



## Article

# The Impact of Green Inclusive Leadership on Green Innovation in Chinese SMEs: The Mediating Roles of Green Knowledge Sharing and Green Organizational Identity

Shuning Zhang, Yannan Li \*  and Ahreum Hong 

Graduate School of Technology Management, Kyung Hee University, Yongin 17104, Republic of Korea; zhang99@khu.ac.kr (S.Z.); arhong@khu.ac.kr (A.H.)

\* Correspondence: liu84333@khu.ac.kr

**Abstract:** The growing urgency of climate change underscores the need for enhanced green management practices across organizations, particularly for small and medium enterprises (SMEs), the backbone of economic development. Green inclusive leadership (GIL) is defined as a leadership approach that emphasizes inclusivity, openness, and support for employees' green ideas and contributions, fostering alignment with organizational environmental objectives. This study examines the influence of GIL on green knowledge sharing (GKS), green organizational identity (GOI), and green innovation (GI) within diverse Chinese industries, including manufacturing, services, media, and IT. Using data from 625 valid survey responses collected from 700 predominantly young, educated employees, this research demonstrates that GIL has a direct positive impact on GKS, GOI, and GI. The findings further reveal that GKS and GOI significantly contribute to GI, highlighting their roles as critical drivers of green innovation. Additionally, GKS and GOI partially mediate the relationship between GIL and GI, providing insights into how GIL promotes sustainable practices and innovation. This study underscores the importance of leadership and collaborative organizational practices in fostering a green-oriented organizational climate, supporting adopting green business models essential for competitive and resilient enterprises in a sustainable economy.

**Keywords:** green inclusive leadership; green knowledge sharing; green organizational identity; green innovation



Academic Editors: Stephen Oduro, Alessandro De Nisco and Fabrizio D'Ascenzo

Received: 31 October 2024

Revised: 20 January 2025

Accepted: 23 January 2025

Published: 1 February 2025

**Citation:** Zhang, S.; Li, Y.; Hong, A. The Impact of Green Inclusive Leadership on Green Innovation in Chinese SMEs: The Mediating Roles of Green Knowledge Sharing and Green Organizational Identity. *Sustainability* **2025**, *17*, 1180. <https://doi.org/10.3390/su17031180>

**Copyright:** © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

The growing urgency of climate change demands enhanced green management practices across industries, particularly small and medium enterprises (SMEs), which play a crucial role in economic development [1]. Additionally, the decisions of employees and consumers are increasingly swayed by the corporate social responsibility ethos of organizations [2]. Consequently, environmental sustainability and green development have emerged as key concerns for both corporations and governments alike [3]. Innovation drives business growth, and most organizations now increasingly rely on the innovative contributions of their employees to maintain and improve their competitiveness [4]. With climate change, resource scarcity, and worsening environmental problems, green innovation has become one of the key elements in driving economic growth and sustainable development [5]. Green innovation, defined as developing eco-friendly products, processes, and business models to promote sustainability, has been widely recognized as a key strategy for achieving sustainability and maintaining competitiveness [6]. Scholars

have emphasized firms' need to develop and implement green innovations that reduce carbon footprints and mitigate environmental hazards [7]. Green innovation encompasses both product and technology advancements and managerial, organizational, and cultural transformations. Achieving such innovation requires green creativity, which can be fostered when leadership teams establish and communicate green policies and procedures to employees, promoting environmentally friendly innovation [8]. Employee green creativity facilitates sustainable development, supports green innovation, enhances corporate image, and empowers employees to devise new environmentally sustainable methods. This leads to service or product innovations that promote eco-friendly behaviors, protect the ecosystem, and increase manufacturing value [9]. In this context, green inclusive leadership is crucial in stimulating green innovation within the workforce [10]. Unlike traditional leadership approaches, green inclusive leaders are open to employee-driven green initiatives and receptive to integrating employees' ecological aspirations into organizational goals [11]. They actively acknowledge and reward environmentally conscious behaviors and ideas among team members, cultivating an innovative green culture within the organization [12]. Moreover, effective knowledge sharing among organizational members is essential for processing unique, task-specific knowledge, enhancing individual learning, and bolstering organizational innovation capabilities [13]. In environmental sustainability, enhancing employees' green knowledge-sharing abilities enables organizations to store, utilize, and strategically leverage green knowledge, thereby amplifying employees' green innovative capacities and augmenting the enterprise's core competitiveness [14]. In environments characterized by green inclusive leadership, there is a notable enhancement in green innovation work behaviors [15]. This is due to creating an inclusive, identity-supportive work atmosphere, which boosts employees' intrinsic motivation [16].

Additionally, employees' identification with and response to the organization's environmental contributions positively impacts green innovation [17]. Employees in such settings are more inclined to support the organization mutually and contribute to innovative business processes [18]. Green inclusive leadership is defined as a leadership style that emphasizes inclusivity, openness, and support for employees' contributions to environmental sustainability, fostering an organizational culture that aligns with environmental objectives [19]. Green inclusive leadership plays a pivotal role in encouraging green knowledge sharing and cultivating green organizational identity, which are critical mechanisms that drive green innovation. By fostering collaboration and aligning individual and organizational environmental goals, Green inclusive leadership enhances employees' engagement in sustainable practices and their ability to contribute innovative solutions to environmental challenges.

Green inclusive leadership (GIL) is key in promoting sustainability and innovation in SMEs; research shows that GIL can significantly influence employees' green creativity by leveraging factors such as green passion and green absorptive capacity [20]. This highlights the potential of inclusive leadership in driving green innovation and creativity in small organizations, often at the forefront of adapting sustainable practices. Research in various industries, such as manufacturing and hospitality, has also shown how GIL promotes green organizational citizenship behavior, encouraging employees to align their actions with the organization's sustainability goals. In addition, it remains crucial to understand the key success factors for SMEs to adopt green practices, as these factors influence their willingness and ability to transform into sustainable operations [21]. The role of leadership extends to guiding SMEs through the challenges of sustainability transformation, especially in high-tech industries where innovation is closely linked to environmental goals [22,23]. These insights highlight the importance of effective leadership in developing green strategies and ensuring that SMEs, as essential contributors to the economy, can align with global

sustainability goals such as the SDGs. Given the above theoretical background, the research objectives and expectations of this study are as follows.

This study examines the impact of green inclusive leadership (GIL) on green knowledge sharing (GKS), green organizational identity (GOI), and green innovation (GI) within the context of small- and medium-sized enterprises (SMEs) in China. Specifically, it investigates the direct effects of GIL on GKS, GOI, and GI, as well as the mediating roles of GKS and GOI in the relationship between GIL and GI. By analyzing these dynamics, the study elucidates how inclusive leadership practices align organizational goals with environmental sustainability, particularly in resource-constrained SME environments. (1) This study contributes to the extant literature by integrating leadership and organizational identity theories, offering a novel perspective on how GIL facilitates knowledge sharing, enhances green organizational identity, and promotes green innovation. This theoretical advancement bridges critical gaps in sustainable management research, particularly in SMEs operating under environmental and economic pressures. (2) From a practical standpoint, the findings provide actionable recommendations for managers, organizations, and policy-makers. These include adopting inclusive leadership approaches, fostering collaborative knowledge-sharing practices, and enhancing green organizational identity as strategies to drive sustainable innovation and competitiveness. This study offers a strategic roadmap for cultivating green-oriented organizational climates, contributing to the resilience and sustainability of SMEs in a rapidly evolving economic and environmental landscape.

## 2. Theoretical Background and Hypothesis

### 2.1. Green Inclusive Leadership and Green Knowledge Sharing

The concept of inclusive leadership, a seminal contribution to organizational management theory, was first introduced by Nembhard et al. [24]. They conceptualized inclusive leadership as a style that is attuned to employees' needs and interests, respects and encourages their contributions, acknowledges their viewpoints, and is characterized by openness, actionability, and usability of communication in interactions with employees [25]. GIL is characterized by inclusivity, openness, and support for employees' green contributions. Quan et al. (2022) define GIL as a leadership style marked by transparency, accessibility, and collaborative interaction with employees to achieve environmental goals and green processes [26]. Building on this foundation, it can be posited that within the context of the contemporary societal emphasis on environmental sustainability, inclusive leadership focused on achieving organizational goals related to environmental protection and sustainability can be termed 'green inclusive leadership' [27]. Leaders who embody this style actively engage in discussions and goal-setting regarding environmental objectives with their employees and demonstrate openness to innovative green ideas [11]. In contemporary corporate environments, the core competitiveness of many enterprises is increasingly derived from the fragmentation, reorganization, integration, and utilization of internal resources or knowledge, necessitating the sharing of resources to bolster their competitive edge [28]. Knowledge sharing involves disseminating one's knowledge to assist others in learning and developing new capabilities, and it transcends mere exchange by facilitating organizational members in locating necessary knowledge and resources through internal exchange mechanisms [29]. GKS involves the exchange of green-related knowledge among employees to foster learning and collaboration. It has been shown to enhance green creativity and organizational innovation through actionable practices [30].

The organizational environment fostered by inclusive leadership is characterized by its diversity and compatibility, effectively mitigating perceptions of hierarchical dominance within the corporate structure [31]. This approach significantly contributes to employees feeling valued within the organization, which in turn enhances the sense of trust among

them. Such an atmosphere is conducive to the facilitation of more extensive knowledge sharing [32]. Moreover, in line with social learning theory, inclusive leaders often serve as role models for their employees, with their behaviors setting a precedent for employee conduct [33]. Consequently, when employees emulate green inclusive leadership, they are more inclined to share green environmental knowledge with their colleagues and actively engage in their work responsibilities [34]. The empowerment provided by inclusive leaders, allowing employees to express diverse voices, ideas, and opinions, further encourages them to participate in corporate green decision-making and resource allocation. Such participation enables employees to utilize resources and knowledge sharing more effectively, thereby making substantial contributions to the organization's environmental objectives [35]. Therefore, in summary, we can formulate Hypothesis 1:

**H1.** *Green inclusive leadership is positively related to green knowledge sharing.*

## 2.2. Green Inclusive Leadership and Green Organizational Identity

Initially perceived as a subset of social identity, the concept of organizational identity has evolved through extensive scholarly research. It is now recognized as the sense of affiliation and emotional attachment that organizational members feel towards their organization [36]. This concept reflects the degree to which employees internalize the organization's values and objectives, significantly influencing their work attitudes and behaviors [17]. Green Organizational Identity (GOI) refers to the collective understanding and identification of employees with the organization's environmental goals. It incorporates environmental concerns into organizational identity, fostering alignment with sustainability objectives and enhancing green innovation performance [37].

When employees' perceptions align with the leader's vision, it strengthens their sense of belonging and synchronizes employee and organizational goals, which can be achieved by enhancing green inclusive leadership practices, thereby fostering employees' GOI and positive changes in their green behavior [21]. In the realm of environmental management, this concept has further evolved. The term 'green organizational identity' has been coined to describe how organizational members collectively develop and understand environmental protection initiatives. This identity shapes how they perceive and interpret their roles and behaviors about environmental conservation and sustainability efforts within the organization [34]. Leaders' positive behaviors and decisions are instrumental in reflecting and shaping the cultural values of an organization [28]. In this context, the cultivation of a green and environmentally conscious organizational culture can be significantly attributed to the practices of green inclusive leadership [26]. When leaders actively engage in, develop, and support the Sustainable Development Goals (SDGs), integrating these principles into the organization's everyday activities enhances employees' identification with these green values and fosters a sense of green identity within the organization [38]. As previously discussed in the context of green knowledge sharing, the role-modeling demonstrated by leaders is also pivotal in inspiring employees to adopt an environmentally conscious mindset and encouraging them to engage in safe and environmentally friendly practices [35]. Furthermore, the development and implementation of environmental policies and procedures, coupled with the provision of resources and training for employees, are crucial steps in promoting and solidifying the development of green organizational identity.

Therefore, in summary, we propose Hypothesis 2:

**H2.** *Green inclusive leadership is positively related to green organizational identity.*

### 2.3. Green Inclusive Leadership and Green Innovation

Creativity has been initially conceptualized as the generation of valuable and novel products or services within an organization, leveraging one's professional skills [39]. It encompasses the successful materialization of unique ideas, signifying the capacity to produce new and potentially beneficial ideas relevant to an organization's products, actions, services, or processes [40]. Green innovation is the development of eco-friendly products, processes, and business models aimed at achieving sustainability. It includes innovations with reduced negative environmental impacts and is often used synonymously with eco-innovation and sustainable innovation [41]. Green innovation represents a conceptual evolution, encompassing the originality, novelty, and practicality of green products, services, processes, and practices [42]. Green inclusive leadership is essential for modern enterprises, motivating employees to propose and implement green initiatives, thereby promoting sustainable development in business and society [43]. This approach boosts followers' confidence, thereby enabling leaders to cultivate green innovation within their teams [11]. When leaders demonstrate fairness and ethical conduct towards their employees, it fosters an environment where employees are incentivized to introduce green innovations in their work, leading to heightened work engagement and dedication towards achieving the company's vision [44].

Furthermore, green inclusive leadership propels green innovation by granting employees access to organizational resources and aiding the execution of innovative solutions. In the equitable relationship fostered by inclusive leadership, employees receive fair recognition and rewards, which spurs them to meet their job requirements, including the pursuit of green innovation [45]. When green-inclusive leaders empathize with employees' needs and emotions, trust them, and encourage the expression of green ideas, employees become more motivated to engage in innovative tasks, willingly applying these efforts to their work [46]. The greener knowledge, resources, and autonomy employees receive from their leaders, the more they are likely to reciprocate through green innovation behaviors, effectively providing feedback and furthering the organization's environmental goals [18]. In summary, we can formulate Hypothesis 3:

**H3.** *Green inclusive leadership is positively related to green innovative behavior.*

### 2.4. Green Knowledge Sharing and Green Innovation

The importance of knowledge in the realization of innovation is well-established [47]. For organizational members, acquiring new knowledge through interaction and exchange is pivotal, as engaging in knowledge-sharing activities significantly enhances employees' learning and innovation capabilities [48]. Empirical studies have indicated that through interactions, employees can amalgamate information resources related to work tasks, encounter diverse ideas and thought processes, and access heterogeneous information and knowledge, leading to the efficient synthesis of shared resources into novel knowledge outputs that foster creativity [49].

In modern enterprises, green knowledge sharing inspires organizational members. This motivation leads them to work innovatively in environmentally sustainable ways. Consequently, they generate creative green ideas, enhancing their green innovation capacity [14]. The process of sharing green knowledge among employees also serves to enhance their personal green literacy and skills, accumulate creative green ideas, and improve both individual and collective innovativeness. This, in turn, contributes to the creation of an improved green work environment and performance [50]. Consequently, it is posited that the willingness of organizational members to share green knowledge and issues with others plays a crucial role in facilitating green innovation. In summary, we propose Hypothesis 4:

**H4.** *Green knowledge sharing is positively related to green innovation.*

#### *2.5. Green Organizational Identity and Green Innovation*

As environmental awareness grows, organizations are proactively addressing challenges and prioritizing corporate environmental management. Organizational identity significantly influences employee behavior by shaping company strategies and actions. [51]. When employees identify strongly with their organization and adopt positive and responsible attitudes, they are more likely to develop green creativity and foster continuous innovation in business processes [52]. Drawing from Organizational Identity Theory, it is posited that the greater the level of employee identification with their organization, the more inclined they are to engage in positive actions that benefit the organization [53]. A robust green organizational identity motivates employees to actively contribute to the organization's sustainability goals. Employees with a high degree of organizational identity believe in the organization's support and recognition of their innovative ideas, including green initiatives. This belief facilitates the generation of more environmental ideas and solutions in their innovation projects [42]. Furthermore, such employees are better equipped to explore green innovation technologies and to creatively apply new knowledge and concepts in green production. This not only advances environmental protection but also promotes innovation, achieving a 'win-win' scenario [17]. Therefore, we propose Hypothesis 5:

**H5.** *Green organizational identity is positively related to green innovation.*

#### *2.6. The Mediating Role of Green Knowledge Sharing in Green Inclusive Leadership and Green Innovation*

Inclusive leaders, known for their acceptance of diversity and differentiation, often provide encouragement and support to their employees [54]. When such leaders proactively disseminate green ideas and knowledge within their organizations, they catalyze a process where employees align with their peers on environmental matters, engaging in active knowledge sharing. Owing to the rapid transfer of information, employees can quickly respond to green innovation challenges by integrating shared knowledge into their practices [55].

Employees, inclined to collaborate with colleagues who share similar values and frequencies, collectively harness the power of green knowledge sharing (such as newly acquired environmental protection knowledge) and mutual exchange of data and information. This collaborative effort is directed towards fostering sustainable development and ESG (environmental, social, and governance) operations within the enterprise [47]. Consequently, this collaborative environment not only mitigates apprehensions associated with green innovation activities but also amplifies employees' self-efficacy in green innovation, making them more likely to generate innovative ideas and outcomes that align with the company's goals and enhance overall organizational performance in environmental sustainability [56]. In summary, Hypothesis 6 can be formulated:

**H6.** *Green knowledge sharing mediates the effect of green inclusive leadership on green innovation.*

#### *2.7. The Mediating Role of Green Organizational Identity in Green Inclusive Leadership and Green Innovation*

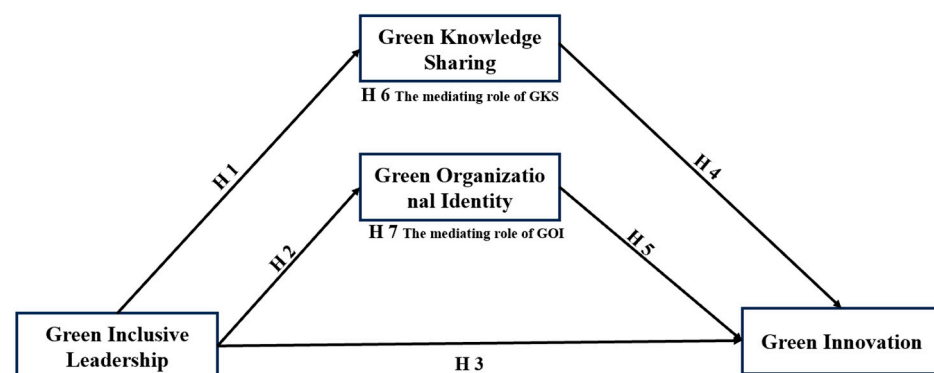
Green inclusive leadership signifies a commitment to environmental values. It fosters harmony and respect, strengthening employees' green organizational identity [57]. Within a work environment that emphasizes environmental protection and sustainability,

organizational members are more likely to enhance their green organizational identity. Research indicates that when members perceive their organization as green, they are more inclined to engage in environmentally protective behaviors and contribute positively to the environmental objectives of the organization [58]. The strength of employees' identification with their organization is directly proportional to their enthusiasm for acting, positively influencing their assessment of the organization. Such strong identification leads to enhanced external image and internal quality of the organization through positive employee behaviors [59]. When employees assimilate the green culture of the organization and sense its commitment to corporate social responsibility, they develop a stronger organizational identification with the green ethos. This identification manifests as green innovative behaviors.

Green-inclusive leaders play a crucial role in promoting the organization's green culture. They encourage the green ideas of existing employees, create a sustainable green organizational atmosphere, and attract more like-minded employees who value their green ethos. This enhances their sense of belonging and organizational identity, fostering loyalty to the organization. Consequently, employees are more likely to offer effective green suggestions and actions, furthering the development of the organization's green business initiatives. For this reason, we propose Hypothesis 7:

**H7.** *Green organizational identity mediates the effect of green inclusive leadership on green innovation.*

Based on the above theoretical foundation and hypothesis, our research model is depicted in Figure 1.



**Figure 1.** Research model.

### 3. Methods

#### 3.1. Sample and Data Collection

This study empirically examines the impact of green inclusive leadership (GIL) on green innovation in Chinese SMEs. SMEs were selected based on China's official SME classification standards, which define micro-, small-, and medium-sized enterprises based on the number of employees. Specifically, SMEs are defined as follows: Microenterprises—fewer than 10 employees and annual revenue of no more than RMB 3 million; Small enterprises—fewer than 100 employees and no more than RMB 50 million yearly revenue; medium enterprises—fewer than 300 employees and no more than RMB 200 million annual revenue. This study focuses on SMEs in Beijing, Shanxi (Datong), Henan (Zhengzhou), Shandong (Qingdao), and Guizhou (Zunyi), following China's SME classification standards. These thresholds vary by industry type, such as manufacturing, construction, and services, and this study specifically targeted companies with 20 to 300 employees, which primarily fall

into the SME category. China has approximately 50 million SMEs, which are key in driving economic growth and innovation. A total of 700 participants from SMEs were surveyed between September 2023 and May 2024. SPSS 26.0 was used to conduct descriptive statistical analysis of the survey data, and the results are shown in Table 1. The demographics of the respondents showed that 58.5% held a bachelor's degree or higher, reflecting a well-educated workforce suitable for analyzing green practices and innovations. Data were collected using a combination of online and offline surveys to maximize response rates and accommodate respondents' preferences and accessibility. All participants received a detailed explanation of the research objectives and the significance of their contribution to understanding green innovation practices. This information was provided in both verbal and written forms to promote transparency and ensure informed consent, which was in line with ethical research standards.

**Table 1.** Sample profile.

Categories		N	%
Gender	Male	306	49
	Female	319	51
Age	~25	79	12.6
	26~30	182	29.1
	31~35	164	26.2
	36~40	82	13.1
	40~	118	18.9
Education	High school	105	16.8
	College	154	24.6
	Bachelor	267	42.7
	Master and Doctor	99	15.8
Career	1~3	164	26.2
	3~6	108	17.3
	6~9	166	26.6
	9~	187	29.9
Industry	IT	42	6.7
	Media	50	8.0
	Service	107	17.1
	Manufacturing	362	57.9
	Other sectors	64	10.2

The sample achieved a high validity rate of 89.3%, indicating reliable and consistent responses. The sample distribution reflects the economic importance of the selected regions' industries, with 57.9% from manufacturing, 17.1% from services, 6.7% from IT, and 8.0% from media. However, it is worth noting that while the study concentrated on SMEs, it did not aim to achieve a perfectly balanced industry distribution in the sample. The focus was on SMEs' green innovation practices rather than maintaining equal industry representation. Future research will address this limitation by employing more rigorous sampling control to ensure greater sample representativeness across different sectors. This approach will enhance the generalizability and robustness of the findings, contributing to a deeper understanding of the role of GIL in driving sustainable practices in SMEs (Table 1).

### 3.2. Measures

Green inclusive leadership (independent variable): Inclusive leadership that achieves organizational goals such as environmental protection and cleanliness through interaction with employees [11]. In this paper, green inclusive leadership was measured using 9 items



taken from Carmeli et al. (2010) [54], with a 5-point response scale from 1 (strongly disagree) to 5 (strongly agree). Sample items of the scale are “The manager is open to hearing new ideas” and “The manager is ready to listen to my requests”. In addition, a 3-question scale developed by Bhutto et al. (2021) [11] was also incorporated. One of the sample items is “Employees can consult leaders in the organization about environmental issues at work”.

Green knowledge sharing (mediator variable): The behavior of company members who are eager to pass on their own questions, information, and knowledge about green issues to others, facilitating learning opportunities and encouraging others to learn and create new knowledge for each other. Green knowledge sharing was measured using a 5-item scale developed by Bock et al. (2005) [59], as well as Chang, and Hung, (2021) [14] in this article, with a 5-point response scale from 1 (strongly disagree) to 5 (strongly agree). A sample item is “My green knowledge sharing (e.g., eliminating pollution, environmental protection, and SDGs, etc.) with other organizational members is good”.

Green organizational identity (mediator variable): When members of an organization work together to construct environmental protection programs and make sense of their actions; this is known as green organizational identity [38]. In this paper, green organizational identity was measured using a 6-item scale developed by Chen (2011) [38], and Quan, Tian, and Qiu (2022) [26] with a 5-point response scale from 1 (strongly disagree) to 5 (strongly agree). A sample item is “Employees are proud of the company’s environmental goals and mission”.

Green innovation (dependent variable): Applying environmentally relevant expertise and highly creative, state-of-the-art thinking across the entire value chain of a company’s products, services, and processes to facilitate the subsequent implementation of green innovations [42]. In this study, green innovative behavior was measured using six items taken from Chen and Chang (2013) [42], Chang, and Hung, (2021) [14] with a 5-point response scale from 1 (strongly disagree) to 5 (strongly agree). Sample items of the scale are “The members within the project would recheck new green ideas” and “The members within the project advocate new green ideas to others”.

## 4. Analyses and Results

### 4.1. Measurement Reliability and Validity Assessment

In the first stage, SPSS 26.0 was used to calculate descriptive statistics, EFA of study variables, reliability values (Cronbach’s alpha), validity values, and correlation coefficients. In the second stage, we used maximum likelihood estimation in AMOS 24.0 to conduct structural equation modeling to estimate measurement and structural models to test the proposed hypotheses. Confirmatory factor analysis (CFA) was employed to validate this factor structure by testing how well the identified model fit the observed data, thereby confirming the construct validity of our measurement model. In the third stage, we again used SPSS to conduct hierarchical regression analysis to confirm the mediating effects of the dual mediators.

To assess the reliability and validity of our measurement instruments, we conducted an exploratory factor analysis (EFA). EFA uncovered the underlying factor structure without imposing a preconceived structure, allowing the data to reveal potential groupings among variables. The results of the exploratory factor analysis are shown in Table 2. This analysis identified four distinct factors, each with factor loadings exceeding the threshold of 0.50, indicating satisfactory internal consistency among the items. To further assess reliability, we calculated Cronbach’s alpha coefficients for each construct: green inclusive leadership (0.939), green knowledge sharing (0.896), green organizational identity (0.938), and green innovative behavior (0.933). All values surpassed the recommended threshold of 0.70,

demonstrating high internal consistency and confirming that our measurement instruments are reliable for hypothesis testing (Table 2).

**Table 2.** Results of exploratory factor analysis.

Variables	1	2	3	4	Cronbach's Alpha
GIL8	0.767	0.223	0.166	0.144	0.939
GIL6	0.762	0.152	0.159	0.203	
GIL2	0.759	0.228	0.233	0.176	
GIL4	0.743	0.232	0.220	0.224	
GIL7	0.742	0.201	0.197	0.218	
GIL1	0.735	0.233	0.284	0.170	
GIL5	0.723	0.183	0.250	0.202	
GIL3	0.708	0.263	0.239	0.119	
GIL9	0.708	0.250	0.149	0.255	
GOI4	0.232	0.802	0.142	0.155	0.938
GOI1	0.279	0.797	0.264	0.131	
GOI2	0.280	0.795	0.213	0.155	
GOI3	0.257	0.782	0.200	0.222	
GOI5	0.232	0.779	0.271	0.128	
GOI6	0.245	0.779	0.241	0.167	
GI2	0.231	0.216	0.788	0.175	0.933
GI6	0.236	0.234	0.783	0.189	
GI1	0.290	0.231	0.773	0.229	
GI5	0.221	0.222	0.758	0.246	
GI3	0.284	0.224	0.748	0.194	
GI4	0.254	0.242	0.739	0.271	
GKS4	0.213	0.176	0.170	0.807	0.896
GKS5	0.242	0.132	0.141	0.802	
GKS3	0.255	0.146	0.232	0.787	
GKS1	0.273	0.157	0.324	0.721	
GKS2	0.172	0.208	0.261	0.667	

Note: N = 625, loadings on a relevant factor are shown in bold and shaded in dark gray. GIL = Green inclusive leadership, GOI = Green organizational identity, GI = Green innovation, GKS = Green knowledge sharing.

Additionally, we investigated the reliability and validity of our perceptual measures constructs by performing a confirmatory factor analysis on an overall four-component structure. Table 3 summarizes the results of our confirmatory factor analysis. As expected, the model fits the data satisfactorily (CMIN/DF = 1.855,  $p < 0.001$ , RMR = 0.035, CFI = 0.980, TLI = 0.978, IFI = 0.980, GFI = 0.935, RMSEA = 0.037). Furthermore, all the factor loadings are highly significant ( $p < 0.001$ ), and the composite reliabilities (green inclusive leadership = 0.940; green knowledge sharing = 0.917; green organizational identity = 0.919; and green innovative behavior = 0.938) of all the constructs exceed the 0.70 benchmarks. All the average variances extracted (AVE) are  $>0.50$  (green inclusive leadership = 0.633; green knowledge sharing = 0.688; green organizational identity = 0.656; and green innovative behavior = 0.715). Therefore, our measures demonstrate adequate convergent validity

and reliability. To assess discriminant validity, we follow Fornell and Larker's (1981) [60] procedure to compare the shared variance between all the possible pairs of constructs to determine whether they are lower than the AVE of the individual constructs.

**Table 3.** Results of confirmatory factor analysis.

Variables	Estimate		S.E.	C.R.	AVE	CR
	$\beta$	B				
GIL9	0.774	1.000				
GIL8	0.792	1.042	0.049	21.459		
GIL7	0.793	1.018	0.047	21.503		
GIL6	0.776	1.024	0.049	20.908		
GIL5	0.783	1.030	0.049	21.149	0.633	0.940
GIL4	0.822	1.116	0.050	22.472		
GIL3	0.771	1.038	0.050	20.756		
GIL2	0.827	1.128	0.050	22.638		
GIL1	0.822	1.102	0.049	22.486		
GKS5	0.837	1.000				
GKS4	0.820	0.992	0.040	25.042		
GKS3	0.844	1.012	0.039	26.188	0.688	0.917
GKS2	0.823	0.978	0.039	25.176		
GKS1	0.824	0.962	0.038	25.233		
GOI6	0.870	1.026	0.037	27.569		
GOI5	0.798	1.000				
GOI4	0.820	1.015	0.045	22.596		
GOI3	0.841	1.034	0.044	23.340	0.656	0.919
GOI2	0.701	0.945	0.051	18.546		
GOI1	0.821	1.045	0.046	22.619		
GI6	0.839	1.000				
GI5	0.834	1.019	0.039	25.880		
GI4	0.809	1.009	0.041	24.669		
GI3	0.846	1.048	0.040	26.504	0.715	0.938
GI2	0.864	1.080	0.039	27.477		
GI1	0.880	1.062	0.037	28.339		
Model Summary	CMIN/DF = 1.855, $p < 0.001$ , RMR = 0.035, CFI = 0.980, TLI = 0.978, IFI = 0.980, GFI = 935, RMSEA = 0.037					

Note: N = 625, GIL = Green inclusive leadership, GOI = Green organizational identity, GI = Green innovation, GKS = Green knowledge sharing.

#### 4.2. Hypothesis Testing

We present the basic descriptive statistics and correlations of the measures in Table 4. As expected, all the independent variables are correlated with their corresponding dependent variables. Green inclusive leadership is significantly correlated with green organizational identity ( $r = 0.610$ ;  $p < 0.05$ ), green innovation ( $r = 0.617$ ;  $p < 0.05$ ), and green knowledge sharing ( $r = 0.577$ ;  $p < 0.05$ ).

**Table 4.** Mean, standard deviations and correlations.

Variables	Mean	S.D.	Gender	Age	Career	GIL	GI	GKS	GOI
Gender	1.51	0.500	1						
Age	2.96	1.298	−0.044	1					
Career	2.60	1.168	−0.066	0.866 **	1				
GLI	3.794	0.9343	−0.009	0.094 *	0.076	1			
GI	3.817	0.9638	−0.013	0.109 **	0.131 **	0.617 **	1		
GKS	3.893	0.9051	−0.024	0.121 **	0.097 *	0.577 **	0.593 **	1	
GOI	3.687	0.9977	0.003	0.103 *	0.080 *	0.610 **	0.593 **	0.490 **	1

Notes: N = 625, \*  $p < 0.05$ ; \*\*  $p < 0.01$ . GIL = Green inclusive leadership, GOI = Green organizational identity, GI = Green innovation, GKS = Green knowledge sharing.

The fit of the structural model is  $CMIN/DF = 1.909$ ,  $<2$ ,  $p < 0.001$ , comparative fit index [CFI] = 0.979, Tucker–Lewis’s index [TLI] = 0.977, incremental fit index [IFI] = 0.979, root mean square error of approximation [RMSEA] = 0.038, confirming that the model is at a satisfactory level. To examine the role of green inclusive leadership in predicting green knowledge sharing, green organizational identity, and green innovation of employees in Chinese enterprises, we employ a regression approach and report the results in Table 5. The results indicate that green inclusive leadership has a positive and significant impact on green knowledge sharing ( $\beta = 0.656$ ,  $t = 14.376$ ,  $p < 0.001$ ), green organizational identity ( $\beta = 0.713$ ,  $t = 15.315$ ,  $p < 0.001$ ), and green innovation ( $\beta = 0.297$ ,  $t = 5.184$ ,  $p < 0.001$ ). Therefore, Hypotheses 1, 2, and 3 are all supported. Additionally, both green knowledge sharing ( $\beta = 0.47$ ,  $t = 7.493$ ,  $p < 0.001$ ) and green organizational identity ( $\beta = 0.307$ ,  $t = 7.020$ ,  $p < 0.001$ ) positively and significantly impact green innovation. Therefore, Hypotheses 4, and 5 are all supported.

**Table 5.** Verification results of hypotheses 1 to 5.

Hypothesized Path	Estimate	S.E.	C.R.	<i>p</i>
H1. GIL → GKS	0.656	0.046	14.376	***
H2. GIL → GOI	0.713	0.047	15.315	***
H3. GIL → GI	0.297	0.057	5.184	***
H4. GKS → GI	0.347	0.046	7.493	***
H5. GOI → GI	0.307	0.044	7.020	***

Model Summary:

$CMIN/DF = 1.909$ ,  $p < 0.001$ ,  $RMR = 0.047$ ,  $GFI = 0.933$ ,  $CFI = 0.979$ ,  $TLI = 0.977$ ,  $IFI = 0.979$ ,  $NFI = 0.957$ ,  $RMSEA = 0.038$

Notes:  $N = 625$ , \*\*\*  $p < 0.001$ . GIL = Green inclusive leadership, GOI = Green organizational identity, GI = Green innovation, GKS = Green knowledge sharing.

To test the extent to which green knowledge sharing and green organizational identity mediate the influence of green inclusive leadership on green innovation, we employ the three-step mediated regression approach recommended by Baron and Kenny (1986) [61] and report the results in Table 6. To test the first mediation condition, we examine the impact of green inclusive leadership on green knowledge sharing and green organizational identity. The results shown in Models 1 and 4 of Table 5 demonstrate that green inclusive leadership positively and significantly influences both green knowledge sharing ( $\beta = 0.570$ ,  $t = 17.380$ ,  $p < 0.001$ ) and green organizational identity ( $\beta = 0.605$ ,  $t = 18.968$ ,  $p < 0.001$ ), thus, satisfying the first mediation condition.

**Table 6.** Results for regression analyses with potential mediating effects.

Variables	Model 1 (GKS)	Model 2 (GI)	Model 3 (GI)	Model 4 (GOI)	Model 5 (GI)	Model 6 (GI)
Age	0.083 (1.263)	−0.086 (−1.307)	−0.115 (−1.972 *)	0.065 (1.030)	−0.086 (−1.307)	−0.108 (−1.841)
Career	−0.018 (−0.270)	0.159 (2.533 *)	0.165 (2.830 **)	−0.023 (−0.359)	0.159 (2.533 *)	0.166 (2.832 **)
GIL	0.570 (17.380 ***)	0.613 (19.483 ***)	0.411 (11.524 ***)	0.605 (18.968 ***)	0.613 (19.483 ***)	0.406 (10.928 ***)
GKS			0.354 (9.887 ***)			
GOI						0.343 (9.236 ***)
R <sup>2</sup>	0.337	0.390	0.473	0.374	0.390	0.464
Δ R <sup>2</sup>	0.334	0.387	0.470	0.371	0.387	0.460
F statistics	105.357 ***	132.323 ***	139.142 ***	123.542 ***	132.323 ***	134.041 ***

Notes:  $N = 625$  \*  $p < 0.05$ , \*\*  $p < 0.01$ . \*\*\*  $p < 0.001$ , GIL = Green inclusive leadership, GOI = Green organizational identity, GI = Green innovation, GKS = Green knowledge sharing.

To test the second mediation condition, we estimate a new model that specifies only the direct relationship between green inclusive leadership and the two mediators (green knowledge sharing and green organizational identity). Models 2 and 5 of Table 5 show that, in the absence of the mediators, green inclusive leadership positively and significantly impacts green innovation ( $\beta = 0.613$ ,  $t = 19.483$ ,  $p < 0.001$ ). These results satisfy the second mediation condition.

Finally, after including the mediators of green knowledge sharing and green organizational identity, the results shown in Models 3 and 6 of Table 6 indicate that green knowledge sharing and green organizational identity significantly impact green innovation. We establish that green inclusive leadership continues to positively and significantly influence green innovation ( $\beta = 0.411$ ,  $t = 11.524$ ,  $p < 0.001$ ;  $\beta = 0.406$ ,  $t = 10.928$ ,  $p < 0.001$ ) even in the presence of the mediators of green knowledge sharing ( $\beta = 0.354$ ,  $t = 9.887$ ,  $p < 0.001$ ) and green organizational identity ( $\beta = 0.343$ ,  $t = 9.236$ ,  $p < 0.001$ ). We also observe a substantial reduction, though still significant, in the coefficient for the direct impact of green inclusive leadership on green innovation after including the mediators of green knowledge sharing (from 0.613 to 0.411) and green organizational identity (from 0.613 to 0.406). Thus, green knowledge sharing and green organizational identity both partially mediate the relationship between green inclusive leadership and green innovation, providing strong support for Hypotheses 6 and 7.

## 5. Conclusions

This study provides valuable insights for small and medium enterprises (SMEs) aiming to enhance green innovation practices through green inclusive leadership (GIL). Given SMEs' critical role in driving economic development and their substantial environmental impact, adopting sustainable practices is essential. Our findings suggest that GIL can foster a collaborative and green-oriented organizational culture by empowering employees to share green knowledge and align with organizational environmental goals, which drives green innovation.

### 5.1. Theoretical Implications

According to our findings, GIL has a positive effect on both GKS and GOI. This means that when green inclusive leadership encourages employees to participate in corporate green decision-making or resource allocation, it is more likely that employees will effectively use green knowledge sharing to contribute more to the organization's environmental goals [35]. This is consistent with what we have hypothesized. According to the principle of reciprocity in social exchange theory, when employees receive green emotions or green inspiration from GIL, they are likely to implement green knowledge sharing to give back to the leader or to repay the organization [62]. Therefore, it is said that the modeling effect and encouragement of leaders help employees to be more willing to share their personal green experiences and insights, which results in an innovative and collaborative knowledge-sharing environment. The supportive behavior of green-inclusive leaders enhances employees' confidence and motivation about sharing green knowledge and makes them feel valued by their leaders. If the leader also participates and builds sustainable development goals with employees, encourages the implementation of green policies, and integrates these into the daily operations of the organization, it will be easier for the psychology and cognition of the employees to move closer to these values, and it will be easier for the employees themselves to have a feeling of green identity in the organization [38]. Similarly to Chen, once members identify an organization as a green organization, they are very likely to improve the environment for the organization and take actions that are beneficial to environmental protection [42].

Second, as confirmed by our examination, GIL has a positive influence with GI. As expected in our hypothesis, we found that GIL affects employees' innovative behaviors in dealing with environment-related issues, and when green-inclusive leaders care enough about employees' needs and show trust to allow them to express their green views and ideas, followers will have fun in participating in innovative activities and take the initiative to apply for completion [46]. By readily consulting leaders on environment-related issues and listening to requests related to environmental issues, the greener knowledge employees can gain from leaders, the more resources and permission they have, leading to a greater willingness to reciprocate organizational feedback leadership through green innovation behaviors [18]. Leaders' green values, behaviors that support green innovation, and motivation and training of employees can be brought to bear in organizational culture and employee engagement, thus, stimulating employees' environmental awareness and encouraging them to come up with innovative green solutions.

In addition, the positive effects of GKS and GOI on GI are supported by statistical data, and the scholars claimed the same results as ours. The process of green sharing among employees can improve their personal green knowledge and skills and gather green creative ideas to enhance their own or others' innovativeness to create a better green work environment and performance [50]. At the same time, employees can also access a wide range of green ideas by pooling information resources related to work issues, thus, capturing more heterogeneous information, and transforming it into their own energy to promote their own green innovation [49]. As the theory of organizational identity posits, the higher the employees' green identity to the organization, the more they are willing and active to take actions to maintain the sustainable interests of the organization [53]. When employees feel the organization's commitment and recognition of green values, they will be more willing to come up with green innovation ideas and put them into practice. Green organizational identity creates a work environment that motivates employees to be green and innovative and helps them to generate more environmental ideas and solutions in their innovation projects, ultimately achieving a win-win situation for environmental protection and innovation [42].

Of course, GKS and GOI will play an important role in mediating between GIL and GI. Research has shown that after GIL and employees have jointly formulated an environmental target program, employees must collaborate, acquire, and communicate with each other in order to introduce green innovative behaviors [47], and after green inclusive leadership supports resource sharing among employees, the exchanged environmental knowledge and resources can be used to innovate the organization and enhance the green innovative power of employees. In such an inclusive organizational atmosphere, it helps to reduce information barriers within the organization and build a relationship of mutual respect and trust between colleagues, and is more conducive to effectively eliminating the anxiety and concerns of employees in their work, so that employees are more motivated to explore new ideas and methods to bring more innovation and success to the organization [35]. Through the openness and encouragement of the leaders, the organizational awareness of the employees can be strengthened and their responsibility toward the sustainable environment can be increased, so that the employees will work harder to support environmental protection and green innovation [42]. When employees feel a sense of corporate social responsibility and learn from the organization's green culture, they will develop an organizational identity with the green organization, which will drive their efforts in green innovation [26]. Meanwhile, the green-inclusive style of leadership can shape the organizational culture conducive to environmental protection goals, thereby increasing the degree of employee identification with the green mission, which further allows employees to contribute to the sustainable development of the organization.

### 5.2. Practical Implications

The transformative impact of green inclusive leadership (GIL) and green innovation on SMEs is grounded in their potential to drive sustainable development and competitive advantage, particularly in addressing the urgent challenges of climate change. Anchoring this study within the Schumpeterian perspective positions leaders and managers as agents of change who drive economic and sustainable transformation through innovative practices. GIL exemplifies the entrepreneurial and managerial capacity to reshape existing structures and create new combinations by fostering green organizational identity, encouraging green knowledge sharing, and catalyzing green innovation.

In the rapidly evolving environmental landscape, adopting green innovation strategies not only enhances competitiveness but also sets industry-wide benchmarks for integrating sustainability into core operations. Visionary and inclusive leaders play a pivotal role in this transformation. They act as catalysts, inspiring shared environmental values and fostering a workplace culture of collaboration and innovation. Through these practices, GIL facilitates the development of a green organizational identity, motivating employees to align their values with organizational goals. To maximize the impact of green innovation, SMEs should prioritize leadership development programs that cultivate inclusivity and environmental awareness. Recognizing employee contributions—whether through formal rewards or verbal acknowledgment—boosts engagement and fosters a culture of green knowledge sharing. This collaborative environment enhances employees' motivation to participate actively in achieving the organization's environmental objectives.

Additionally, involving employees in setting and clarifying environmental goals strengthens their green organizational identity, aligning individual efforts with broader sustainability objectives. Over time, this alignment reinforces the perception that green innovation benefits the enterprise and the larger societal and environmental systems. Such practices position SMEs as key players in the global transition towards a sustainable economy, underscoring the relevance of leadership and innovation in addressing contemporary challenges.

### 5.3. Research Limitations and Further Research Directions

This study acknowledges certain limitations that will guide our future research endeavors. Firstly, as the sample predominantly comprises individuals from the production, manufacturing, service, and media industries, we plan to extend our research to include a broader range of industries and regions. This will help us explore the influence of green-inclusive leadership (GIL) and green innovation (GI) across diverse organizational and environmental contexts, enhancing the external validity of our findings. Secondly, the current cross-sectional design limited our ability to observe the long-term effects of GIL on GI. In our future studies, we will adopt longitudinal designs to capture leadership's dynamic and sustained impacts on innovation over time. Additionally, we will expand our focus to include other mediators, such as green human resource management, green policy management, and corporate social responsibility, to build a more comprehensive understanding of the factors influencing GI. Finally, we plan to investigate substantive factors, including financial outcomes and the time required for returns on green investments, to provide deeper insights into the economic feasibility and long-term benefits of implementing green innovations in different organizational settings. These future efforts will contribute to advancing the knowledge of sustainable leadership and innovation practices.

**Author Contributions:** Conceptualization, S.Z.; Methodology, Y.L. and A.H.; Investigation, A.H.; Data curation, Y.L.; Writing—original draft, S.Z. and Y.L.; Writing—review & editing, Y.L.; Supervision, A.H. All authors have read and agreed to the published version of the manuscript.

**Funding:** This work received no external funding.

**Institutional Review Board Statement:** The study did not require institutional ethical approval as it involved a survey administered as part of a training program, ensured anonymity of responses, and provided participants with the option to decline participation.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data is unavailable due to privacy or ethical restrictions.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References

- Braun, L.M.; Perez Cuso, M.; Mayer-Besting, E.; Marcelino Santos Lima, V. *Advancing the Green Transition of SMEs: Insights for SME Development Agencies to Support Sustainability Practices and Reporting*; SACAP: Bangkok, Thailand, 2024.
- Zhang, X. Sustainable Practices, CSR, and Brand Reputation: Influencing Purchase Intentions in Luxury Green Marketing. *J. Educ. Humanit. Soc. Sci.* **2024**, *27*, 480–486. [[CrossRef](#)]
- Verma, J.; Gupta, M. Green Environmental Sustainability: Initiatives by Government and Corporate Sectors. In *Handbook of Research on Safe Disposal Methods of Municipal Solid Wastes for a Sustainable Environment*; IGI Global: Hershey, PA, USA, 2023; pp. 212–221.
- Garrido-Moreno, A.; Martín-Rojas, R.; García-Morales, V.J. The key role of innovation and organizational resilience in improving business performance: A mixed-methods approach. *Int. J. Inf. Manag.* **2024**, *77*, 102777. [[CrossRef](#)]
- Hayaloğlu, P.; Artan, S. The Effects of Green Innovation on Environmental Quality and Economic Growth: An Investigation for G-20 Countries. *Curr. Debates Sustain. Dev.* **2022**, *53*, 56–75.
- Le, T.T. How do corporate social responsibility and green innovation transform corporate green strategy into sustainable firm performance? *J. Clean. Prod.* **2022**, *362*, 132228. [[CrossRef](#)]
- Awan, U.; Sroufe, R.; Kraslawski, A. Creativity enables sustainable development: Supplier engagement as a boundary condition for the positive effect on green innovation. *J. Clean. Prod.* **2019**, *226*, 172–185. [[CrossRef](#)]
- Jia, J.; Liu, H.; Chin, T.; Hu, D. The continuous mediating effects of GHRM on employees' green passion via transformational leadership and green creativity. *Sustainability* **2018**, *10*, 3237. [[CrossRef](#)]
- Li, W.; Bhutto, T.A.; Xuhui, W.; Maitlo, Q.; Zafar, A.U.; Bhutto, N.A. Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. *J. Clean. Prod.* **2020**, *255*, 120229. [[CrossRef](#)]
- Mittal, S.; Dhar, R.L. Effect of green transformational leadership on green creativity: A study of tourist hotels. *Tour. Manag.* **2016**, *57*, 118–127. [[CrossRef](#)]
- Bhutto, T.A.; Farooq, R.; Talwar, S.; Awan, U.; Dhir, A. Green inclusive leadership and green creativity in the tourism and hospitality sector: Serial mediation of green psychological climate and work engagement. *J. Sustain. Tour.* **2021**, *29*, 1716–1737. [[CrossRef](#)]
- Choi, S.B.; Tran TB, H.; Park, B.I. Inclusive leadership and work engagement: Mediating roles of affective organizational commitment and creativity. *Soc. Behav. Personal. Int. J.* **2015**, *43*, 931–943. [[CrossRef](#)]
- Huang, X.; Hsieh, J.J.; He, W. Expertise dissimilarity and creativity: The contingent roles of tacit and explicit knowledge sharing. *J. Appl. Psychol.* **2014**, *99*, 816. [[CrossRef](#)] [[PubMed](#)]
- Chang, T.W.; Hung, C.Z. How to shape the employees' organization sustainable green knowledge sharing: Cross-level effect of green organizational identity effect on green management behavior and performance of members. *Sustainability* **2021**, *13*, 626. [[CrossRef](#)]
- Khan, J.; Jaafar, M.; Mubarak, N.; Khan, A.K. Employee mindfulness, innovative work behaviour, and IT project success: The role of inclusive leadership. *Inf. Technol. Manag.* **2024**, *25*, 145–159. [[CrossRef](#)]
- Saether, E.A. Motivational antecedents to high-tech R&D employees' innovative work behavior: Self-determined motivation, person-organization fit, organization support of creativity, and pay justice. *J. High Technol. Manag. Res.* **2019**, *30*, 100350.
- Liu, L.; Zhao, L. The influence of ethical leadership and green organizational identity on Employees' green innovation behavior: The moderating effect of strategic flexibility. *IOP Conf. Ser. Earth Environ. Sci.* **2019**, *237*, 052012. [[CrossRef](#)]
- Qi, L.; Liu, B.; Wei, X.; Hu, Y. Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator. *PLoS ONE* **2019**, *14*, e0212091. [[CrossRef](#)] [[PubMed](#)]
- Eladawi FM, I.; Elnaggar, M.K.; Hashad, M.E.; Awad AH, I.; Abd AA EK, G. Effect of Green Inclusive Leadership on Employees' Green Work Engagement in Hotels and Travel Agencies: The Role of Green Intrinsic Motivation. *Geo J. Tour. Geosites* **2024**, *54*, 885–895. [[CrossRef](#)]
- Murad, M.; Li, C. Impact of green inclusive leadership on employee green creativity: Mediating roles of green passion and green absorptive capacity. *Leadersh. Organ. Dev. J.* **2024**, *46*, 118–138. [[CrossRef](#)]



21. Abdou, A.H.; Al Abdulathim, M.A.; Hussni Hasan, N.R.; Salah MH, A.; Ali HS, A.M.; Kamel, N.J. From green inclusive leadership to green organizational citizenship: Exploring the mediating role of green work engagement and green organizational identification in the hotel industry context. *Sustainability* **2023**, *15*, 14979. [[CrossRef](#)]
22. Huy, P.Q.; Phuc, V.K. Changing times: Does the critical success factors boosting green transition of SMEs remain unchanged? *J. Innov. Entrep.* **2025**, *14*, 2. [[CrossRef](#)]
23. Mehmood, K.; Iftikhar, Y.; Suhail, A.; Jabeen, F.; Ashraf, R.U.; Bader Alkatheeri, H. Driving Twin Transition in Green SMEs: The Role of Platform Leadership in Sustainable Practices. *Acad. Manag. Proc.* **2024**, *2024*, 20300. [[CrossRef](#)]
24. Nembhard, I.M.; Edmondson, A.C. Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *J. Organ. Behav. Int. J. Ind. Occup. Organ. Psychol. Behav.* **2006**, *27*, 941–966. [[CrossRef](#)]
25. Li, T.; Tang, N. Inclusive leadership and innovative performance: A multi-level mediation model of psychological safety. *Front. Psychol.* **2022**, *13*, 934831. [[CrossRef](#)] [[PubMed](#)]
26. Quan, D.; Tian, L.; Qiu, W. The Study on the Influence of Green Inclusive Leadership on Employee Green Behaviour. *J. Environ. Public Health* **2022**, *2022*, 5292184. [[CrossRef](#)] [[PubMed](#)]
27. Dinibutun, S.R. From green inclusive leadership to green creativity: The mediating role of green passion and green absorptive capacity. *J. Open Innov. Technol. Mark. Complex.* **2024**, *10*, 100272. [[CrossRef](#)]
28. Ma, Y.R.; Jiang, S.S.; Zhang, J. An Empirical Study on the Impact of Inclusive Leadership on Medical Team Performance. A Team Cognition Perspective. *J. Hunan Univ.* **2019**, *33*, 1–11.
29. Wensley, A. Book review: Working knowledge: How organizations manage what they know Thomas, H. Davenport and Laurence Prusak. *Knowl. Process Manag.* **1998**, *5*, 65–66. [[CrossRef](#)]
30. Saleem, F.; Pinto, L.; Malik, M.I. Green Knowledge Sharing and the Green Performance Nexus: A Moderated Mediation Model. *Sustainability* **2024**, *16*, 9654. [[CrossRef](#)]
31. Sharma, L.; Agarwal, P.; Joshi, B.P.; Kumar, N.; Tiwari, S. A study of impact of inclusive leadership on innovative behaviors and diversity at workplace. *Environ. Soc. Psychol.* **2023**, *9*, 1721. [[CrossRef](#)]
32. Nishii, L.H. The benefits of climate for inclusion for gender-diverse groups. *Acad. Manag. J.* **2013**, *56*, 1754–1774. [[CrossRef](#)]
33. Gu, Y.H.; Qing, T.; Yang, F.; Zhang, Z. The Double-edged Sword Effect of Inclusive Leadership on Followers' Creativity. *Sci. Technol. Prog. Responses* **2017**, *36*, 7.
34. Mitchell, M.S.; Cropanzano, R.S.; Quisenberry, D.M. *Social Exchange Theory, Exchange Resources, and Interpersonal Relationships: A Modest Resolution of Theoretical Difficulties*; Springer: New York, NY, USA, 2012. [[CrossRef](#)]
35. Xu, M.Z.; Zhang, X.Q. The Impact of Inclusive Climate on Employee Creativity: Take the Cross-level Mediating Effect of Knowledge Sharing. *Sci. Technol. Prog. Policy* **2019**, *36*, 138–144.
36. Ashforth, B.E.; Mael, F. Social Identity Theory and the Organization. *Acad. Manag. Rev.* **1989**, *14*, 20–39. [[CrossRef](#)]
37. Mushtaque, T.; Tunio, M.N.; Akbar, Z.; Jariko, M. Green Organizational Identity: Antecedents and Consequences: An Empirical Study. *J. Contemp. Issues Bus. Gov.* **2021**, *27*, 2056–2069.
38. Chen, Y.S. Green organizational identity: Sources and consequence. *Manag. Decis.* **2011**, *49*, 384–404. [[CrossRef](#)]
39. Woodman, R.W.; Sawyer, J.E.; Griffin, R.W. Toward a theory of organizational creativity. *Acad. Manag. Rev.* **1993**, *18*, 293–321. [[CrossRef](#)]
40. Shalley, C.E.; Gilson, L.L. What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *Leadersh. Q.* **2004**, *15*, 33–53. [[CrossRef](#)]
41. Rupasinghe, L.R.; Pushpakumari, M.D.; Perera, G.D.N. Mapping the knowledge of green innovation: A systematic literature review. *J. Humanit. Appl. Soc. Sci.* **2024**, *6*, 357–376. [[CrossRef](#)]
42. Chen, Y.S.; Chang, C.H. The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity. *J. Bus. Ethics* **2013**, *116*, 107–119. [[CrossRef](#)]
43. Thabet, W.M.; Badar, K.; Aboramadan, M.; Abualigah, A. Does green inclusive leadership promote hospitality employees' pro-environmental behaviors? The mediating role of climate for green initiative. *Serv. Ind. J.* **2023**, *43*, 43–63. [[CrossRef](#)]
44. Dhar, R.L. Ethical leadership and its impact on service innovative behavior: The role of LMX and job autonomy. *Tour. Manag.* **2016**, *57*, 139–148. [[CrossRef](#)]
45. Mansoor, A.; Farrukh, M.; Wu, Y.; Abdul Wahab, S. Does inclusive leadership incite innovative work behavior? *Hum. Syst. Manag.* **2021**, *40*, 93–102. [[CrossRef](#)]
46. Janssen, O. How fairness perceptions make innovative behavior more or less stressful. *J. Organ. Behav.* **2004**, *25*, 201–215. [[CrossRef](#)]
47. Thornhill, S. Knowledge, innovation and firm performance in high-and low-technology regimes. *J. Bus. Ventur.* **2006**, *21*, 687–703. [[CrossRef](#)]
48. Kremer, H.; Villamor, I.; Aguinis, H. Innovation leadership: Best-practice recommendations for promoting employee creativity, voice, and knowledge sharing. *Bus. Horiz.* **2019**, *62*, 65–74. [[CrossRef](#)]

49. Gong, Y.; Cheung, S.Y.; Wang, M.; Huang, J.C. Unfolding the proactive process for creativity: Integration of the employee proactivity, information exchange, and psychological safety perspectives. *J. Manag.* **2012**, *38*, 1611–1633. [[CrossRef](#)]
50. Sosa, M.E. Where do creative interactions come from? The role of tie content and social networks. *Organ. Sci.* **2011**, *22*, 1–21. [[CrossRef](#)]
51. Gürlek, M.; Tuna, M. Reinforcing competitive advantage through green organizational culture and green innovation. *Serv. Ind. J.* **2018**, *38*, 467–491. [[CrossRef](#)]
52. Abbas, J.; Sağsan, M. Impact of knowledge management practices on green innovation and corporate sustainable development: A structural analysis. *J. Clean. Prod.* **2019**, *229*, 611–620. [[CrossRef](#)]
53. Li, Y.S.; Lee, M. Doing right leads to doing well: When the type of CSR and reputation interact to affect consumer evaluations of the firm. *J. Bus. Ethics* **2012**, *105*, 69–81. [[CrossRef](#)]
54. Carmeli, A.; Reiter-Palmon, R.; Ziv, E. Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creat. Res. J.* **2010**, *22*, 250–260. [[CrossRef](#)]
55. Cress, U.; Martin, S. Knowledge sharing and rewards: A game-theoretical perspective. *Knowl. Manag. Res. Pract.* **2006**, *4*, 283–292. [[CrossRef](#)]
56. Jiang, Z. Research on the impact of inclusive leadership on team knowledge sharing—A multi-level model test with two-dimensional identity as the mediator. *Acad. J. Eng. Technol. Sci.* **2020**, *3*, 23–36.
57. Yue, C.A.; Men, L.R.; Ferguson, M.A. Examining the effects of internal communication and emotional culture on employees' organizational identification. *Int. J. Bus. Commun.* **2021**, *58*, 169–195. [[CrossRef](#)]
58. Zhu, Y.; Zhang, H.; Siddik, A.B.; Zheng, Y.; Sobhani, F.A. Understanding corporate green competitive advantage through green technology adoption and green dynamic capabilities: Does green product innovation matter? *Systems* **2023**, *11*, 461. [[CrossRef](#)]
59. Bock, G.W.; Zmud, R.W.; Kim, Y.G.; Lee, J.N. Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Q.* **2005**, *29*, 87–111. [[CrossRef](#)]
60. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [[CrossRef](#)]
61. Baron, R.M.; Kenny, D.A. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Personal. Soc. Psychol.* **1986**, *51*, 1173. [[CrossRef](#)]
62. Zhong, X.; Fu, Y.; Wang, T. Inclusive leadership, perceived insider status and employee knowledge sharing—Moderating role of organizational innovation climate. *RD Manag.* **2019**, *31*, 109–120.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.