IMPACT OF INCLUSIVE LEADERSHIP ON EMPLOYEES' GREEN VOICE BEHAVIOR IN THE HOSPITALITY INDUSTRY: THE MEDIATING ROLE OF ORGANIZATIONAL LEARNING CULTURE

Tahmina Rita[1] and Md. Shawfiqul Islam[2]

Abstract

The purpose of the study is to examine how inclusive leadership (IL) affects employees' green voice behavior (EGVB) in the hospitality sector, with an emphasis on the mediating function of organizational learning culture (OLC) in Bangladesh's travel and tourist business. Based on Social Learning Theory and Social Exchange Theory, the study creates and evaluates a model that connects learning culture, employees' green voice behavior, and leadership behaviors. Convenience sampling was used to collect data from hotel staff in popular tourist locations including Dhaka and Chittagong, and 278 valid replies were obtained. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to examine the data. Results show that IL promotes corporate learning culture and significantly improves workers' green voice behavior. All four hypotheses were supported. The study contributes to the growing body of literature on leadership and sustainability in the hospitality sector, while offering practical insights for managers to cultivate IL and strengthen learning-oriented cultures to promote environmentally responsible employee engagement.

1. Introduction

Environmental concerns have attracted international attention in recent decades (Ding *et al.,* 2023; Yang *et al.,* 2025). Since businesses contribute significantly to environmental challenges, they are inevitably under pressure from governments, shareholders, and customers (Irfan *et al.,* 2024). More companies are putting green management procedures, guidelines, and systems into place in response to these environmental concerns (Yu *et al.,* 2023). However, depending solely on these formal organizational measures from the top is inadequate (Nas *et al.,* 2021) due to

---

[1] Assistant Professor, Department of Management Studies, Jagannath University, Dhaka. https://orcid.org/0009-0009-0754-6480, Email: anikadumgt@yahoo.com

[2] Assistant Professor, Department of Management Studies, Jagannath University, Dhaka. https://orcid.org/0009-0006-4731-2898, Email: shawfiqul@mgt.jnu.ac.bd

the complexity of environmental challenges (Iqbal *et al.*, 2024). Most green initiatives depend on workers' voluntary involvement outside of their assigned tasks (Liu & Qi, 2022). Because the hospitality industry often lacks the means to solve environmental challenges, it is imperative that firms encourage workers to actively and freely participate in green activities.

While little is known about employees' green voice behavior (EGVB), researchers are currently primarily interested in extra-role behaviors or organizational citizenship behaviors (OCB) toward the environment (Gu & Liu, 2022). EGVB is an eco-friendly, voluntary behavior that involves proposing new, environmentally friendly ideas and pushing for modifications to current procedures even in the face of opposition (Al-Romeedy&Badwy, 2025). Since employees viewed voice as an expensive and detrimental activity that may make them look like opponents or troublemakers, since it usually challenges the status quo, exploring different aspects that inspire EGVB becomes an essential area of research (Nazeer *et al.*, 2025).

Prior research on EGVB mostly concentrated on corporate social responsibility (Crucke *et al.*, 2022; Shah *et al.*, 2021), green practices such as human resource management (Z. Liu *et al.*, 2024; Murillo-Ramos *et al.*, 2024), and mindfulness (Kim *et al.*, 2017; Murillo-Ramos *et al.*, 2024). However, there is a dearth of studies on how leadership fosters EGVB (Aboramadan *et al.*, 2024; Crucke *et al.*, 2022). Leadership has been found to have a substantial impact on employee attitudes, values, and behaviors (Alwheshi *et al.*, 2024; Li *et al.*, 2024; Siyal *et al.*, 2023). Research has proven that leadership has a noteworthy influence on voice behavior (Ilyas *et al.*, 2021; C. Liu *et al.*, 2023; W. Liu *et al.*, 2010).

In response to calls for more research on this issue (Crucke *et al.*, 2022; Ilyas *et al.*, 2022), we employed social exchange theory (SET) (Bandura & Walters, 1977) to explore the impact of leadership on EGVB because of their large and direct influence on employees through regular contact. Businesses require IL that improves employee satisfaction due to the difficulty and challenges of tackling environmental issues. This includes reducing the perceived risks of taking initiative (Shafaei *et al.*, 2024), fostering a sense of competence and autonomy (Siyal *et al.*, 2023), raising feelings of uniqueness and belonging (Adams *et al.*, 2020), and promoting positive relationships between leaders and employees (Li *et al.*, 2024). Additionally, at the individual and corporate levels, IL promotes sustainability and lowers resource use. Likewise, inclusive leaders provide workers with a sense of psychological empowerment, which leads to increased levels of autonomy at work that are further mirrored in workers' behavior, which includes a variety of eco-friendly practices (Jha *et al.*, 2025).

Moreover, we propose the organizational learning culture (OLC) as a mechanism that explains the relationship between IL and EGVB based on SLT. According to Nejati and Shafaei (2023), it makes sense to suggest that IL support OLC, which encourages staff members to practice environmentally friendly behavior and share their thoughts and recommendations on environmental issues (Khan &Terason, 2022). However, very few studies have been conducted on EGVB in the hospitality sector, and most of the studies are based on developed economies. Also, there is limited empirical research on how inclusive leaders promote green voice behavior, and how the OLC mediates such a relationship.

The study on EGVB is significant in the context of Bangladesh's hospitality industry. Bangladesh is fortunate to have the world's longest sea beach, Cox's Bazar, coral islands Saint Martin's, and the world's largest mangrove forest, the Sundarbans. Furthermore, it provides opportunities to witness the breathtaking sunsets and sunrises from Kuakata, the lush green tea plantations of Sylhet, the green hills and mountains of the Chittagong Hill Tracts with their streams and valleys, and many more. Traditional events, such as PahelaBaishakh (the first day of spring) and Nababarsha (Bengali New Year), attract travelers from all over the world. These festivals entice travelers with their colorful vibes while also sharing the history, heritage, and friendliness of this wonderful country's people, and as a result, tourism has become an essential economic component of most people's lives in Bangladesh.

Additionally, given the potential to achieve multiple Sustainable Development Goals (SDGs), tourism is recognized as one of Bangladesh's thrust industries, establishing a definitive relationship between tourism and sustainability. However, it will be challenging unless the human resources related to tourism voice concerns about the sustainable practices. Therefore, this study focuses on EGVB reflected by employees' insights that can shape internal operations, strategic sustainability planning, and broader ecological stewardship in the hospitality sector.

Here, Dhaka and Chittagong were focused on the study since they have a diverse array of hotels, both locally owned and multinational brands. While Chittagong exhibits a mix of business, transit, and leisure travel, Dhaka mostly symbolizes urban and business tourism. Again, significant environmental constraints, including excessive energy consumption, water scarcity, waste management problems, and urban pollution, are faced by hotels in Dhaka and Chittagong. Due to the resource-intensive nature of hospitality operations, these issues are more noticeable. As a result, these cities offer a valuable setting for researching sustainability concepts where environmental improvements are significant, such as EGVB, and leadership for sustainability.

Therefore, this study expects to contribute to both theory and practice by responding to the focal research question about whether inclusive leadership (IL) impacts the employee green voice behavior (EGVB) and whether organizational learning culture (OLC) plays any role for stimulating such nexus. Based on this fundamental purpose, this study focuses on the following specific research questions:

RQ$_1$: To what extent does inclusive leadership (IL) influence the employee green voice behavior (EGVB)?

RQ$_2$: To what degree does organizational learning culture (OLC) mediate the relationship between inclusive leadership (IL) and employee green voice behavior (EGVB)?

In fact, this study addresses the following specific research objectives:

i.   to evaluate the effects of inclusive leadership (IL) on employee green voice behavior (EGVB);

ii.   to examine the influence of IL on organizational learning culture (OLC);

iii. to investigate the nexus between OLC and EGVB;

iv.   to assess the indirect mediating effects of OLC on the relationship between IL and EGVB in Bangladesh's hospitality industry; and

v.   to provide suggestions for future research in the hospitality sector that could assist stakeholders in fostering sustainability.

2. Underlying Theories and Hypotheses

2.1 Social Exchange Theory (SET)

A useful foundation for explaining the EGVB in this study could be provided by SET (Blau,1964), which can serve as a framework to justify such exchanges between the inclusive leader and the followers' green voice behavior. According to SET, employees will view a leader favorably if they are seen as inclusive, open, accessible, and available (Carmeli *et al.,* 2010), which ultimately leads to a desire on the part of the employees to reciprocate by acting in extra-role activities, such as using green voice behaviors. According to Carmeli *et al.* (2010) and Choi *et al.* (2015), inclusive leaders are very interested in the expectations and feelings of their staff and consider team members' differences and support their belongingness to facilitate each team member's contributions, such as stimulating team members to voice their ideas and perspectives in the team (Ashikali *et al.,* 2021). Additionally, IL enhances employees' voluntary communicative efforts to acquire and circulate tasks and managerial information and to share and discuss positive and negative aspects of their organization with internal members (Lee, 2022). Therefore, due to reciprocity, even if engaging in voice is risky, due to the support, fairness, and voice opportunities provided by IL employees make them more willing to take such risks.

2.2 Social Learning Theory (SLT)

According to Bandura's (1977) SLT, people acquire knowledge from the people they socialize with through observation, modelling, and the interaction of personal, behavioral and environmental factors. SLT, therefore, provides a strong theoretical bridge between an organization's learning culture and employees' pro-environmental behaviors (Bandura, 1986), like EGVB. According to SLT, followers look up to leaders as role models, and the actions of these leaders have an impact on their followers. Therefore, when inclusive leaders model green behavior and explain the rationale, employees attend, encode, and imitate those behaviors (Hu *et al.,* 2022).SLT elucidates the impact of IL by examining how employees observe and replicate the behavior exhibited by leaders, which further reinforces OLC that legitimizes environmental voice (Thabet *et al.,* 2024). Leaders exemplify reflexivity and empowerment, thereby facilitating followers' acquisition of self-efficacy in articulating sustainability-oriented ideas within a nurturing culture that promotes shared knowledge and adaptability (Alqatan *et al.,* 2025).

2.3 IL and EGVB Association

EGVB is a pro-environmental action that is both demanding and motivating, as Sibunruang& Kawai (2024) perceived it as a proactive activity that is future-oriented and beneficial in purpose when it is promotive, while it may be confrontational and change-oriented, potentially harming relationships. EGVB is an eco-friendly and voluntary activity that involves pushing for modifications to current procedures and offering new pro-environmental proposals, even when others disagree (Aboramadan *et al.,* 2021; Murillo-Ramos *et al.,* 2024). Regarding IL, in 2006, Nembhard and Edmondson developed the notion of IL by proposing that leader inclusiveness is

defined as words and deeds by a leader or leaders that indicate an invitation and appreciation for others' contributions. According to Carmeli et al. (2010), who built the concept of IL from scratch, leaders who exhibit openness, accessibility, and availability in their interactions with followers represent IL. With that notion, the IL may improve workers' EGVB.

According to the SET (Blau, 1964), inclusive leaders encourage actions to give their staff members the impression that they have been treated well, which encourages them to return the favor to the leader and the company (Hollander, 2009). Meanwhile, according to Sibunruang and Kawai (2024), "faith in leaders is relevant to the leader-directed OCB dimensions of altruism, conscientiousness, sportsmanship, and courtesy." Thus, hospitality organizations must explore IL that improves EGVB. Again, the workforce demonstrates strong dedication to environmental behavior while also maintaining elevated energy levels that lead them to behave positively toward their inclusive leaders (Aboramadan *et al.* 2022). Such reciprocal motivation, as SET posits, towards their leader and organization leads employees to display green voice behavior (Uzum *et al.,* 2025). Given the above arguments, we propose the following:

H_1: IL is positively associated with EGVB.

2.4 IL and OLC Relationship

According to Garvin A. (1994), organizations are considered to have an OLC if they are skilled at producing, gaining, and disseminating knowledge and adapting their behavior to consider fresh information. According to Yang et. al (2004), one of the imperatives that make up an OLC is continuous learning, which involves creating opportunities for all members, promoting inquiry, team learning, empowerment, embedding systems, system connection, and strategic leadership. These practices encourage collaboration, collective vision, global thinking, and support learning at individual, team, and organizational levels (Hanh Tran & Choi, 2019).

The beneficial conditions for promoting OLC emerge because of inclusive leader behavior (Xie, 2019). The SLT (Bandura, 1986) asserts that learning culture may be impacted by the actions of leaders. Inclusive leaders who are approachable and enthusiastic to engage with employees to cultivate a shared vision are essential for a learning-oriented culture (Real *et al.,* 2014). Employees have greater opportunity to accelerate the learning and dissemination of information when a leader fosters the expression of diverse opinions, questions long-held assumptions and beliefs, and encourages fresh viewpoints (Zagorsek *et al.,* 2009).According to earlier research, executives and staff may clarify organizational goals through an open culture (Zagorsek *et al.,* 2009). Thus, we put forth the following hypothesis.

H_2: IL is positively related to OLC.

2.5 Link between OLC and EGVB

OLC addresses green behavior challenges through efficiency by implementing green thinking into existing knowledge-management operations (Vidal-Salazar *et al.,* 2012). The research shows that organizational learning creates substantial changes to civic virtue and OCB and conscientiousness (Deswal &Sheokand., 2025). Under such learning culture-driven environments, employees gain opportunities to share their information and knowledge with co-workers while embracing different plausible

approaches towards continuous organizational advancement (Sidani and Reese, 2018). According to Özgül and Zehir (2019), organizational culture significantly supports employee green actions. In addition, research demonstrates that an OLC connects positively to organizational green conduct and functions as supporting personnel commitment to business targets (Chin, Yean, & Leow, 2021). Based on SLT, an organization with an OLC can establish permanent learning opportunities to enhance knowledge exchange and teamwork, which enables employees to achieve and grow relevant workplace abilities (Meher *et al.,* 2024). However, research needs a more extensive empirical study to understand how OLC works with other workplace variables (Egan *et al.,* 2004; Lin *et al.,* 2019). Thus, we propose the following:

H₃: OLC is positively linked to EGVB.

2.6 Role of OLC

A strong OLC enhances the effectiveness of IL in fostering EGVB by creating an environment where individuals feel safe, connected, and empowered to share sustainability-oriented ideas (Hanh Tran & Choi, 2019). IL highly focuses on providing an open culture in which employees can contribute their unique ideas (Nejati& Shafaei, 2023), which promotes organisational knowledge sharing and learning (Guo *et al.,* 2020). And through repeated leader behaviors, employees collectively learn that voicing new ideas is acceptable and valued. This aligns with SLT, which posits that individuals learn appropriate behaviors by observing role models and the consequences of their actions (Bandura, 1977).

Furthermore, a learning-driven, innovative culture fosters openness, flexibility, and creativity, encouraging employees to propose new solutions to environmental challenges (Rohmah *et al.,* 2023). Prior research has similarly shown that learning culture acts as a critical mechanism through which IL influences employee behaviors, such as OCB (Hanh Tran & Choi, 2019). Together, these mechanisms amplify the positive influence of IL, making it more likely that employees will actively engage in pro-environmental voice behaviors like EGVB. Therefore, it can be hypothesized that,

H₄: OLC positively mediates the relationship between IL and EGVB.

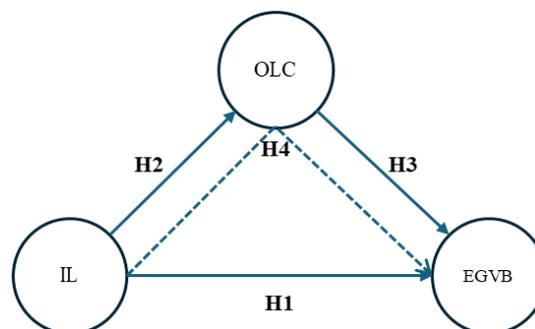Therefore, this study develops the theoretical framework as stated in figure 1 below.

Figure 1: Hypothesized Model

IL: Inclusive Leadership; OLC: Organizational Learning Culture; EGVB: Employees' Green Voice Behavior

3. Methods

3.1 Data and Sample

This study adopted a convenience sampling method to collect data from the employees of 30 three-star hotels located in Dhaka and Chittagong district. Convenience sampling is a popular method in quantitative research and was employed when target population members met criteria like being readily available, residing close by, and being eager to take part, all of which are pertinent to our inquiry (Asiamah *et al.,* 2017). Also, hotel selection was made possible by the convenience sampling strategy, which gives researchers faster replies than probability sampling techniques.

An online survey run with Google Forms was used to gather data from December 2024 to March 2025. To ensure the privacy of the participants, this survey did not contain the names or affiliations of the respondents. Employees who held junior to mid-level positions within the company and had at least one year of service experience and understanding of green initiatives were emailed to take part in the study. Because they are immediately involved in day-to-day operations and are therefore most exposed to organizational procedures, environmental routines, and leadership behaviors inside the company, junior and mid-level employees were chosen as respondents.From the standpoint of employee voice, lower-to-middle level employees are more likely to recognize inefficiencies, environmental concerns, and chances for improvement in routine work procedures. Finally, compared to senior bosses, junior and mid-level employees frequently face a higher power imbalance, which makes voice behavior more discretionary and possibly dangerous for them.

A 69% response rate was achieved by receiving 278 responses via Google Forms. The responses comprised 219 males (78%) and 54 females (22%). Over half (54%) of the respondents were between the ages of 26 and 35. The majority of the staff members (67%) had honor's degrees, and the rest of the employees hold a three-year diploma degree. Regarding job experience, 44% of respondents had three to four years, and 27% had less than two years' experience.

3.2 Measurements

To increase validity and reliability, we used to measure scales from well-established scales. EGVB was measured with Liang *et al.*'s (2016) ten-item scale. The sample item involved "I proactively voice out constructive suggestions …". The scale and this methodology have been used by Hwang and Lee (2019), Tabrizi *et al.* (2023) and Nourafkan *et al.* (2023) for measuring EGVB. IL was assessed using a nine-item scale proposed by Carmeli *et al.* (2010). A comparable scale was used in earlier research (Choi *et al.* 2017; Qi *et al.* 2019). The sample item involved "My manager inspires me to make him/her accessible to emerging matters". Additionally, the scale's reliability rating of 0.951 confirmed its reliability (Shakil *et al.,* 2023). A seven-item scale used by Yang *et al.* (2004) was adopted for measuring OLC. The sample item involved "In my organization, leaders continually look for opportunities to learn". The seven-item scale shows reliability of 0.880 (Yang *et al.,* 2004).

3.3 Data Analysis Techniques

Smart PLS 4.1.0 was used to study the data and determine if the sample data were representative. SPSS 27 was utilized to conduct the Harman single-factor test. Since

the PLS-SEM system does not necessitate a standard assumption test, standard sample data were employed (Hair *et al.,* 2017). The latent nature of the variables, which made direct measurement difficult, supported the use of the PLS-SEM approach. Three variables, EGVB, an endogenous variable, OLC, a mediator, and IL, an exogenous variable, are the main factors of interest in this study. Every measurement technique was assessed using five-point Likert ratings. The measuring model was initially tested in the study to assess the validity and reliability of the constructs. After that, the structural model was examined to confirm the hypotheses.

3.4 Common Method Bias (CMB)

The Harman single-factor test for multicollinearity analysis and Variance Inflation Factors (VIF) values were employed to assess CMB (Kyriazos&Poga, 2023). Kock (2015) states that a VIF value of less than 3.3 indicates the absence of multicollinearity. The findings demonstrate that all VIF values fall below this threshold, indicating that multicollinearity is not an issue (see Table 5). According to Harman's one-factor statistical analysis, the first factor's highest variance explanation was 33.31% (see Appendix), which was less than 40% of the overall variance of the data (Cheah *et al*. 2019; Fuller *et al*. 2016).Even though only one source was used for data collection, CMB was not an issue. Additionally, to lessen evaluation nervousness, respondents were first given assurances of anonymity and information that there were no right or wrong answers. Then, by putting predictors and criterion variables in different areas of the questionnaire with different instructions, they were kept psychologically separated.

4. Results

4.1 Measurement Model

The association between each indicator and its latent variables was examined through measurement model analysis, including item loadings, reliability and convergent validity. The current study evaluated construct and internal consistency reliability and validity using measurement model testing (see Table 1). The factor loading should exceed 0.701, α and rho_a should be above 0.700, and the AVE essential to be greater than 0.500 (Hair *et al.,* 2017). Thus, the loading values less than the threshold were removed for the study. Here, the items EGVB1, EGVB3, EGVB8, IL8, and IL9 were deleted due to loading less than 0.701. The factor loadings for the remaining items, α and rho_a, and AVE exceed the threshold.

Table 1: Outer Loadings, Construct Reliability and Validity

Construct	Loading	CA (α)	CR (rho_a)	AVE
Employees' Green Voice Behavior		*0.883*	*0.885*	*0.588*
EGVB10	0.796			
EGVB2	0.802			
EGVB4	0.755			
EGVB5	0.725			
EGVB6	0.751			
EGVB7	0.777			

EGVB9	0.762			
Inclusive Leadership		*0.910*	*0.913*	*0.653*
IL1	0.721			
IL2	0.875			
IL3	0.795			
IL4	0.782			
IL5	0.852			
IL6	0.865			
IL7	0.752			
Organizational Learning Culture		*0.871*	*0.875*	*0.561*
OLC1	0.780			
OLC2	0.752			
OLC3	0.748			
OLC4	0.706			
OLC5	0.778			
OLC6	0.746			
OLC7	0.732			

CA: Cronbach's Alpha; CR: Composite reliability; AVE: Average variance extracted
Source: Author's calculation

The HTMT (Heterotrait-monotrait ratio) and the Fornell-Larker criteria were then used to evaluate the discriminant validity (see Table 2). The Fornell-Larcker criterion test was performed by comparing the correlations between the latent variables to the square root of the AVE. Specifically, the square root of the AVE for each construct must be greater than the greatest correlation with any other construct. Table 2's results show that each item for each variable meets these criteria, meaning that each construct's square root of the AVE is greater than the others (Hair *et al.,* 2017). Also, the HTMT ratio results provide additional evidence that the constructs have strong discriminant validity because all HTMT values are smaller than 0.850 (Hair *et al.,* 2014).

Table 2: Discriminant Validity

Fornell-Larcker Criterion				HTMT			
	EGVB	IL	OLC		EGVB	IL	OLC
EGVB	**0.767**	-	-	EGVB	-	-	-
IL	0.348	**0.808**	-	IL	0.389	-	
OLC	0.716	0.344	**0.749**	OLC	0.788	0.385	-

Source: Author's calculation

4.2 Structural Model

Analyses of the structural model are based on the VIF, R^2, and path coefficient values. Table 3 shows that VIF values are employed to establish connections between exogenous variables and ascertain the absence of substantial collinearity. The findings indicate that the VIF values fall below the critical value of 5.00 (Hair *et al.,* 2014). Therefore, the proposed constructs do not exhibit multicollinearity.

Table 3: Collinearity Statistics (VIF)

	EGVB	OLC	IL
EGVB			
OLC	1.134		
IL	1.134	1.000	

Source: Author's calculation

The determinant coefficient test assesses the precision of the model's predictive value, which represents the collective influence of exogenous and endogenous variables. The predictive accuracy of this research model increases with value (Hair *et al.,* 2017). The obtained R-square values are presented in Table 4. As indicated by the results, IL accounted for 53% of EGVB and 12% of OLC. Though the IL affects EGVB significantly, there might be other factors other than IL, that affect OLC significantly.

Table 4: R-square Test

	R^2	R^2 adjusted
EGVB	0.525	0.521
OLC	0.118	0.115

Source: Author's calculation

In Table 5, the results show that IL substantially enhances EGVB (β = 0.116; p = 0.013). H_1 is therefore approved. In other words, IL encourages employees to act in a green voice. Likewise, IL greatly enhances OLC (β = 0.344; p = 0.000). Therefore, H_2 is also recognized, indicating that inclusive leaders foster a culture of learning where staff members feel free to express their thoughts. Since OLC significantly improves EGVB (β = 0.676; p = 0.000), H_3 is also acceptable. EGVB is therefore significantly influenced by the learning culture.

Table 5: Path Coefficient (Direct)

	β	σ	t	p
IL -> EGVB	0.116	0.047	2.487	0.013
IL -> OLC	0.344	0.063	5.434	0.000
OLC -> EGVB	0.676	0.039	17.285	0.000

Source: Author's calculation

Table 6 showed a significant result (β = 0.348, t = 5.441, p = 0.000) that showed the overall effect of IL on the EGVB outcome. Furthermore, it was discovered that IL had a significant direct impact on EGVB (β = 0.116, t = 2.487, p = 0.013). With OLC as the mediating variable, IL had a substantial effect on EGVB (β = 0.233, t = 5.591, p = 0.000). H_4 is therefore supported. Thus, the association between EGVB and IL is partially mediated via the OLC.

Table 6: Path Coefficient (Indirect)

Total effect (IL ->EGVB)			Direct effect (IL -> EGVB)			Indirect effect of IL on EGVB					Percentile bootstrap 95% confidence interval	
β	t	p	β	t	p		β	SE	t	p	Lower	Upper
0.348	5.441	0.000	0.116	2.487	0.013	H4: IL -> OLC -> EGVB	0.233	0.042	5.591	0.000	0.143	0.312

Source: Author's calculation

The study model, which includes the path coefficients, is expressed as OLC = 0.882 + 0.344 ILand EGVB = 0.475 + 0.116 IL + 0.676 OLC, as in Figure 3, based on the analysis.
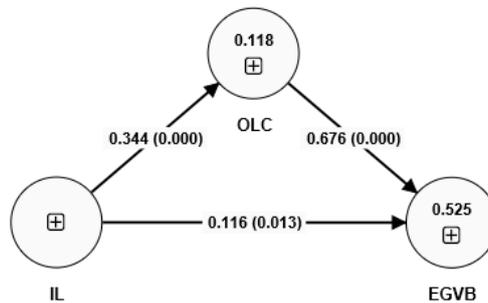

Figure 3: Tested Model (Structural)

Source: Author's calculation

5. Discussion

The objective of the study was to investigate how IL affects EGVB and how OLC act as a mediator. The finding supports the hypothesized relationship, suggesting that employees who perceive their leaders as inclusive are more likely to proactively express environmentally oriented suggestions and concerns. This finding can be explained through the lens of SET, by voluntarily offering suggestions aimed at improving environmental sustainability, employees reciprocate IL behaviors, thereby strengthening the social exchange relationship. In the context of the tourism and hospitality industry, where frontline employees closely interact with operational processes and environmental resources, IL plays a crucial role in encouraging employees to speak up about sustainability-related issues. This finding is consistent with earlier studies that when workers believe that their leaders will appreciate their contributions and listen to them with respect, they are more likely to use green voice (Nguyen *et al.,* 2025). Therefore, IL gives workers the interpersonal basis to bring up environmental concerns that could otherwise be viewed as dangerous or disruptive.

Then, the results demonstrate a statistically significant relationship between IL and OLC, indicating that IL plays a critical role in shaping a learning-oriented organizational environment. This finding can be effectively explained through the lens of SLT. Inclusive leaders act as salient social models within organizations by openly soliciting input, valuing diverse perspectives, and encouraging experimentation

and dialogue. Through repeated observation of these behaviors, employees learn that knowledge sharing, questioning existing practices, and learning from mistakes are not only acceptable but encouraged. This supports the claim that IL encourage ongoing education, information exchange, and group problem-solving (Nembhard & Edmondson, 2006; Hirak *et al.,* 2012). Inclusive leaders create an environment that encourages experimentation and organizational learning by respecting varied viewpoints and promoting participatory decision-making (Ashikali *et al.,* 2021).

Next, the findings reveal that OLC has a significant influence on EGVB, underscoring the pivotal role of OLC in encouraging employees to proactively express green ideas and concerns. This result is consistent with research that indicates proactive environmental activities are encouraged by companies with good learning cultures (Jiang & Men, 2017). A learning culture makes it clear that the company encourages experimentation and information sharing, which makes it easier for staff members to and green activities.

Lastly, the mediation analysis demonstrates that OLC significantly mediates the relationship between IL and EGVB, indicating that IL influences EGVB by shaping a learning-oriented organizational culture. Though the effect is relatively low, OLC contributes to mediating the relationship between IL and EGVB. That also implies some other factors might strongly contribute to ensuring relationship between IL and EGVB. Therefore, by encouraging psychological safety, transparency, and trust, inclusive leaders may improve learning processes and provide staff members with the institutional support and self-assurance they need to use their green voice. This mediation effect supports past findings that leadership activities have an impact on employee outcomes due to cultural characteristics (Zhang *et al.,* 2021). Consequently, one of the most important ways that IL converts into long-lasting employee behaviors is via cultivating an OLC.

6. Contribution of the Study

This study adds to the body of knowledge on OLC, IL, and EGVB in several ways. First, the study expands on the use of SET by demonstrating that IL has a favorable impact on EGVB (Blau, 1964). Through equity, transparency, and acknowledgement, inclusive leaders instill a feeling of responsibility and reciprocity in their workforce. Employees are more willing to participate in optional activities like green voice, which help the company and its sustainability objectives, in return for the support they get (Cropanzano& Mitchell, 2005).

Afterwards, the discovery that IL greatly improves OLC adds to the expanding corpus of research that connects contextual and cultural enabling leadership styles (Hirak *et al.,* 2012). This finding implies that leaders act as role models who uphold learning-oriented norms by promoting cooperation, information exchange, and experimentation, in line with social SLT (Bandura, 1977). These practices are observed and internalized by employees, strengthening the OLC.

Subsequently, the research demonstrates that OLC is a strong predictor of EGVB. By showing that a learning-oriented culture not only fosters creativity and adaptability but also gives staff members the confidence to voice environmental

concerns, which adds to the body of research on green behavior (Li *et al.,* 2020). In theory, this establishes OLC as a crucial contextual mechanism that converts leadership actions into environmentally beneficial results.

Then, this study increases knowledge of EGVB by combining SET and SLT to explain how IL promotes environmentally proactive employee behavior through OLC. By extending SET to the field of environmental sustainability, it shows how EGVB serves as a kind of positive reciprocity in response to IL. This broadens SET to incorporate environmentally conscious voice behaviors in addition to conventional performance and civic behaviors. Then, by displaying that OLC is a crucial social environment through which IL influences employee behavior, the study improves SLT. It emphasizes how EGVB is encouraged by learning norms, modeling, and reinforcement processes, which enhance SLT-based explanations of pro-environmental behavior in businesses.

Furthermore, through the integration of SET and SLT, this study offers a dual-theoretical framework that explains how EGVB is taught and maintained inside businesses as well as why employees engage in it. This study expands on previous research that focused on transformational or ethical leadership in environmental contexts (Robertson & Barling, 2017) by demonstrating that inclusivity is also crucial for promoting sustainability-related voices.

In practice, the results indicate that companies looking to improve EGVB should invest in building a strong OLC in line with IL development since systems and procedures that promote education, information exchange, and experimentation must be in place to support leaders who exhibit inclusivity. By doing this, companies may foster an atmosphere where workers are encouraged to treat others with inclusivity and feel comfortable sharing green behaviors.

7. Conclusion and Future Research Directions

The results of this study show that IL plays a vital role in shaping employees' willingness to speak up for environmentally friendly practices. The findings confirmed that the measures used were reliable and valid, the model had strong predictive power, and the links between the variables were statistically significant. Overall, the study highlights that when leaders practice inclusiveness and cultivate learning, employees are more empowered and motivated to contribute to sustainability goals within their organizations.

Despite its contributions, this work contains a few shortcomings that open up new research directions. Importantly, OLC was found to partially mediate the relationship between IL and EGVB, suggesting other unexamined mechanisms may also explain this relationship.Future research should include other mediators like psychological safety, green self-efficacy, and perceived organizational support, through which IL promotes EGVB. Looking ahead, since this study was carried out in the hospitality sector, it would be valuable to test the model in different industries. Researchers might also consider using longitudinal or experimental approaches to better capture how leadership and culture evolve in shaping employees' sustainable actions.

Although CMB was not an issue, this study used self-reported data. Future research should include multi-source data collecting methodologies, such as asking for IL

ratings from employees, EGVB assessments from supervisors, and OLC metrics combined at the team or organizational level. In addition, exploring boundary conditions such as company size, leadership experience, or external environmental pressures could reveal when and where IL is most effective. Finally, combining surveys with qualitative methods like interviews or case studies would help bring employees' lived experiences to the surface and offer a richer picture of how IL fosters meaningful contributions to sustainability.

References

Aboramadan, M., Barbar, J., Alhabil, W., &Alhalbusi, H. (2024). Green servant leadership and green voice behavior in Qatari higher education: does climate for green initiative matter? *International Journal of Sustainability in Higher Education, 25*(3), 539–555. https://doi.org/10.1108/IJSHE-03-2023-0112

Aboramadan, M., Crawford, J., Turkmenoglu, M. A., & Farao, C. (2022). Green inclusive leadership and employee green behaviors in the hotel industry: does perceived green organizational support matter? *International Journal of Hospitality Management, 107*, 103330.

Alqatan, A., Simmou, W., Shehadeh, M., AlReshaid, F., Elmarzouky, M., &Shohaieb, D. (2025). Strategic pathways to corporate sustainability: the roles of transformational leadership, knowledge sharing, and innovation. *Sustainability, 17*(12), 5547.

Al-Romeedy, B. S., &Badwy, H. E. (2025). From policy to participation: how green HRM drives employee green voice through climate perceptions in tourism and hospitality businesses. *International Journal of Organizational Analysis*, 1–27. https://doi.org/10.1108/IJOA-06-2025-5676

Alwheshi, A., Alzubi, A., &Iyiola, K. (2024). Linking responsible leadership to organizational citizenship behavior for the environment: Examining the role of employees harmonious environmental passion and environmental transformational leadership. *Sage Open, 14*(3), 21582440241271177.

Ashikali, T., Groeneveld, S., & Kuipers, B. (2021). The Role of Inclusive Leadership in Supporting an Inclusive Climate in Diverse Public Sector Teams. *Review of Public Personnel Administration*, *41*(3), 497–519. https://doi.org/10.1177/0734371X19889722;WGROUP: STRING:PUBLICATION

Asiamah, N., Mensah, H., & Oteng-Abayie, E. F. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The qualitative report, 22*(6), 1607-1621.

Bandura, A. (1986). Social Foundations of Thought and Action. *The Health Psychology Reader*, 94–106. https://doi.org/10.4135/9781446221129.N6

Bandura, A., & Walters, R. (1977). Social learning theory. http://www.asecib.ase.ro/mps/Bandura_ SocialLearningTheory.pdf

Blau, P. M. (1964). Justice in social exchange. *Sociological inquiry, 34*(2).

Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity research journal, 22*(3), 250-260.

Cheah, J. H., Ting, H., Ramayah, T., Memon, M. A., Cham, T. H., &Ciavolino, E. (2019). A comparison of five reflective–formative estimation approaches: reconsideration and recommendations for tourism research. *Quality & quantity, 53*(3), 1421-1458.

Chin, T. L., Yean, T. F., & Leow, H. W. (2021). Ability, motivation, opportunity-enhancing HRM practices and corporate environmental citizenship: Revisiting the moderating role of organisational learning capability in Malaysian construction companies.

Choi, S. B., Tran, T. B. H., & Kang, S. W. (2017). Inclusive leadership and employee well-being: The mediating role of person-job fit. *Journal of Happiness Studies, 18*(6), 1877-1901.

Choi, S. B., Tran, T. B. H., & Park, B. I. (2015). Inclusive leadership and work engagement: Mediating roles of affective organizational commitment and creativity. *Social Behavior and Personality: an international journal, 43*(6), 931-943.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management, 31*(6), 874-900.

Crucke, S., Servaes, M., Kluijtmans, T., Mertens, S., & Schollaert, E. (2022). Linking environmentally-specific transformational leadership and employees' green advocacy: The influence of leadership integrity. *Corporate Social Responsibility and Environmental Management, 29*(2), 406–420. https://doi.org/10.1002/CSR.2208

Deswal, R., &Sheokand, K. (2025). Does workplace happiness lead to organisational citizenship behaviour: a study of faculty in higher education institutions. *International Journal of Work Innovation, 6*(2), 148-166.

Ding, H., Su, W., & Hahn, J. (2023). How Green Transformational Leadership Affects Employee Individual Green Performance—A Multilevel Moderated Mediation Model. *Behavioral Sciences 2023, Vol. 13, Page 887, 13*(11), 887. https://doi.org/10.3390/BS13110887

Egan, T. M., Yang, B., & Bartlett, K. R. (2004). The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human resource development quarterly, 15*(3), 279-301.

Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of business research, 69*(8), 3192-3198.

Garvin, D. A. (1994). Building a learning organization. *Business Credit-New York*, 96, 19-19.

Gu, F., & Liu, J. (2022). Environmentally Specific Servant Leadership and Employee Workplace Green Behavior: Moderated Mediation Model of Green Role Modeling and Employees' Perceived CSR. *Sustainability 2022, Vol. 14, Page 11965, 14*(19), 11965. https://doi.org/10.3390/SU141911965

Guo, Y., Zhu, Y., & Zhang, L. (2020). Inclusive leadership, leader identification and employee voice behavior: The moderating role of power distance. *Current Psychology 2020 41:3, 41*(3), 1301–1310. https://doi.org/10.1007/S12144-020-00647-X

Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis, 1*(2), 107-123.

Hanh Tran, T. B., & Choi, S. B. (2019). Effects of inclusive leadership on organizational citizenship behavior: The mediating roles of organizational justice and learning culture. *Journal of Pacific Rim Psychology, 13*. https://doi.org/10.1017/prp.2019.10

Hirak, R., Peng, A. C., Carmeli, A., & Schaubroeck, J. M. (2012). Linking leader inclusiveness to work unit performance: The importance of psychological safety and learning from failures. *The leadership quarterly, 23*(1), 107-117.

Holland, D., & Albrecht, C. (2013). The Worldwide Academic Field of Business Ethics: Scholars' Perceptions of the Most Important Issues. *Journal of Business Ethics, 117*(4), 777–788. https://doi.org/10.1007/S10551-013-1718-Y/TABLES/3

Hollander, J. B., Pallagst, K., Schwarz, T., & Popper, F. J. (2009). Planning shrinking cities. *Progress in planning, 72*(4), 223-232.

Hu, X., Li, R. Y. M., Kumari, K., Ben Belgacem, S., Fu, Q., Khan, M. A., &Alkhuraydili, A. A. (2022). Relationship between Green Leaders' Emotional Intelligence and Employees' Green Behavior: A PLS-SEM Approach. *Behavioral Sciences, 13*(1), 25. https://doi.org/10.3390/ BS13010025

Hwang, K., & Lee, B. (2019). Pride, mindfulness, public self-awareness, affective satisfaction, and customer citizenship behaviour among green restaurant customers. *International Journal of Hospitality Management, 83,* 169-179.

Ilyas, S., Abid, G., Ashfaq, F., Ali, M., & Ali, W. (2021). Status Quos Are Made to be Broken: The Roles of Transformational Leadership, Job Satisfaction, Psychological Empowerment, and Voice Behavior. *SAGE Open, 11*(2). https://doi.org/10.1177/21582440211006734

Ilyas, U., Sohail, A., Ashraf, A., & Rehman, A. (2024). The influence of inclusive leadership on employee work engagement: examining the mediating path of job satisfaction. *Migration Letters, 21*(S7), 1746-1758.

Iqbal, M., Waqas, M., Ahmad, N., Hussain, K., & Hussain, J. (2024). Green supply chain management as a pathway to sustainable operations in the post-COVID-19 era: investigating challenges in the Chinese scenario. *Business Process Management Journal*, *30*(4), 1065–1087. https://doi.org/10.1108/BPMJ-05-2023-0381

Irfan, M., Ghufran, M., &Musarat, M. A. (2024). From intent to impact: top management's commitment influence on sustainable risk management under stakeholder pressure. *Engineering, Construction and Architectural Management*. https://doi.org/10.1108/ECAM-05-2024-0608/1259522

Jha, I. N., Sarkar, S., & Pal, D. (2025). Nurturing green habits: Impact of inclusive leadership on employee recycling behavior in the Indian IT sector. *Green Leadership Strategies for Increased Employee Engagement and Performance*, 365–397. https://doi.org/10.4018/979-8-3373-2106-6.CH012

Jiang, H., & Men, R. L. (2017). Creating an engaged workforce: The impact of authentic leadership, transparent organizational communication, and work-life enrichment. *Communication research, 44*(2), 225-243.

Jr., J. F. H., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, *1*(2), 107. https://doi.org/10.1504/IJMDA.2017.087624

Khan, M. S., &Terason, S. (2022). Encouraging pro-environmental behavior in university employees: An approach toward environmental sustainability as moderated by green organizational culture. *Journal of Community Psychology, 50*(3), 1454-1469.

Kim, A., Kim, Y., Han, K., Jackson, S. E., &Ployhart, R. E. (2017). Multilevel Influences on Voluntary Workplace Green Behavior: Individual Differences, Leader Behavior, and Coworker Advocacy. *Journal of Management, 43*(5), 1335–1358. https://doi.org/10.1177/0149206314547386

Kock, N., & Mayfield, M. (2015). PLS-based SEM algorithms: The good neighbor assumption, collinearity, and nonlinearity. *Information Management and Business Review, 7*(2), 113-130.

Kyriazos, T., &Poga, M. (2023). Dealing with multicollinearity in factor analysis: the problem, detections, and solutions. *Open Journal of Statistics, 13*(3), 404-424.

Lee, Y. (2022). Dynamics of millennial employees' communicative behaviors in the workplace: the role of inclusive leadership and symmetrical organizational communication. *Personnel Review*, *51*(6), 1629–1650. https://doi.org/10.1108/PR-09-2020-0676

Li, X., Ling, C. D., & Zhu, J. (2024). Implications of inclusive leadership for individual employee outcomes: A meta-analytic investigation of the mediating mechanisms and boundary conditions. *Asia Pacific Journal of Management*, 1–38. https://doi.org/10.1007/S10490-024-09987-9/TABLES/6

Lin, Y., Zheng, L., Zheng, Z., Wu, Y., Hu, Z., Yan, C., & Yang, Y. (2019). Improving person re-identification by attribute and identity learning. *Pattern recognition, 95*, 151-161.

Liu, C., Wu, M., & Chen, X. (2023). A chain mediation model of inclusive leadership and voice behavior among university teachers: evidence from China. Scientific Reports, 13(1), 1–14. https://doi.org/10.1038/S41598-023-50018-2;SUBJMETA

Liu, F., & Qi, M. (2022). Enhancing Organizational Citizenship Behaviors for the Environment: Integrating Social Identity and Social Exchange Perspectives. *Psychology Research and Behavior Management*, *15*, 1901–1914. https://doi.org/10.2147/PRBM.S370500

Liu, W., Zhu, R., & Yang, Y. (2010). I warn you because I like you: Voice behavior, employee identifications, and transformational leadership. *The Leadership Quarterly, 21*(1), 189–202. https://doi.org/10.1016/J.LEAQUA.2009.10.014

Meher, J. R., Nayak, L., Mishra, R. K., & Patel, G. (2024). Impact of organizational learning culture on organizational effectiveness: a serial mediation analysis with knowledge sharing and employee competencies. *VINE Journal of Information and Knowledge Management Systems, 54*(2), 324-338.

Murillo-Ramos, L., Huertas-Valdivia, I., & García-Muiña, F. E. (2024). Green human resource management in hospitality: nurturing green voice behaviors through passion and mindfulness. *Journal of Hospitality Marketing & Management, 33*(6), 784–806. https://doi.org/10.1080/ 19368623.2024.2301778

Nas, Z., Yuzuncu, V., &Kelimeler, A. (2021). Factors Affecting the Organizational Silence of Academics Employed at the Universities in Pakistan. *Journal of Social Sciences of Mus Alparslan University*, *9*(1), 9–27. https://doi.org/10.18506/ANEMON.674992

Nazeer, S., Naveed, S., Sair, S. A., & Khan, K. (2025). Making sustainable voices heard at the workplace. *International Journal of Ethics and Systems*. https://doi.org/10.1108/IJOES-09-2024-0298/1252992/MAKING-SUSTAINABLE-VOICES-HEARD-AT-THE-WORKPLACE

Nejati, M., & Shafaei, A. (2023). The role of inclusive leadership in fostering organisational learning behaviour. *Management Research Review*, *46*(12), 1661–1678. https://doi.org/ 10.1108/MRR-10-2022-0716

Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 27*(7), 941-966.

Nguyen, C. M., Nguyen, T. Q., Nguyen, H. N. T., & Khuu, D. P. T. (2025). Promoting voluntary workplace green behavior through green human resource management practices: the role of environmental knowledge and green employee empowerment. *Management Research Review*.

Nourafkan, N. J., Karatepe, O. M., &Rezapouraghdam, H. (2024). Corporate social responsibility, workplace spirituality and their effects on green promotive and prohibitive voice behaviours. *Current Issues in Tourism, 27*(7), 1142-1158.

Özgül, B., &Zehir, C. (2023). Top management's green transformational leadership and competitive advantage: the mediating role of green organizational learning capability. *Journal of Business & Industrial Marketing, 38*(10), 2047-2060.

Qi, L., Liu, B., Wei, X., & Hu, Y. (2019). Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator. *PloS one, 14*(2), e0212091.

Real, J. C., Roldán, J. L., & Leal, A. (2014). From entrepreneurial orientation and learning orientation to business performance: analysing the mediating role of organizational learning and the moderating effects of organizational size. *British Journal of Management, 25*(2), 186-208.

Robertson, J. L., & Barling, J. (2017). Toward a new measure of organizational environmental citizenship behavior. *Journal of Business Research, 75*, 57-66.

Rohmah, S. (2023). The Effect of Academic Supervision and School Climate on Teacher Performance in Islamic Junior High School. *Journal of Education Research and Evaluation, 7(*4), 636-643.

Shafaei, A., Nejati, M., Omari, M., &Sharafizad, F. (2024). Inclusive Leadership and Workplace Bullying: A Model of Psychological Safety, Self-Esteem, and Embeddedness. Journal of Leadership & Organizational Studies, 31(1), 41–58. https://doi.org/10.1177/ 15480518231209018

Shakil, R. M., Memon, M. A., & Ting, H. (2023). Inclusive leadership and innovative work behaviour: the mediating role of job autonomy. *Quality & Quantity, 57*(Suppl 4), 707-721.

Sibunruang, H., & Kawai, N. (2024). The proactive nature of employee voice: The facilitating role of supervisor developmental feedback. *Journal of Management & Organization, 30(*4), 1100-1118.

Sidani, Y., & Reese, S. (2018). A journey of collaborative learning organization research: interview with Victoria Marsick and Karen Watkins. *The Learning Organization, 25(*3), 199-209

Siyal, S., Liu, J., Ma, L., Kumari, K., Saeed, M., Xin, C., & Hussain, S. N. (2023). Does inclusive leadership influence task performance of hospitality industry employees? Role of psychological empowerment and trust in leader. *Heliyon*, *9*(5), e15507. https://doi.org/ 10.1016/J.HELIYON.2023.E15507

Tabrizi, R. S., Karatepe, O. M., Rezapouraghdam, H., Rescalvo-Martin, E., &Enea, C. (2023). Green human resource management, job embeddedness and their effects on restaurant employees' green voice behaviors. *International Journal of Contemporary Hospitality Management, 35*(10), 3453-3480.

Thabet, M. A., Galil, S. A., & Al-Maswari, M. A. (2024). Political Satire in Paul Torday's Salmon Fishing in the Yemen. *Jordan Journal of Modern Languages & Literatures, 16*(4), 1045-1062.

Uzum, B., Ozkan, O. S., OzkurtSivrikaya, S., &Ciftyildiz, K. (2025, March). Does responsible leadership via voice behavior promote green behavior?. In Evidence-based HRM: a Global Forum for Empirical Scholarship. *Emerald Publishing Limited.*

Vidal-Salazar, M. D., Cordón-Pozo, E., &Ferrón-Vilchez, V. (2012). Human resource management and developing proactive environmental strategies: The influence of environmental training and organizational learning. *Human Resource Management, 51*(6), 905-934.

Xie, L. (2019). Leadership and organizational learning culture: a systematic literature review. *European journal of training and development, 43*(1/2), 76-104.

Yang, B., Watkins, K. E., &Marsick, V. J. (2004). The construct of the learning organization: Dimensions, measurement, and validation. *Human resource development quarterly, 15*(1), 31-55.

Yang, N., Gao, J., & Chang, P. C. (2025). Can Environmentally-Specific Transformational Leadership Foster Employees' Green Voice Behavior? A Moderated Mediation Model of Psychological Empowerment, Ecological Reflexivity, and Value Congruence. *Behavioral Sciences, 15*(7), 945.

Yu, F., Zhang, Q., & Jiang, D. (2023). The impact of regional environmental regulations on digital transformation of energy companies: The moderating role of the top management team. *Managerial and Decision Economics*, *44*(6), 3152–3165. https://doi.org/10.1002/MDE.3868; WGROUP:STRING:PUBLICATION

Zagoršek, H., Dimovski, V., &Škerlavaj, M. (2009). Transactional and transformational leadership impacts on organizational learning. *Journal for East European management studies,* 144-165.

Zhang, J., Ul-Durar, S., Akhtar, M. N., Zhang, Y., & Lu, L. (2021). How does responsible leadership affect employees' voluntary workplace green behaviors? A multilevel dual process model of voluntary workplace green behaviors. *Journal of Environmental Management, 296,* 113205. https://doi.org/10.1016/J.JENVMAN.2021.113205

Appendix

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**8.661**	**33.312**	**33.312**	**8.661**	**33.312**	**33.312**
2	3.566	13.717	47.029			
3	1.867	7.180	54.210			
4	1.611	6.198	60.407			
5	1.376	5.292	65.699			
6	1.026	3.946	69.645			
7	.802	3.085	72.730			
8	.768	2.954	75.684			
-	-	-	-			
-	-	-	-			
26	.135	.519	100.000			
Extraction Method: Principal Component Analysis.						