su14042046>
- Pham, N. T., Phan, Q. P. T., Tučková, Z., Vo, N., & Nguyen, L. H. L. (2018). Enhancing the organizational citizenship behavior for the environment: The roles of green training and organizational culture. *Management and Marketing*, 13(4), 1174–1189. <https://doi.org/10.2478/mmcks-2018-0030>
- Piwowar-Sulej, K. (2020). Pro-environmental organizational culture: Its essence and a concept for its operationalization. *Sustainability (Switzerland)*, 12(10), 4197. <https://doi.org/10.3390/su12104197>
- Qu, X., Khan, A., Yahya, S., Zafar, A. U., & Shahzad, M. (2022). Green core competencies to prompt green absorptive capacity and bolster green innovation: the moderating role of organization's green culture. *Journal of Environmental Planning and Management*, 65(3), 536–561. <https://doi.org/10.1080/09640568.2021.1891029>
- Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34(2), 176–194. <https://doi.org/10.1002/job.1820>
- Roscoe, S., Subramanian, N., Jabbour, C. J. C., & Chong, T. (2019). Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment*, 28(5), 737–749. <https://doi.org/10.1002/bse.2277>
- Shah, T. A., Khattak, M. N., Zolin, R., & Shah, S. Z. A. (2019). Psychological empowerment and employee attitudinal outcomes: The pivotal role of psychological capital. *Management Research Review*, 42(7), 797–817. <https://doi.org/10.1108/MRR-05-2018-0194>
- Shahriari, M., Tajmir Riahi, M., Azizan, O., & Rasti-Barzoki, M. (2022). The effect of green organizational culture on organizational commitment: The mediating role of job satisfaction. *Journal of Human Behavior in the Social Environment*, 1–18.
- Škare, M., Soriano, D. R., & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and



- tourism industry. *Technological Forecasting and Social Change*, 163, 120469. <https://doi.org/10.1016/j.techfore.2020.120469>
- Soares, J., Miguel, I., Venâncio, C., Lopes, I., & Oliveira, M. (2021). Public views on plastic pollution: Knowledge, perceived impacts, and pro-environmental behaviours. *Journal of Hazardous Materials*, 412, 125227. <https://doi.org/10.1016/j.jhazmat.2021.125227>
- Song, W., Deng, J., Zhang, F., Peng, X., & Jin, X. (2023). Activating employee pro-environmental behavior in the workplace: the effects of environmental self-identity and behavioral integrity. *Environment, Development and Sustainability*, 1–27. <https://doi.org/10.1007/s10668-023-03549-7>
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63(3), 224–237. <https://doi.org/10.2307/2695870>
- Tahir, R., Athar, M. R., Faisal, F., Shahani, N. un N., & Solangi, B. (2019). Green Organizational Culture: A Review of Literature and Future Research Agenda. *Annals of Contemporary Developments in Management & HR*, 1(1), 23–38. <https://doi.org/10.33166/acdmhr.2019.01.004>
- Toubes, D. R., & Araújo-Vila, N. (2022). A Review Research on Tourism in the Green Economy. *Economies*, 10(6), 137. <https://doi.org/10.3390/economies10060137>
- Triandis, H. C. (1989). The Self and Social Behavior in Differing Cultural Contexts. *Psychological Review*, 96(3), 506–520. <https://doi.org/10.1037/0033-295X.96.3.506>
- Udall, Alina M., de Groot, J. I. M., de Jong, S. B., & Shankar, A. (2020). How do I see myself? A systematic review of identities in pro-environmental behaviour research. *Journal of Consumer Behaviour*, 19(2), 108–141. <https://doi.org/10.1002/cb.1798>
- Udall, Alina Mia, de Groot, J. I. M., De Jong, S. B., & Shankar, A. (2021). How I See Me—A Meta-Analysis Investigating the Association Between Identities and Pro-environmental Behaviour. *Frontiers in Psychology*, 12, 582421. <https://doi.org/10.3389/fpsyg.2021.582421>
- Uddin, M. A., Biswas, S. R., Bhattacharjee, S., Dey, M., & Mahmood, M. (2021). Inspiring employees' ecological behaviors: The roles of corporate environmental strategy, biospheric values, and eco-centric leadership. *Business Strategy and the Environment*, 30(5), 2367–2381. <https://doi.org/10.1002/bse.2751>
- Van der Werff, E., Steg, L., & Keizer, K. (2013). The value of environmental self-identity: The relationship between biospheric values, environmental self-identity and environmental preferences, intentions and behaviour. *Journal of Environmental Psychology*, 34, 55–63. <https://doi.org/10.1016/j.jenvp.2012.12.006>
- Van der Werff, E., Steg, L., & Keizer, K. (2014). I Am What I Am, by Looking Past the Present: The Influence of Biospheric Values and Past Behavior on Environmental Self-Identity. *Environment and Behavior*, 46(5), 626–657. <https://doi.org/10.1177/0013916512475209>
- Wang, C. H. (2019). How organizational green culture influences green performance and competitive advantage: The mediating role of green innovation. *Journal of Manufacturing Technology Management*, 30(4), 666–683. <https://doi.org/10.1108/JMTM-09-2018-0314>

- Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., & Guillaumie, L. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, 155, 104660. <https://doi.org/10.1016/j.resconrec.2019.104660>
- Zhao, X., Liu, C., Sun, C., & Yang, M. (2020). Does stringent environmental regulation lead to a carbon haven effect? Evidence from carbon-intensive industries in China. *Energy Economics*, 86, 104631. <https://doi.org/10.1016/j.eneco.2019.104631>
- Zibarras, L. D., & Coan, P. (2015). HRM practices used to promote pro-environmental behavior: a UK survey. *International Journal of Human Resource Management*, 26(16), 2121–2142. <https://doi.org/10.1080/09585192.2014.972429>
- Zientara, P., & Zamojska, A. (2018). Green organizational climates and employee pro-environmental behaviour in the hotel industry. *Journal of Sustainable Tourism*, 26(7), 1142–1159. <https://doi.org/10.1080/09669582.2016.1206554>