

THE EFFECT OF TRANSFORMATIONAL LEADERSHIP AND ORGANIZATIONAL CULTURE ON GREEN PERFORMANCE THROUGH EMPLOYEE BEHAVIOR WITH INNOVATION INCENTIVES AS A MODERATING VARIABLE AT SOLUSI BANGUN ANDALAS COMPANY

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ABSTRACT

This study aims to examine the transformational leadership and organizational culture influence on green performance through employee behavior with innovation incentives as a moderating variable at Solusi Bangun Andalas (SBA) company. To clarify this study model, all variables are measured within the context of greening. The sample size is 106 employees (census), and the data analysis method used is Partial Least Squares (PLS). The results indicate that in the direct effect test, leadership does not significantly affect green performance, but culture and behavior significantly do. Furthermore, leadership and culture positively significantly affect behavior. In the mediation effect test, behavior significantly mediates the leadership and culture influence on green performance. In the moderation effect test, innovation incentives were found not to moderate the influence of behavior on green performance.

Keywords: Green Transformational Leadership, Green Organizational Culture, Employee Green Behavior, Green Innovation Incentives, Green Performance.

1. INTRODUCTION

Climate change is one of the most crucial global issues currently facing the world. Its impacts are felt not only in environmental aspects but also in social and economic dimensions. Phenomena such as rising global temperatures, drought, food crises, and population displacement due to environmental damage are clear evidence that climate change threatens the sustainability of human life. The Intergovernmental Panel on Climate Change (IPCC) report (IPCC, 2023) emphasized that ongoing ecosystem degradation will worsen environmental resilience and human well-being if not addressed seriously. In response to these challenges, the industrial sector is being challenged to transform toward more sustainable business practices. Industries are no longer solely focused on achieving financial profit but are also required to consider the environmental impact of their operations. In this context, the concept of green performance is a crucial indicator for assessing an organization's ability to manage its activities in an environmentally friendly manner, including in terms of efficient resource use, waste reduction, and compliance with environmental regulations. However, current industrial practices have often been criticized for contributing to the overexploitation of natural resources. Issues such as environmental damage, social inequality, and unethical decision-making have drawn public attention to the industrial sector (Carroll & Brown, 2018). Therefore, intervention through government policies and regulations is crucial in encouraging companies to adopt sustainable practices. These regulations serve not only as a control tool but also as a stimulus for companies to balance economic growth and environmental

preservation (H. Liu et al., 2024).

Over two decades, there has been greater pressure from society and the market to practice sustainable business. With greater consumer awareness of environmental impact, corporations are acting differently, and consumers are choosing to purchase differently. This has led to movements like the boycotting of non-environmentally friendly products and an increased demand for green products, stimulating companies to bring their A-game in with preventing pollution rather than controlling it (Daily & Huang, 2001). In finance and investment, this trend is echoed by a growing number of institutions embedding sustainability across their product suites. Investment companies, for instance, have issued hybrid instruments which combine Sharia requirements with the notion of environmental concern, and they are also implementing ESG (Environmental, Social and Governance) standards. This shows that environmental problems have become a part of the widespread decision-making in business today.

The industry has a critical role in providing infrastructure but also accounts for a huge part of carbon emissions. The cement industry accounts for about 7–8% of total carbon dioxide (CO₂) output from human activities (Redlin & Gries, 2021). These effects can include global warming, conflict with ecosystem stability, and dangers to communities surrounding the lakes. The Indonesian government has developed several policies to reduce the cement industry's environmental impact, including by limiting greenhouse gas emissions up to a ceiling of 750 kg CO₂eq per ton of cement (i.e., Minister of Industry Regulation No. 26/2018). This policy can not only motivate enterprises to improve efficiency, but also encourage them to use more environmentally friendly technologies in the production process. The type of cement is well proven, and the Solusi Bangun Andalas (SBA) company has shown its commitment to using sustainable principles. This is reflected in its success in the 2025 PROPER Gold award from the Ministry of Environment and Forestry. This award is a testament to the company's exceptional performance in meeting and exceeding environmental compliance standards and making meaningful impacts on ways to preserve the environment while empowering communities. But these are hardly the end of the efforts to boost green performance. There is still room for improvement during the operation of the machine, especially with regard to resource security. For example, water consumption in the company's operations shows a significant downward trend, from approximately 2,000 m³ per day in December 2023 to 600 m³ per day in June 2025. However, there is still potential for efficiency improvements, particularly through optimizing operational processes and increasing environmental awareness among employees.

Green performance is therefore inextricably linked not only to policies and technologies, but also crucially to human resources. One important aspect is that management supports those green practices, but at the same time, employees' behavior is also a major concern regarding those changes. They achieve this through energy-saving behavior, waste management, and the application of sustainability-related guidelines. Employee green behavior also yielded a rather decent mean of 3.68. Similarly, poor levels were recorded for some additional indicators, such as waste separation and accounting for material consumption. This not only indicates a difference in awareness of green behavior, but also consistency and routine practice.

Innovation incentives are the third driver of better environmental performance. Employees with creative ideas contributing towards environmental sustainability can also be offered economic or non-economic benefits. However, the insight gained from their early survey was that most company innovation incentives exist but are weak in terms of rewarding employees for innovative

ideas. Transformational leadership should also be strategically included in promoting green performance. There will be a clear vision from leadership, with encouragement and support for rank-and-file employees, and an environment that enables the practice. Leadership is all on the right track at SBA according to the pre-survey results, but collaboration and alignment around environmental goals need more work. In addition, the role of sustainable values in organizational culture plays an important factor in enhancing the implementation of green performance. A strong culture will develop employee mindsets and behaviors, bolstering pro-environmental principles. On the other hand, some employees had not yet internalized environmental values, as shown by the results of the pre-survey.

Numerous ongoing studies have suggested that transformational leadership, organizational culture, and innovation incentives are significant indicators of green performance. However, these research findings have yet to be consistent and they seem to be divided, especially with regard to organizational culture that can lead in a positive or negative direction depending on where it is implemented (S. Wang & Huang, 2022). Also, research integrating green transformational leadership, green organizational culture, employee green behavior as a mediating variable, and innovation incentives as a moderating variable in the same research model was still limited, especially related to the cement industry in Indonesia.

2. LITERATURE REVIEW

2.1. Green Performance

Green performance is a measure that demonstrates an organization's ability to manage its environmental impact in a structured and sustainable manner. This concept is rooted in environmental corporatism, which emphasizes that companies must consider the entire product life cycle and maintain a balance between economic, social, and environmental aspects (Elkington, 1994). Operationally, green performance reflects the measurable results of an organization's environmental management, including regulatory compliance, efficient use of energy and resources, and reduced emissions and waste (International Organization for Standardization, 2015; (Daily & Huang, 2001). Therefore, green performance is both a way of fulfilling responsibility and a measure of long-term sustainability of the company. Moreover, green performance is viewed in terms of applying environmental management principles at every stage, including preproduction and production, as well as post-production waste recycling and reporting the ecological footprint impact (Jabbour & Santos, 2008). It helps increase operational efficiency while solidifying our position in the regulatory landscape and public expectations. Further, the green performance represents one aspect of sustainability performance which can be summarized into three base domains: economic, environmental, and social (Juo & Wang, 2025). Therefore, organizations are required to balance economic profit, environmental preservation, and social welfare (Jum'a, 2022); (Febrianty et al., 2023). Within the Natural Resource-Based View (NRBV) theoretical framework, green performance is viewed as a source of competitive advantage derived from a company's ability to strategically manage natural resources (Hart, 1995); (Barney et al., 2011). According to the NRBV, preventive initiatives related to pollution control, product lifecycle management, and sustainable development are our most immediate roadmap for future success. Green performance is operationally measurable with waste reduction and resource efficiency indicators, energy consumption levels, and compliance levels with environmental standards (Haldorai et al., 2025); (Juo & Wang, 2025).

2.2. Employee Green Behavior

Employee behavior is a process where individual characteristics interact with the context of the organization to determine how people behave (Robbins & Judge, 2022); (Rosenstiel, 2011). Every member of an organization has individual values, background, and reasons to do so, which influence the company system, culture, and structure. Employee green behavior (EGB) in an environmental context refers to voluntary actions that can have a conscious intent to minimize negative effects on the environment or positively contribute to sustainability (Miao & Wei, 2016). This behavior leads to some specific goals; internal and external drivers influence a person (Badu & Djafri, 2017). In organizational practice, employee green behavior can be divided into task-based (in-role) and voluntary (extra-role) behaviors, both of which contribute to achieving the company's environmental goals (Norton et al., 2015). The TPB approach is considered relevant in this study because it explains the relationship between employee perceptions, intentions, and actual behavior within the work environment (Jiao & Jiao, 2024). In practice, employee green behavior can be measured through various indicators reflecting concrete actions in the workplace. These indicators include aspects of attitude, social norms, and behavioral control (Liobikienė et al., 2025), as well as concrete practices such as waste segregation, recycling, resource conservation, use of digital documents, and initiatives to reduce waste and propose innovative ideas (Hidalgo-Crespo et al., 2024). These behaviors demonstrate employees' active role in supporting organizational sustainability. Previous research also confirms that employee green behavior plays a strategic role as a mediating variable in improving a company's environmental performance, where employees are key actors in reducing an organization's carbon footprint (Al-Swidi et al., 2021); (Chowdhury et al., 2025). In this article, employee green behavior will often be referred to as simply behavior or green behavior, to simplify the terms in the table and explanations.

2.3 Green Innovation Incentives

Green innovation incentives are organizational mechanisms designed to encourage employees to generate and implement innovative ideas oriented toward environmental sustainability. In this review, the term 'innovation' does not refer exclusively to sustainable technologies but also extends to enhanced work processes and managerial solutions as well as creative repair solutions that may improve efficiencies and mitigate adverse environmental impacts (Manik et al., 2025); (Antonioli et al., 2013). If innovation is related to work behavior, green innovative behavior will emerge (Aboramadan, 2022) or employee behaviors to generate ideas that help the environment through other aspects such as dissemination and implementation. To encourage this behavior, organizations need to provide reward systems, both financial and non-financial, as well as forms of recognition that can increase employee engagement and contribution to environmental goals (Renwick et al., 2013). From a human resource management perspective, green innovation incentives can also be explained through the Ability–Motivation–Opportunity (AMO) theory, which states that employee performance is influenced by the abilities, motivation, and opportunities provided by the organization (Appelbaum, 2000). In this context, green motivation does not exist in isolation, but rather results from the interaction between environmental competency, intrinsic and extrinsic motivation, and organizational support (Naqshbandi et al., 2026); (Yusliza & Renwick, 2024). Research shows that without motivational support and opportunities, employee capabilities will not yield optimal performance (Obereder et al., 2022). Therefore, organizations need to simultaneously integrate training, rewards, and employee empowerment to create an environment

that encourages green innovation (Armstrong & Taylor, 2023); (Floris & Pinna, 2024). Furthermore, a combination of financial and non-financial incentives has been shown to increase employee commitment to implementing environmentally friendly practices (Cherian & Jacob, 2012); (B. Liu et al., 2024)

Operationally, green innovation incentives are reflected in various indicators that demonstrate organizational support for sustainable innovation. These indicators include integrating innovative ideas into the reward system, providing financial incentives for environmental performance, providing green training, and team-based rewards for achieving environmental goals (Das & Dash, 2023). Furthermore, active employee involvement in seeking, developing, and implementing environmentally friendly ideas is also a crucial component of sustainable innovation (Chaudhary & Kumar, 2022); (Hu et al., 2022). Implementing an effective incentive system not only improves an organization's environmental performance but also strengthens employee loyalty and retention, contributing to long-term competitive advantage (Das & Dash, 2023). In this article, green innovation incentives will often be referred to as simply innovation incentives, to simplify the terms in the table and explanations.

2.4. Green Transformational Leadership

Green transformational leadership means going beyond the traditional concept of transformational leadership, seeking to change followers' values and attitudes in pursuit of higher goals, and particularly through environmental sustainability. Green transformational leadership in the environmental field channel is a leadership style that actively promotes sustainable values and one that helps an organization or company act more environmentally friendly. (Robertson & Barling, 2013); (Mittal & Dhar, 2016). In practice, this leadership emphasizes the importance of a concrete commitment to sustainability, encouragement of green innovation, and open and participatory communication when discussing environmental issues (Hussain et al., 2025). Thus, green transformational leadership is a strategic factor in building an organizational culture that supports sustainable practices. Operationally, green transformational leadership can be measured through several key indicators that reflect leader behavior in supporting environmental goals. These indicators include the leader's ability to inspire members through environmental planning, provide a clear vision, encourage team collaboration, and empower employees to achieve sustainability goals (Chen et al., 2014). In addition, leaders are also required to demonstrate sensitivity to employees' environmental values and encourage the emergence of innovative, green-oriented ideas. In this article, green transformational leadership will often be referred to as simply leadership or green leadership, to simplify the terms in the table and explanations.

2.5. Green Organizational Culture

In an environmental context, green organizational culture reflects a set of values, symbols, and beliefs that encourage an organization to operate in an environmentally friendly and sustainable manner (Porter et al., 2016). Developing this culture not only reduces the ecological footprint and increases resource efficiency but also contributes to the organization's long-term sustainability (Huynh et al., 2024). Furthermore, pressure from stakeholders encourages companies to allocate greater resources to environmental programs, making it crucial for organizations to understand how environmental culture and policies influence perceptions and overall organizational performance (Adil et al., 2025). Operationally, green organizational culture can be measured

through several key indicators that reflect the internalization of sustainability values within the organization. These indicators include the socialization and internalization of environmental awareness, the formalization of environmental policies, the establishment of environmental conservation as a strategic priority, and the instillation of sustainability-oriented core values (C.-H. Wang, 2019); (Huynh et al., 2024). In addition, the integration of environmental objectives with corporate targets and the development of environmentally friendly process and product innovations are also important indicators in assessing the strength of an organization's green culture. In this article, green organizational culture will often be referred to as simply culture or green culture, to simplify the terms in the table and explanations.

3. RESEARCH METHODS

This research population is all 106 employees of the SBA company. The sample size is 106 employees (census). The data analysis used Partial Least Squares (PLS-SEM) with SmartPLS software. The research instrument employs a Likert Summated Ratings scale, an attitude measurement method that asks respondents to indicate their level of agreement or disagreement with a statement (Noor, 2017). The scale consists of five levels, ranging from a score of 1 (strongly disagree) to a score of 5 (strongly agree). The hypotheses tested are :

H1 : significantly leadership affects green performance

H2 : significantly culture affects green performance

H3 : significantly leadership affects behavior

H4 : significantly culture affects behavior

H5 : significantly behavior affects green performance

H6 : significantly behavior mediates the leadership influence on green performance

H7 : significantly behavior mediates the leadership influence on green performance

H8 : significantly innovation incentives moderate the behavior influence on green performance

4. RESULT AND DISCUSSION

4.1. Hypothesis Testing

The testing results of the hypotheses are shown in Table 1 below.

Table 1. Direct Effect

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values	Result
Culture -> Green Performance	0.250	0.262	0.107	2.344	0.019	H2 accepted
Culture -> Behavior	0.422	0.430	0.102	4.140	0.000	H4 accepted
Leadership -> Green Performance	0.087	0.077	0.110	0.794	0.427	H1 rejected
Leadership -> Behavior	0.361	0.349	0.111	3.267	0.001	H3 accepted

Behavior -> Green Performance	0.276	0.273	0.096	2.871	0.004	H5 accepted
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4.1.1. Direct Effect

The results of the path coefficient analysis indicate that most of the relationships between variables in the research model have a significant influence. Culture was shown to have a positive and significant effect on green performance ($\beta = 0.250$; $t = 2.344$; $p = 0.019$), indicating that the stronger the environmentally oriented culture, the better the company's environmental performance. Furthermore, culture also positively significantly affects employee green behavior ($\beta = 0.422$; $t = 4.140$; $p = 0.000$), indicating that environmentally friendly organizational values and practices can shape employee behavior that is more environmentally conscious. On the other hand, leadership showed different results. Although it had a positive influence on green performance, the effect was not statistically significant ($\beta = 0.087$; $t = 0.794$; $p = 0.427$), thus this hypothesis was rejected. However, leadership was shown to have a positive significant effect on employee green behavior ($\beta = 0.361$; $t = 3.267$; $p = 0.001$). This indicates that the leadership role is more effective in shaping employee behavior than directly impacting the green performance.

Furthermore, employee green behavior was shown to have a positive and significant effect on green performance ($\beta = 0.276$; $t = 2.871$; $p = 0.004$). This finding confirms that employee environmentally friendly behavior is a crucial factor in improving a company's environmental performance. Overall, the results indicate that improved green performance is more indirectly influenced by the formation of employee green behavior, particularly through culture and leadership that support sustainability values.

4.1.2. Mediation Effect

Testing results of the mediation effect are shown in Table 2 below.

Table 2. Mediation Effect

Variable	O	M	STDEV	T	P	Result
Leadership -> Behavior -> Green Performance	0.100	0.096	0.047	2.124	0.034	H6 accepted
Culture -> Behavior -> Green Performance	0.116	0.117	0.051	2.304	0.021	H7 accepted

The bootstrapping test results reveal employee green behavior acts as a significant mediating variable in the leadership and culture effect on green performance. This is shown by a T-statistic > 1.96 and a $p < 0.05$ for both mediation paths, indicating a positive significant indirect effect. For the leadership effect mediated through employee green behavior on green performance path, the results indicate a positive significant indirect effect ($\beta = 0.100$; $T = 2.124$; $p = 0.034$). This means that leadership can improve green performance through increased employee green behavior. Meanwhile, for the culture effect mediated through employee green behavior on green performance path, a positive significant indirect effect was also found ($\beta = 0.116$; $T = 2.304$; $p = 0.021$), indicating that an environmentally friendly culture can encourage green performance

through employee behavior. Overall, employee green behavior functions as a partial mediator in both relationships. This confirms that employee green behavior is a crucial mechanism that bridges the leadership and culture influence on green performance, while simultaneously strengthening the achievement of sustainable corporate environmental performance.

4.1.3. Moderation Effect

Testing results of the mediation effect are shown in Table 3 below.

Table 3. Moderation Effect

Variable	O	M	STDEV	T	P	Result
Innovation incentive x Behavior -> Green Performance	-0.030	-0.028	0.047	0.645	0.519	H7 rejected
Innovation incentive -> Green Performance	0.331	0.332	0.073	4.504	0.000	-

The test results for the interaction effect of innovation incentives $\times$ behavior $\rightarrow$ green performance show an insignificant effect ($\beta = -0.030$, $T = 0.645$, $p = 0.519 > 0.05$). Therefore, it is concluded that innovation incentives do not moderate the effect of behavior on green performance. Thus, although innovation incentives and behavior each exert a significant direct influence on green performance, the interaction between the two still does not yield a significant moderating effect. This implies that the innovation incentives' impact on green performance does not depend on the level (high or low) of behavior.

4.2. Discussion

The results show that green transformational leadership positively significantly affects employee green behavior. Leaders who provide environmental vision, inspiration, and role models have been shown to encourage employees to behave more environmentally friendly in their daily work activities. This finding aligns with research by (Ansari & Khan, 2024) and (Al-Swidi et al., 2021), which emphasized that green leadership plays a crucial role in shaping employee awareness and engagement in sustainability practices. Theoretically, this occurs through role modeling, where leaders serve as concrete examples internalized by employees. Furthermore, previous research has proved that besides leadership factors, green organizational culture also significantly determines employee performance in terms of their green behavior. A work environment that fosters sustainable collective behavior is achieved through values, norms, and beliefs regarding the importance of sustainability. Research by (Dong et al., 2023) demonstrates that green culture can play a significant role in enhancing sustainability values and fostering social capital to support this behavior. A positive normative force encourages workers to comply with and even exceed environmental performance standards within the organization.

On the other hand, contrary to its impact on behavior, green transformational leadership does not have an explicit positive effect on green performance. While leaders theoretically perform a strategic function in directing organizations toward sustainability (Purwanto et al., 2024), the outcomes of this analysis reveal that leaders do not have a substantial direct influence. This observation is consistent with (Yang et al., 2024), who found that leadership is usually weak in

influencing performance, where supporting variables, such as green innovation, strengthen its influence on others. Conversely, green organizational culture has a strong potential to shape employees' green performance. Supporting a culture with sustainability principles assists in achieving better performance of environmental practices throughout the organization. The finding is consistent with (Huynh et al., 2024), but results differ across contexts, as shown by (Purwanto et al., 2024). It implies that a green culture is effective only when it can be institutionalized in the organizational context and practiced consistently. It is also recognized as being an important predictor of employee green behavior; again, this has been shown to greatly affect green performance. The key actors in organizational operations are employees themselves, who are considered crucial for environmental programs. Research by (Al-Swidi et al., 2021) shows that basic measures in energy efficiency and waste management can have a huge cumulative effect on environmental performance. So, almost all sustainability relies on individual behavior.

This study also provides empirical evidence that green transformational leadership indirectly enhances employee green performance via employee green behavior. In other words, leadership influences performance through employee green behavior as mediated by employee green behavior. Ideas that translate into real, tangible influence on organizational performance-level actions. The same finding is true of the link between green organizational culture and green performance. Organizational culture has both a direct and an indirect effect through employee green behavior. Fostering environmentally themed work habits through strong values and norms supports the implementation of sustainability programs. Therefore, employee green behavior is one of the main mechanisms that strengthens this relationship. On the other hand, green innovation incentives do not moderate the relationship between employee green behavior and green performance. Incentives may have little promise or may not be a key contributor to stronger employee motivation, as the results of this study showed. This indicates that green behavior depends more on culture and leadership in influencing the effectiveness of green behavior on organizational environmental performance.

5. CONCLUSION

The results indicate that, in general, the conditions of green transformational leadership, green organizational culture, green innovation incentives, employee green behavior, and green performance at SBA are in the good category. The leadership and culture also have been shown to have a positive influence on employee green behavior, meaning that the stronger the implementation of environmentally-based values and leadership, the higher the environmentally friendly behavior exhibited by employees. Furthermore, green organizational culture and employee green behavior have been shown to influence the company's green performance. However, green transformational leadership does not have a direct influence on green performance. But transformational leadership still has an indirect influence through employee green behavior, acting as a mediating variable. The same is true for green organizational culture, which influences green performance through employee behavior.

On the other hand, green innovation incentives have not been shown to act as a moderating variable in the relationship between employee green behavior and green performance. This indicates that the existence of incentives has not been able to strengthen the influence of green behavior on a company's environmental performance. Overall, employee green behavior in this study is a key factor in bridging and strengthening the relationship between organizational green

variables (antecedent) and green performance. Several recommendations based on the results are provided as follows.

1. Green performance variable received the lowest average score of 3.94 for the indicator "the company has reduced waste in all its operational processes." although still in the good category, this indicates the need to improve the company's waste management efforts. Therefore, the company is advised to improve its waste management program, implement a regular waste monitoring system, and provide employee training on waste reduction in daily operations to optimize green performance.
2. Furthermore, green performance must be undertaken by integrating green technology in companies. But while several companies have launched waste reduction initiatives, they should expand and harness digital document control systems, energy-saving processes, and more recent waste treatment technologies. The company provides technology that enables organizations to achieve not just lower-impact green performance, but also improves overall efficiency for sustainable development.
3. Employee green behavior variable received the lowest average score of 3.86 for the indicator "i propose ideas to management or the team to reduce waste in company operations." this result indicates that employees are less active in contributing ideas or innovations related to the environment. The company is advised to encourage a participatory culture, provide a dedicated forum for submitting ideas, and provide rewards or incentives for employees who contribute to waste reduction to further improve employee green behavior.
4. Improving employee green behavior within organizations also requires sustained environmental awareness through continuous internal programs. For example, retailers can run regular environmental programs such as energy-saving campaigns, reduction in the use of plastics, or recycling actions. Additionally, a new employee orientation that incorporates environmental values is beneficial when staff have the knowledge of performing sustainable practices immediately.
5. Leadership variable received the lowest average score of 3.81 for the indicator "my supervisor acts with consideration for the environmental beliefs of employees." this suggests that there is still more work to do for leaders when it comes to aligning employees' environmental views in decision-making. The recommendations include: foster two-way communication between superiors and subordinates; solicit participation of employees in environmental program-planning, training for leaders on disclosing motives as inclusive leadership based on employee environmental aspirations.
6. Culture scored the lowest at 3.74 for the indicator: "the company has a clear policy statement that addresses environmental awareness in all business aspects." while still placed in the good bracket, this suggests that the company must do better at providing information on its environmental policies. Thus, companies are recommended to design and communicate environmental policies in a clearer way throughout all departments, to implement them consistently and where necessary, involve employees in understanding how to execute the policy goals so that greener behavior is promoted as part of an organizational culture.
7. Green innovation incentive had a direct positive impact on green performance with a high mean value of 5.15 but was not significant as an interaction with the employee green behavior moderator variable. This implies that green innovation incentives are not yet able to effectively motivate employees to modify their performance to accommodate environmentally

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- friendly behaviors. So, firms are suggested to develop more specific and heterogeneous incentive programs, such as directly tying the reward to tangible contributions in green practices, providing recognition of innovative ideas, and specifying the goals of incentives; other than directly or indirectly linking them with incentives, this is an important approach. This way, it can be specified so that it will not only lead to satisfaction but also highlight their influence on green performance.
8. Integrating environmental performance indicators into the company's evaluation system contributes to developing a sustainable culture in the company. This means that every department or individual has goals related to one of the environmental parameters, such as reducing waste, improving energy efficiency, or green innovation. Environmental awareness only becomes a responsibility rather than mere talk when it is regularly measured and evaluated.
 9. Employee green behavior had equally strong average values of green performance (and thus did not moderate significantly). This implies green innovation incentives might not have incentivized employees to adapt their green actions strategically or intuitively in a way that improves performance. This means that firms should create more tailored and diversified incentive mechanisms by linking rewards to direct contributions in green activities, recognizing innovation, and clearly stating the objectives of incentives to ensure optimal functioning of these elements and maximize their impact on green performance.
 10. Concrete role models from green behavior implementation are required for transformational leadership. Leadership is not only about pointing in the right direction. Leaders must also set an example with specific actions such as conserving energy, reducing paper use, and explicit backing for sustainability programs. Employees will be encouraged to live by these values with committed role models and make the value system part of their daily work life.

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