

HOW GENERATIVE LEADERSHIP INFLUENCES ENVIRONMENTAL BEHAVIOR AT WORK: THE MEDIATING ROLE OF MAN-NATURE ORIENTATION

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Received: July 20, 2024

Revised: August 20, 2024

Accepted: September 06, 2024

Published: September 16, 2024

ABSTRACT

This study investigates the influence of Generative Leadership (GL) on Extra-Role Behavior (ERB) for the environment within the tourism and hospitality sector, focusing on the mediating role of Man-Nature Orientation (MNO). The study proposes a model to understand how GL can drive ERB, which is crucial for achieving long-term sustainability. Utilizing a quantitative, cross-sectional design, data were collected from 250 executives, managers, and owners in the tourism and hospitality industry. Results indicate that GL positively impacts ERB for the environment and that MNO mediates this relationship. The study provides practical insights for managers seeking to foster environmentally responsible behaviors among employees and contributes to sustainability in the tourism sector.

Keywords: Generative Leadership, Extra-Role Behavior for the Environment, Man-Nature Orientation, Tourism and Hospitality Sector.

1. INTRODUCTION

The tourism industry, while economically beneficial, poses significant environmental challenges due to its rapid growth and unsustainable practices (Li, Wu, & Patwary, 2022). The industry's role in local development underscores the need for sustainable practices. Employees' engagement in Extra-Role Behavior (ERB) for the environment—voluntary Contributions that are outside of formal job specifications to support environmental sustainability—is crucial for achieving organizational sustainability (Islam, Khan, Ahmed, & Mahmood, 2021).

Leadership is of utmost importance in influencing ERB, with ethical, authentic, and servant leadership styles previously explored (Srivastava & Dhar, 2019; Aboramadan, Hamid, Kundi, & El Hamalawi, 2022). However, the effectiveness of these styles in the volatile context of Pakistan's tourism industry remains unclear. Generative Leadership (GL) is proposed as a potential

approach to address these challenges (Bushe, 2019; Kearney & Lichtenstein, 2023). GL emphasizes proactive problem-solving and innovation, aligning with the need for sustainability in the tourism sector (Afridi, Shahjehan, Zaheer, Khan, & Gohar, 2023; Macaux, 2010).

This research intends to examine the influence of GL on ERB for the environment and examine the mediating role of MNO, a variable reflecting individuals' attitudes towards nature and environmental responsibility. Understanding these relationships will provide insights into fostering sustainability in the tourism industry.

2. Literature Review

Generative Leadership and Environmental Behavior: Generative Leadership (GL) is characterized by a forward-thinking approach that prioritizes long-term sustainability and innovation (Afridi, Javed, Ali, Zafar, & Haider, 2023). GL fosters an environment conducive to growth and

creativity, encouraging employees To involve oneself in activities that support environmental sustainability (Klimek et al., 2008). GL contrasts with traditional leadership models by emphasizing adaptation and resilience in response to complex challenges (Çetin &Demirbilek, 2020).

Research indicates that GL positively influences environmental behaviors by inspiring employees to exceed their formal responsibilities and contribute to sustainability (Norton et al., 2017). Despite the recent emergence of GL in leadership literature, its application to environmental sustainability within the tourism sector remains underexplored (Goldstein et al., 2010; Hazy &Prottas, 2018).

Extra-Role Behavior for the Environment:

Extra-Role Behavior (ERB) Relates to self-initiated actions by employees beyond their formal job duties to support environmental sustainability (Islam & Tariq, 2018). ERBs are crucial for organizational sustainability, as they reflect employees' personal commitment to environmental preservation (Joireman, Van Lange, & Van Vugt, 2004). ERBs differ from Organizational Citizenship Behavior (OCB) by including proactive and preventive actions related to environmental concerns (Bakari et al., 2017(Afridi et al., 2017; Afridi, 2016; Afridi et al., 2020; Afridi, Ali, et al., 2023)).Employees' perception of supportive leadership is a significant predictor of ERB (Dangelico & Pujari, 2010). While previous studies have explored various leadership styles, the role of GL in promoting ERB within the tourism sector has not been extensively studied.

Mediating Role of Man-Nature

Orientation:Man-Nature Orientation (MNO) reflects an individual's perspective on coexisting harmoniously with nature (Kluchhohn& Strodbeck, 1961). High MNO is associated with a positive attitude towards environmental behaviors (Wijaya, 2009). MNO encompasses ecological awareness, connectedness with nature, and concern for environmental preservation (Mayer & Frantz, 2004(Afridi & Haider, 2018; Afridi et al., 2018;

Afridi, Javed, et al., 2023; Afridi et al., 2019)).Research suggests that MNO can mediate the relationship between leadership styles and environmental behaviors (Bissing-Olson et al., 2013). By fostering a sense of connection to nature, GL may influence ERB through MNO, promoting proactive environmental actions among employees.

3. Methodology

Research Design: This study leverages a cross-sectional approach to explore the relationships between GL, MNO, and ERB within the tourism sector of Khyber Pakhtunkhwa, Pakistan. The region's diverse ecological contexts and growing tourism industry provide an ideal setting for this research.

Sampling and Data Collection: A combination of convenience and stratified sampling techniques was used to select participants from hotels, restaurants, tour operators, and travel agencies under the Kaghan Development Authority. Out of 250 distributed questionnaires, 160 responses were received, with 150 deemed usable for analysis. Data were collected through self-administered questionnaires measuring GL, MNO, and ERB.

Measures: The structured questionnaire is adopted from the previous studies. Generative Leadership (GL) was quantified using a 27-item scale adapted from Çetin and Demirbilek (2019).

Man-Nature Orientation (MNO) was gauged with a 5-item scale designed by Chan (2001), while, Extra-Role Behavior for the Environment (ERB) was evaluated with a 12-item scale designed by Boiral and Paillé (2012).

Control Variables: Control variables included business age, business size, education level, and experience of owners/managers.

Data Analysis: Statistical analyses, including correlation, regression, and mediation Analyses, were performed to evaluate the proposed hypotheses.

4. Results

Descriptive Statistics: The study is based on the responses of 150 respondents, with descriptive statistics as follows:

Variable	Mean	Std. Deviation
Gender	1.2800	0.45050
Age	2.9533	0.95774
Education	2.9533	0.89245
Experience	2.1333	0.87214
Generative Leadership (GL)	3.6958	0.40014
Extra-Role Behavior for Environment (ERB)	3.6636	0.37764
Man-Nature Orientation (MNO)	3.6800	0.63669

The descriptive statistics illustrate the sample's characteristics and highlight the main variables in the study. The mean scores for Generative Leadership (3.6958), Extra-Role Behavior (3.6636), and Man-Nature Orientation (3.6800) indicate generally positive evaluations by respondents, suggesting that the respondents

perceive their leaders as supportive, are engaged in environmentally friendly behaviors, and hold a strong orientation towards nature. The relatively low standard deviations for these variables (below 0.4) imply that there is a consensus among the respondents about these aspects, with minimal variability in their responses.

Correlation Analysis

Variable	Generative Leadership	ERB for Environment	Man-Nature Orientation
Generative Leadership	1	0.631**	0.707**
ERB for Environment	0.631**	1	0.788**
Man-Nature Orientation	0.707**	0.788**	1

The correlation table reveals significant positive relationships among the variables. Generative Leadership and Extra-Role Behavior for Environment: The correlation coefficient of 0.631 reveals a moderate to strong positive association, implying that as generative leadership increases, so do the extra-role behaviors related to environmental sustainability.

Generative Leadership and Man-Nature Orientation: The correlation coefficient of 0.707 signifies a strong positive relationship, meaning that leaders who exhibit generative leadership qualities tend to have employees with a higher orientation towards nature.

Man-Nature Orientation and Extra-Role Behavior for Environment: With a correlation coefficient of 0.788, there is a strong positive association, indicating that those with a greater man-nature orientation are more likely to engage in extra-role behaviors for environmental sustainability.

These correlations support the proposed theoretical model, indicating that both generative leadership and man-nature orientation are positively related to

employees' extra-role behaviors for the environment.

Regression and Mediation Analysis

Regression analysis is applied to measure the impact of Generative Leadership and Man-Nature Orientation on extra role behavior. The results indicate that Generative Leadership significantly predicts Extra-Role Behavior for the Environment. Thus, hypothesis 1 of the study is proved. This finding underscores that as generative leadership practices increase; employees tend to engage more frequently in extra-role behaviors that contribute to environmental well-being.

In this study, researcher has also checked the mediating effect of Man-Nature Orientation in the relationship between generative Leadership and Extra Role Behavior for the environment. The mediating effect is evaluated through numerous steps based on bootstrapping technique which is highly recommended in existing literature Hair et al. (2016). The first step involved examining the direct influence of independent variables on the

dependent variable. In the second phase, the significance of indirect path was evaluated which is an important condition for mediation (Hair et al., 2016). In the last step, the magnitude of the indirect effect was appraised by using "Value Accounted For" (VAF) measure. The VAF is calculated through the ratio of indirect effect to total effect. Hair et al. (2016) had suggested that if the ratio of indirect to total effect is in between zero and 0.2,

there will be no mediation, a value of greater than 0.2 but less than 0.8 shows partial mediation while value of 0.8 to 1.0 indicates full mediation. The results of mediation analysis are presented in Table 5.5. It shows that the direct relationships between IVs and dependent variables are significant; hence, it satisfies the precondition of mediation. Haier et al. (2016) had suggested that although;

Table 4.2: Mediating effect of Man-Nature Orientation

	Total effect of X on Y			Direct effect of X on Y			Indirect effect(s) of X on Y:			VAF
	Effect	LLCI	ULCI	Effect	LLCI	ULCI	Effect	LLCI	ULCI	
GL-MNO-ERBE	.5956	.4767	.7146	.1399	.0081	.2717	.4557	.3372	.6008	.7651

Table 4.2 indicates that the total effect of Generative Leadership with Extra-Role Behaviour for environment was significant at β value of 0.5956. The analysis demonstrated that Generative Leadership positively affects Extra-Role Behaviour for environment. However, when Man-Nature Orientation was introduced as a mediator between of Gnerative Leadership & Extra-Role Behaviour for environment the B value of this direct impact was reduced to 0.1399. It shows that Man-Nature Orientation effectiveness partially mediated the relationship between Generative Leadership & Extra-Role Behaviour for environment. The same is indicated from the significance of the indirect impact ($B=0.3372$) and the values of lower limits and upper limits confidence intervals (0.3372, 0.6008). Further, the VAF value (0.7651) of mediating relationship of MNO between of Gnerative Leadership & Extra-Role Behaviour for environment indicates that, MNO partially mediates the influence of Generative Leadership on Extra-Role Behavior for the environment. Hence, hypothesis 2 is proved.

5. Discussion

The study confirms that Generative Leadership positively influences Extra-Role Behavior for the environment, with Man-Nature Orientation acting as a partial mediator. Generative leaders foster an environment that inspires employees to be involved in voluntary, environmentally supportive actions. MNO enhances this relationship by

promoting a harmonious relationship with nature, thereby influencing employees' pro-environmental behaviors.

These findings suggest that tourism and hospitality organizations can increase their environmental performance by incorporating GL practices and nurturing MNO among employees. Managers should focus on creating a supportive and innovative environment that aligns with environmental sustainability goals.

6. Conclusion

This research provides empirical evidence on the positive impact of Generative Leadership on Extra-Role Behavior for the environment, with a significant mediating role of Man-Nature Orientation. The results offer valuable insights for managers in the tourism and hospitality sector aiming to promote sustainability. Future research should explore additional contexts and variables to further understand the dynamics of leadership and environmental behavior.

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