



## Impact of Environmental Corporate Social Responsibility on Pro-Environmental Behavior in Hospitality Industry: Mediating Role of Moral Obligation

Syed Farhan Gillani<sup>1</sup>, Rana Muhammad Shahid Yaqub<sup>2</sup>

### Abstract

There is a growing body of research that suggests that ECSR can have a significant impact on employees' PEB. When companies prioritize environmental sustainability and communicate their commitment to their employees, it can create a sense of shared responsibility and purpose. This, in turn, can motivate employees to adopt more pro-environmental behaviors. Therefore, this study aimed to examine the impact of environmental corporate social responsibility (ECSR) on employees' pro-environmental behaviors (PEB), as well as the mediating role of moral obligation (MO) in this relationship. The study employed the structural equation modeling method with PLS-SEM to evaluate the proposed hypotheses. A survey was conducted using convenience sampling, and data were collected from 446 tourists who had experienced Pakistani hospitality. The results revealed that ECSR has a direct impact on consumer PEB, and this relationship is partially mediated by moral obligation. The study aims to bridge the gap in our understanding of the underlying mechanisms through which ECSR affects employee pro-environmental behavior.

**Keywords:** Environmental corporate social responsibility, Employee's pro-environmental behaviors, Moral obligation

### 1. Introduction

In recent decades, organizations have been actively working to address environmental issues in a more comprehensive and responsive way (May et al., 2007; Wolff et al., 2018). However, there is a need to focus on the micro-level of corporate social responsibility (CSR) in order to fully understand its impact. Few studies in the marketing field have addressed the role of external stakeholders, such as customers, in ECSR (Zhao et al., 2022). Furthermore, the focus of ECSR research has shifted from the organizational and institutional levels to the individual level, but it remains unclear how and why ECSR encourages desirable attitudes and behaviors among visitors. Thus, there is a need to broaden the range of tourist behaviors that are influenced by ECSR. Engaging visitors in pro-environmental behaviors is one of the most important outcomes of an ECSR strategy to promote environmentally sound behavior. In this study, pro-environmental behaviors refer to actions that visitors take to preserve the environment while they are on site, such as turning off lights, printing on both sides of the page, taking the stairs instead of the elevator, and keeping the area clean. Organizational citizenship behaviors (Chen et al., 2023), organizational commitment (Maqbool & Nazir, 2023), task performance (De Roeck & Maon, 2018), organizational identification (Coulombe, 2023), and work engagement have been the main research topics on the impact of ECSR on tourist behavior (Horng et al., 2014; Rao et al., 2022). However, few studies have examined the mediating role of moral obligation (Bradley et al., 2018; Su et al., 2018; Wong & Kim, 2023; M.-Y. Wu et al., 2022). This paper aims to fill several gaps in the literature. First, it examines the impact of ECSR on visitors' pro-environmental behaviors. Second, it proposes and evaluates a model that considers moral obligation as a mediating factor in the relationship between ECSR and tourist behavior. Third, there is a growing recognition that "acts of morality of tourists deal with ethical issues of tourists as a means of influencing behaviors inside the tourist perspective" (Tran, 2023). Finally, this study provides evidence of the benefits of CSR in Pakistan.

### 2. Literature Review and Hypotheses Development

#### 2.1. Environmental corporate social responsibility

Organizations are increasingly adopting ECSR as a comprehensive approach to addressing environmental pressures, especially in response to the growing number of government regulations on the environment (Jenkins, 2004). In the tourism industry, tourists are expected to behave responsibly by the government, as well as other stakeholders, including customers, employees, and suppliers. Contemporary factors such as the competitive market, technological challenges, globalization, diversity, and the deteriorating environment heavily influence tourism attitudes and habits (Kurniawati & Mujiyati, 2023). The current investigation aims to examine tourists' perceptions of hospitality organizations' environmental CSR practices, taking into account the triple bottom line of collective, cost-effective, and environmental performance (Latif et al., 2022). While some argue that organizations use CSR as a mere gesture to appease stakeholders or to prevent lawsuits, others view CSR as a sincere effort to address environmental and social issues and make a positive impact on society and the environment. The degree of impact of an organization's ECSR initiatives determines the likelihood of change in individual's value of organizational activities (Ong et al., 2018). In order to study ECSR, it is advised to adopt a subjective approach due to the difficulty of relying on objective measures (Richards et al., 2023). Furthermore, the current literature lacks sufficient emphasis on the micro level approach to ECSR, making it a crucial area for future research (Chatterjee et al., 2023).

<sup>1</sup> PhD Scholar, Department of Marketing and International Business, Institute of Business Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan, [farhan.gillani75@gmail.com](mailto:farhan.gillani75@gmail.com)

<sup>2</sup> Assistant Professor, Department of Marketing and International Business, Institute of Business Management and Administrative Sciences, The Islamia University of Bahawalpur, Pakistan, [shahid.yaqub@iub.edu.pk](mailto:shahid.yaqub@iub.edu.pk)

A tourist's inclination to develop and implement eco-initiatives is positively correlated with a work environment that is supportive and characterized by ECSR activities (Rehman et al., 2022). Day trippers are more likely to participate in ecological activities in organizations where they have learned and shared environmental principles, aligning their personal morals with the organizational values (C.-J. Wu et al., 2022). Gryshchenko et al. (2022) found that tourists' perceptions of environmental management techniques impact their willingness to engage in environmentally friendly behaviors. According to Elshaer et al. (2022), behavioral reasoning theory predicts that visitors are more likely to engage in pro-environmental behaviors when they believe their hospitality is supportive. Moreover, ECSR strategies have been shown to support emotional, attitudinal, and behavioral outcomes in the workplace (Silva et al., 2023; Su et al., 2018). Tourists who believe in their organizational citizenship behavior are more likely to occur in socially conscious organizations (Bradley et al., 2018; Chen et al., 2023; C.-J. Wu et al., 2022).

## 2.2. Pro-environmental behavior

According to Lynn (2014), there are three aspects to pro-environmental behavior. The first dimension is the pro-social nature of pro-environmental activities, which promotes the welfare of both individuals and organizations. The second dimension involves employees choosing to engage in unnecessary environmentally friendly actions, such as using less lights and taking the stairs instead of elevators, which is more discretionary in nature. The third dimension involves taking necessary actions to improve the environmental performance of an organization and protect the environment as a whole (Rehman et al., 2023), but tourists may engage in these actions to project a "green" image. In earlier studies, inconsistent terminology has been used to define pro-environmental workplace activities, which can potentially adversely affect organizational choices and the adoption of environmental regulations or goals. Pro-environmental behavior in tourist destinations is typically divided into two main sections: private and direct pro-environmental behaviors like recycling and energy-related operations, and social and intermediary pro-environmental behaviors like eco-civic involvement and eco-helping behavior (Daryanto & Song, 2021; Ren et al., 2019; Zeng et al., 2023; Zibarras & Coan, 2015).

The pro-environmental behavior used in this study is defined by Udall et al. (2020) as behavior that consciously aims to reduce one's negative effects on the built environment and the natural world. Research indicates that there are a number of individual-level factors that are significant predictors of a tourist's pro-environmental behavior, including personal traits, general nature awareness and environmental knowledge, self-efficacy, environmental values, motivation, and habit (Afsar & Umran, 2020). Recent research has also addressed problems with creating and assessing frameworks that explain visitors' pro-environmental activities in hospitality. Empirical research on what factors affect how pro-environmental tourists behave is limited, with the bulk of the studies (Changxi & Shouming, 2023; Gao et al., 2021; Liu et al., 2020; Miller et al., 2015; Wu et al., 2021; Xu et al., 2020; Zhang et al., 2023) being conceptual in nature. Energy conservation and recycling intentions within broad pro-environmental activities demonstrate a significant link with individual behavioral norms (Thomas & Sharp, 2013). Horng et al. (2014) found that environmental education, evaluation of performance, financial compensation, environmental infrastructure, managerial assistance, and training were determinants of tourists' environment-related actions. Tang et al. (2023) conducted a case study in a sizable organization in the UK, focusing on organizational variables, individual characteristics, and the interactions between these aspects as they evaluated sustainable waste behavior. They concluded that environmental attitudes, waste reduction, and recycling practices were impacted by factors such as a lack of concern for the environment and an underlying conviction in the amount of recyclable waste. It is plausible to hypothesize:

H1. Engaging in environmental CSR is linked to an increase in pro-environmental behavior among employees.

H2. Environmental corporate social responsibility is positively associated with a moral obligation.

## 2.3. Moral Obligation

The analysis of PEB's altruistic motivations highlights the significant role of morality (Han & Hyun, 2017; Hasan & Rahman, 2023; Zhu et al., 2022). Scholars often refer to Schwartz's (1977) Norm-Activation Model (NAM) as a means of linking PEBs to moral obligation. NAM was developed to explain moral decision-making and altruistic, prosocial, and pro-environmental behavior (Schwartz & Fleishman, 1982). According to NAM, personal standards or emotions of moral obligation are crucial for supporting PEBs (Schwartz & Howard, 1984). A person's propensity for acting altruistically increases with their capacity for moral reasoning. Recent studies have examined tourists' moral obligations or sense of duty to participate in PEBs (Pradhananga et al., 2017; Turner et al., 2023; Wu et al., 2021; Yeow & Loo, 2022). Positive correlations have been found between tourists' moral obligations and both low-effort PEBs, such as recycling (Wu et al., 2021) and using "green" shopping bags (Han & Hyun, 2017), and high-effort PEBs, such as volunteering for conservation projects (Pradhananga et al., 2017). Earlier studies have suggested that small environmental conservation pledges can lead to larger ones (Turner et al., 2023). Improving one's self-efficacy, or confidence in carrying out specific actions, is also an effective method for changing one's intention to perform more challenging tasks (Bandura, 1997). In the context of tourism, providing tourists with evidence of the effectiveness of PEBs plays a crucial role in encouraging more environmentally friendly behavior (Shahzalal & Font, 2018; Wu et al., 2021). PEBs serve as proof of behavioral effectiveness, which strengthens tourists' motivation to engage in them. Therefore, we argue that moral ECSR has an impact on moral duty, which in turn strengthens PEBs (Shahzalal & Adnan, 2022). Thus, we propose a moral obligation to temper ECSR's influence on PEBs. In summary, based on the literature review discussed above, we make the following assumptions.

H3. Moral obligation is positively associated with a Pro-environmental behavior.

H4. Moral obligation is positively mediate between ECSR and PEB.

### 3. Methodology

#### 3.1. Participants and procedure

This study focuses on individuals who have visited different locations and stayed in hotels (consumers/customers) to achieve the study's objectives and evaluate the proposed theoretical model. These individuals are the appropriate target because they have experience in travel and lodging and are familiar with the locations. The study will be conducted using a cross-sectional design in Pakistan's major cities and tourism destinations. A sample is a subset of the population that accurately represents the entire population. Two commonly used sampling methods are probability sampling and non-probability sampling, with probability sampling being used for statistical judgments (Hair et al., 2007). In this study, we will use the convenience sampling method because the sample is geographically dispersed, making it difficult to select a representative sample. Based on sample size estimation, we will survey 450 individuals as the population is large and unknown (Hair et al., 2007). Individual customers or consumers will be used as the unit of analysis.

#### Appendix A

Demographic Characteristics of the Participants (n=446)	Frequency	Percentage
<b>Gender</b>		
Male	325	72.9
Female	122	27.1
<b>Age</b>		
Under 18 years	13	2.8
19-29 years	211	44.9
30-39 years	161	34.3
40-49 years	47	10
50-60 years	25	5.3
Above 60 years	13	2.8
<b>Education</b>		
Intermediate	47	10
Bachelor	104	22.1
Master	117	24.8
M Phil	138	29.3
PhD	65	13.8
<b>Marital status</b>		
Single	204	43.7
Married	259	55.5
Others	4	.8
<b>Monthly Income in Pak Rupees</b>		
Less than 50,000	138	29.3
50,000 to 99,999	134	28.5
100,000 to 149,999	107	22.7
150,000 to 199,999	42	8.9
Above 200,000	50	10.6
<b>Occupation</b>		
Student	115	24.4
Self Employed	55	11.7
Office Work	72	13.3
Professional Work	94	20
House Wife	10	2.1
Sale/Service Related	23	4.9
Government Employee	102	21.7
Once a Year	302	64.1
Twice a Year	88	18.7
Thrice a Year	40	18.7
More than Thrice	41	8.5
<b>What are your Favorite Places</b>		
Hilly Areas	176	37.4
Historical	47	10.00
Beaches	43	9.1
Every Type	166	35.2

Data collection was conducted using a survey approach from August to December 2022. A total of 1245 questionnaires were distributed to visitors, and the researchers collected the completed surveys in coded envelopes to protect respondents'

anonymity and confidentiality. Out of 465 collected surveys, 19 were discarded due to missing or incomplete data. Data analysis was conducted using the 446 completed surveys, which showed that 122 respondents (27.1%) were female, and 325 (72.9%) were male. A large majority of the respondents (44.9%) were in the 19–29 age range, and 29.5% of the respondents had an M.Phil. degree. Additionally, 24.4% of the participants were primarily students.

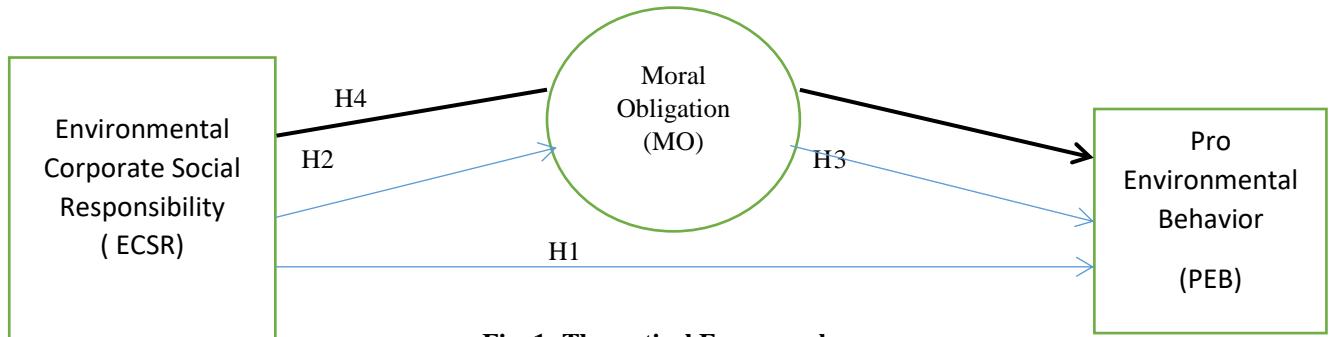


Fig. 1: Theoretical Framework

### 3.2. Measures

The final survey instrument utilized in this study consisted of questions related to the respondents' demographic data and measures for the three components illustrated in Figure 1. The ECSR scale comprised nine items adapted from Turker's (2009) work. The Pro-Environmental Behavior Scale's questions were borrowed from studies by Kim et al., Robertson and Barling (2013), and Kaiser, Oerke and Bogner (2007). A total of five items were used to assess pro-environmental behavior. The moral obligation scale had four components extracted from Reynolds (2008). A Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was employed to assess each item, with a maximum score of 5. The Cronbach's alpha values for the latent constructs of ECSR, MO, and PEB were 0.875, 0.799, and 0.739, respectively. All readings exceeded the recommended threshold of 0.70 (Nunnally and Bernstein 1994), indicating high reliability. Detailed information about the measurement items can be found in Appendix A.

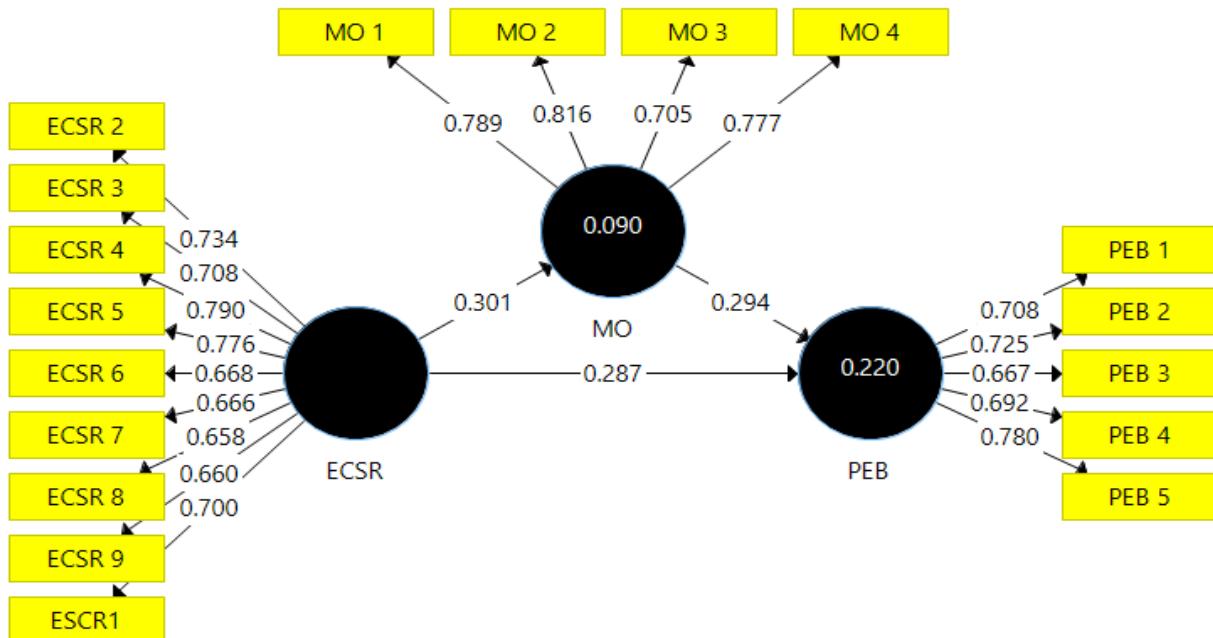


Fig -2

### 4. Data Analysis

The data analysis was conducted using PLS-SEM and SPSS 24.0. Using SPSS 24.0, we assessed the respondent profiles, the relationships between components, and the validity of the measurements. In scholarly studies, structural models can be examined using either a covariance-based method (Byrne & Van de Vijver, 2010; Channa et al., 2022; Cramer & Bock, 1966) or a variance-based approach (Abbas et al., 2023; Ahmed et al., 2020; Rani et al., 2021). For this study, we used a variance-based strategy and structural equation modeling (PLS-SEM) methods (Ringle et al., 2015). PLS-SEM was chosen because it is more suitable for prediction (as depicted in Fig. 1) (Hair et al., 2016) and is favored by many researchers over conventional multivariate techniques (Afsar & Umrani, 2020; Haenlein & Kaplan, 2004). Additionally, PLS-SEM

estimates relationships between indicators and their corresponding latent constructs and models relationship indicators and the related latent components in structural models simultaneously (Hair et al., 2017).

## 5. Results

In accordance with guidelines from Literature on PLS-SEM we used a procedure of two-step to evaluate the facts and test relationship hypotheses (Assaker et al., 2012; Channa et al., 2022). In the first phase, we evaluated the measurement model to determine its internal consistency reliability, discriminant validity, convergent validity, and inter-item reliability. The structural model was analyzed in step two to evaluate path coefficients and test hypotheses.

### 5.1. Measurement model

To determine inter-item dependability, we first analyzed factor loadings, and a threshold of 0.60 was maintained (Hair et al. 2014, 2016). Second, convergent validity was examined using the average variance extracted (AVE), therefore the suggested threshold of 0.50 remained in place. (Assaker et al., 2012; Channa et al., 2022; Hazen et al., 2015), and all values were found to be over the cutoff of 0.70 (Fornell & Larcker, 1981; Nielsen et al., 2010; Voorhees et al., 2016). Table 1 displays all of the measuring model's precise findings.

**Table 1. Measurement model**

Items Loadings, Cronbach's alpha, Composite Reliability, Average Variance Extracted						
Constructs	Items	Loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ECSR			0.875	0.878	0.9	0.502
	ECSR 1	0.704				
	ECSR 2	0.737				
	ECSR 3	0.717				
	ECSR 4	0.795				
	ECSR 5	0.764				
	ECSR 6	0.674				
	ECSR 7	0.641				
	ECSR 8	0.659				
	ECSR 9	0.663				
MO			0.799	0.778	0.855	0.597
	MO 1	0.790				
	MO 2	0.812				
	MO 3	0.705				
	MO 4	0.776				
PEB			0.739	0.767	0.84	0.515
	PEB 1	0.704				
	PEB 2	0.729				
	PEB 3	0.663				
	PEB 4	0.682				
	PEB 5	0.772				

### 5.2. Discriminant validity

According to the recommendations by (Henseler et al.), we utilized the heterotrait-monotrait ratio of correlations (HTMT) technique to determine discriminant validity. (2015). Recent criticism of the Fornell and Larcker (1981) criterion is the driving force behind the use of the HTMT approach. The findings in Table 2 imply that all construct pair values fall within the suggested range of 0.85 by (Henseler et al., 2015). Further evidence comes from academic research, which shows that there are occasions when it can be challenging to distinguish between notions that are conceptually distinct from one another across a range of academic settings. (Henseler et al. 2015; Channa et al. 2020). The selection of the HTMT threshold is said to be influenced by a variety of variables, making its derivation subjective. It is further suggested that theoretical distinctiveness across constructs aids in the comprehension of the justified discrimination.

**Table 2. Heterotrait-Monotrait Ratio (HTMT)**

	ECSR	MO	PEB
ECSR			
MO	0.362		
PEB	0.457	0.481	

### 5.3. Structural model

The next step was to test the structural model and evaluate the importance of the path coefficients in accordance with the recommendations in the PLS-SEM literature. (Henseler et al. 2009; Wah et al. 2012). Using the Smart PLS software version 3.2.9, proposed hypotheses were tested using a bootstrapping technique with 5000 subsamples. (Ringle et al. 2015). Table 3's summary of the structural model's findings indicates that all hypothesized links were discovered to be statistically significant.

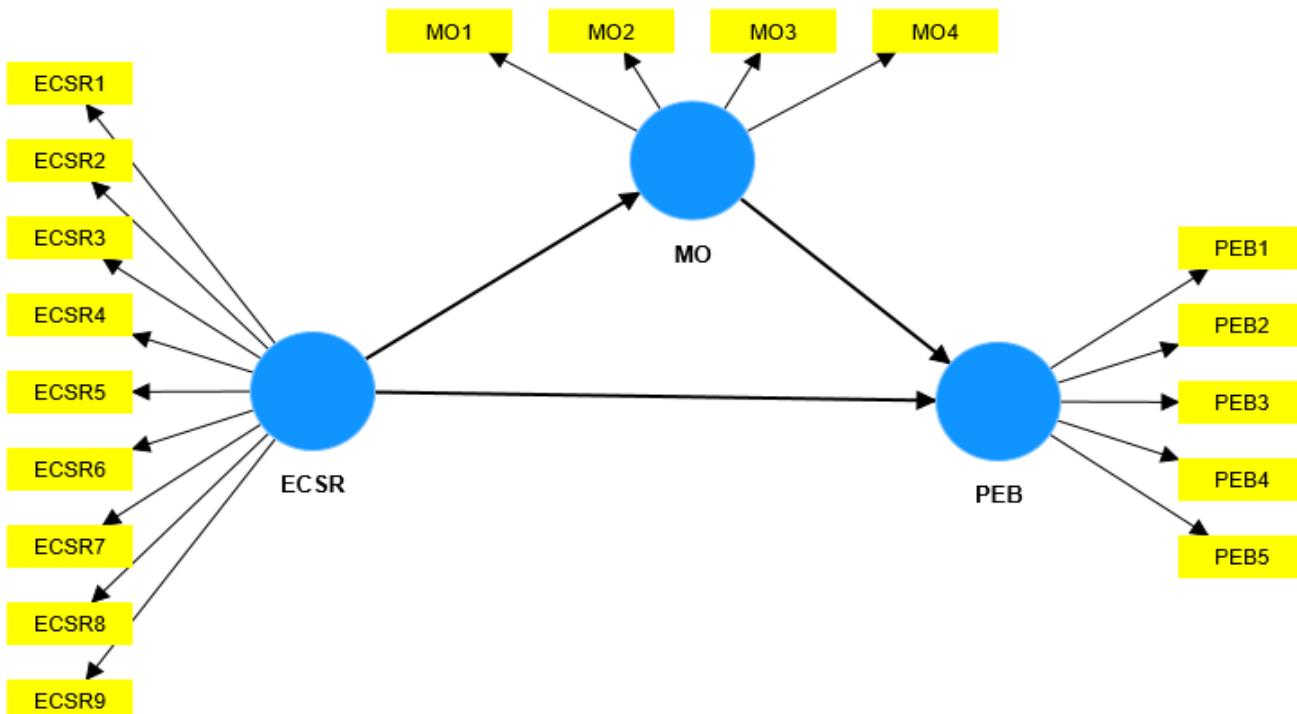


Fig.3

**Table 3: Structural model: Summary of Hypotheses Testing**

Hyp	Relation	Beta	SE	T-value	p value	Findings
H1	ECSR -> PEB	0.322	0.292	5.286	0.000	Supported
H2	ECSR -> MO	0.311	0.316	5.285	0.000	Supported
H3	MO -> PEB	0.317	0.305	5.175	0.000	Supported
H4	ECSR -> MO -> PEB	0.099	0.093	3.587	0.000	Partial Mediation

### 5.4. Explanatory power of the model

$R^2$ , also known as the coefficient of determination, was used to assess the model's explanatory ability. Using the Smart PLS software to run the PLS algorithm,  $R^2$  was calculated. As indicated in Table 4, all values were discovered to be greater than the recommended cutoff of 0.10 (Falk and Miller 1992).

**Table 4.  $R^2$  assessment**

Construct	$R^2$
MO	0.110
PEB	0.222

### 5.5. Predictive relevance of the model

To determine the model's predictive significance, we similarly generated cross-validated redundancy (Q2). The predictive relevance of the model is established, in accordance with Hair et al. (2014), when all values of Q2 surpass zero. All Q2 values appear to have met the proposed standards for determining the model's predictive relevance, according to the results shown in Table 5.

**Table 5. Q<sup>2</sup> assessment**

Construct	Q <sup>2</sup>
MO	0.051
PEB	0.105

## 6. Discussion and Conclusions

This study examines the relationship between ECSR, MO, and PEB among tourists. The findings suggest that ECSR has a direct impact on both MO and PEB. Specifically, individuals with higher levels of MO are more likely to engage in PEB, which is crucial for promoting environmental sustainability (UNWTO, 2015). While previous research has highlighted the importance of tourists' PEBs in reducing the negative impacts of tourism on the environment (Bramwell et al., 2017; Ginting & Wahid, 2023; Liang-Chih et al., 2022; Nowacki et al., 2018; Scott & Gössling, 2022), there are several factors that influence the adoption of PEBs, making it challenging to promote sustainable tourism. Therefore, it is essential to understand the reasons why people may not participate in PEBs (Alam et al., 2023; Bahja & Hancer, 2021; Font & Hindley, 2017; Salim et al., 2022; Schubert et al., 2020; Wu et al., 2021). This study suggests that the inhibitory mechanism of PEB is a cohesive set of cognitive inclinations. By framing a variety of justifications as an inclination to ethically uncouple from PEBs, this study adds to the body of prior investigation by incorporating the notion of moral behavioral reasoning. Incorporating ideas on moral obligation into the research model offers a more in-depth understanding of the factors that affect the development of PEB. The findings of this study are consistent with earlier research (de Groot & Thøgersen, 2018; Esfandiar et al., 2023; Gupta & Sharma, 2019; Soopramanien et al., 2023; Steg et al., 2013) that suggest a positive relationship between MO and PEB. Tourists who feel strongly about protecting the environment are more likely to engage in PEB.

The study emphasizes the need to identify and evaluate potential situational interventions that can strengthen the links between moral obligation and PEB (Mehmood et al., 2023). Overall, the study highlights the importance of considering the role of MO in promoting sustainable tourism and suggests potential avenues for future research to promote pro-environmental behaviors among tourists. The study demonstrates that Employee Corporate Social Responsibility (ECSR) can enhance employee Pro-Environmental Behavior (PEB) through both direct and indirect means, specifically via the mediating effect of Moral Obligation (MO) at tourist locations. This finding is consistent with earlier research that has shown ECSR perceptions to have both direct and indirect effects on tourists' PEB across different organizational contexts (Afridi et al., 2023; Afsar et al., 2018; González-De-la-Rosa et al., 2023; Liang-Chih et al., 2022; Sánchez-Marín et al., 2022). Gkorezis and Petridou (2017) also established a direct and indirect relationship between ECSR and PEB, and our study contributes to their work.

### 6.1. Implications

The study's conclusions contribute significantly to the academic understanding of Employee Corporate Social Responsibility (ECSR) and environmental management. Firstly, it adds to the current understanding of tourists' Pro-Environmental Behavior (PEB) by shedding more light on its underlying causes. The findings support the notion that personal attitudes, specifically Moral Obligation (MO), form a comprehensive and interconnected conceptual framework that ultimately influences tourists' perception of benefit (PEB) (Afsar et al., 2018; Gkorezis & Petridou, 2017). By highlighting the significance of individual personality traits and ethical responsibility, our study also contributes to the evolving concept of environmental sustainability in the hospitality context. For tourists, the meaning of moral obligation may serve as a proximal factor in determining pro-environmental behavior during their stay. Personal morality has a significant impact on people's behavior towards the environment in social and domestic contexts (Bamberg & Möser, 2007; Gärling, Fujii, Gärling, & Jakobsson, 2003). Therefore, identifying fundamental characteristics and moral qualities that may influence tourists to act in a pro-environmental manner is crucial. Thirdly, from a practical standpoint, the study's results provide vital information to public policymakers and tourist management regarding promoting sustainability. The findings improve policymakers' knowledge of PEB formation, suggesting that moral obligation is a significant factor in preventing PEBs from acting as they would like. This can educate decision-makers in public policy and tourism management about sustainability. Finally, the study suggests grouping tourists based on their previous engagement with the environment to better promote sustainable behavior.

### 6.2. Limitations and Future Research Directions

While this research is among the first to explore and incorporate the concept of moral obligation in the context of Pro-Environmental Behavior (PEB), future studies should investigate additional factors that connect Employee Corporate Social Responsibility (ECSR) to PEB, such as environmental knowledge and green mindfulness. Furthermore, the findings of this study can aid in the planning of field studies to compare perceived PEB and actual PEB. Lastly, it should be noted

that this study utilized cross-sectional data, and a long-term study that moves from an onsite situation to an offshore context could provide valuable insights.

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