



Volume and Issues Obtainable at the Department of Tourism and Hospitality Management-  
The Islamia University of Bahawalpur, Bahawalpur, Pakistan 63100.

**Journal of Tourism, Hospitality, and Services Industries Research**

ISSN: 2958-5570 ; ISSN (E): 2958-5589

Volume 4, No.1, June 2024

Journal homepage: <https://journals.iub.edu.pk/index.php/jthsir>

DOI: 10.52461/jths.v4i01.3011

## Green Leaders, Green Performance: Mediating Role of Pro-Environmental Behavior

Hooria Anis, *Foundation University Islamabad, Pakistan*

Hina Fayyaz, *Foundation University Islamabad, Pakistan*

### ARTICLE DETAILS ABSTRACT

#### History

Received: May, 2024

Online: Dec, 2024

#### Keywords

*Green Transformational Leadership, Environmental Performance, Pro-Environmental Behavior*

The study aims to suggest the relationship between green transformational leadership and environmental Performance. Moreover, propositioning the mediating role of Pro-environmental behavior. The conceptual framework developed in the present study is supported by the Stimulus Organism Response theory. The propositions are made from the perspective of the tourism & hospitality sector of Pakistan. The research highlights the theoretical and practical implications furthermore limitations and future research directions are also underlined.



© 2024 The authors, under a Creative Commons Attribution Non-Commercial 4.0

\*Corresponding author: [hinafayyaz1@fui.edu.pk](mailto:hinafayyaz1@fui.edu.pk)

### Introduction

Currently, environmental problems like pollution, global warming, and biodiversity loss are worsening and pose a major threat to the environment, worsening the ecosystem's problems to the point that they could lead to an absolute environmental disaster (Ozturk, 2021). This whole scenario has made environmental issues the most prominent problem to be tackled. However, developing countries like Pakistan suffer extravagantly from these issues, with cities like Lahore experiencing severe air pollution and known to be the second most polluted city globally. (IQAir, 2024) Under the harmful effects of environmental pollution, firms are required to take necessary actions and implement policies for environmental protection. Investing in renewable energy sources, promoting sustainable practices, and fostering environmental awareness can pave the way for a greener future in developing economies. Practitioners for instance Telfer and Sharples (n.d) highlighted that tourism for developing economies is an attractive development option. Moreover, according to a report by the International Monetary Fund (IMF) (Tourism, 2023), tourism has been identified as a key driver of economic recovery and growth.

However, tourism's reliance on transportation, energy-intensive accommodations, and emission-generating activities creates a significant carbon footprint. This footprint contributes to global

warming, which disrupts ecosystems, raises sea levels, and creates extreme weather crises. (Chan, 2021) Indicates that the tourism and hospitality sector have one of the highest carbon footprints worldwide. Reducing the carbon footprint is now the utmost priority of firms. As tourism is identified as a vital economic driver simply shutting down this industry might not be the solution. Instead, the focus must be on finding a way for tourism to thrive while minimizing its environmental impact. Consequently, scholars have argued in this regard and suggested that firms need to develop and apply green practices (Awan, 2019; Mittal, 2016)

Striking a balance between tourism's economic benefits and environmental sustainability is crucial not just for the environment, but also for a firm's image and long-term stakeholder value. The tourism and hospitality sector, despite its economic importance, contributes significantly to greenhouse gas emissions. Studies show that 5% to 8% of global emissions come from this sector, with hotels being a major contributor (Kim, 2020). Employee behavior plays a vital role in promoting an environmental performance by encouraging environmentally friendly practices (pro-environmental behavior or PEB) among staff is essential for hotels to achieve environmental performance. However, maintaining PEB can be challenging due to demanding work hours, difficult conditions, and occasionally unruly customers (Phillip, 2021).

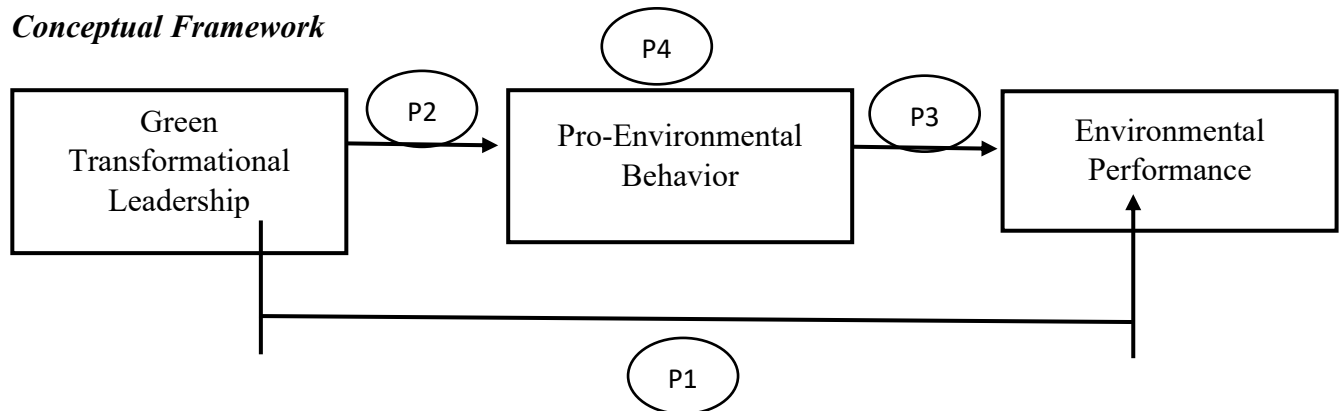
In the context of organizations, it is critically important to motivate employees towards pro-environmental behavior and environmental performance. Thus, the question arises of how it can be done. The answer is hidden in the identification of factors that lead to environmental factors. The extant literature highlights green transformational leadership as one of the predictors of environmental performance (Hien, 2023).

Green Transformational leadership is a new approach that motivates employees to embrace environmentally friendly practices by providing direction, encouragement, and autonomy. (Yang, 2019). Green Transformational Leadership through innovative practices encapsulates employees' potential to suggest new ways to operate in an environmentally friendly manner leading to service innovations, promoting eco-friendly behavior, defending cultural identities, providing memorable experiences for tourists, and increasing value for tourism and the hospitality industry (Mittal, 2016). Research suggests a positive correlation between green leadership and employee PEB in the hospitality industry (Yang, 2019) however, further studies are needed to solidify this connection.

### **Literature Review and Proposition Development:**

#### *Stimulus Organism Response Theory:*

Stimulus Organism Response (SOR) theory proposed by Woodworth (2023) has become one of the most commonly used frameworks that describe input, process and outputs in a single model. As outlined by (Shijie Song, 2020) It describes the relationship between external stimuli (S), the internal state of an organism (O), and the resulting behavioral response (R). This model is fundamental in understanding why people behave a certain way. The internal processing of external stimuli influences emotions and ultimately shapes our actions. Researchers have widely embraced and used the stimulus-organism-response model (S-O-R) to analyze behavior in the context of online hotel booking behavior. (Emir, 2016) . By considering both external stimuli and the internal state of emotions, the S-O-R model sheds light on why we approach or avoid situations. This model highlights the essential role of emotions in shaping our interpretations and guiding our behavior.

**Conceptual Framework**

By designing positive environmental prompts (stimuli) in the workplace, organizations can encourage automatic environmentally friendly responses (habits) in employees (Olfat, 2024). S-O-R theory forms the basis of many training programs. Providing clear instructions and consistent feedback on environmentally friendly practices can strengthen those behaviors and lead to improved environmental performance.

**Green Transformational Leadership and Environmental Performance**

Green Transformational leadership positively influences organizational performance. Moreover, Green transformational leadership," a specific leadership style mainly focused on environmental sustainability suggests transformational leaders to demonstrably boost employee behavior, engagement, and additionally environmental performance (Julian, 2009; Ramus,2000) Green transformational leadership, with its focus on sustainability, has been linked to environmental performance through the adoption of increased green working practices (Serdar, 2020).

Han and Yoon (2015) explore how green initiatives in hotels influence customers' internal evaluations and emotions, leading to environmentally responsible behaviors. By implementing the SOR framework, the study shows that green practices, such as energy conservation and recycling programs, positively impact customers' attitudes and intentions towards sustainable behavior. The findings highlight how green leadership influences customer attitudes and leads to environmentally responsible behaviors, ultimately enhancing environmental performance in the hospitality sector.

**Proposition 1:** *Green transformational Leadership has a positive effect on Environmental Performance*

**Green Transformational Leadership and Pro-environmental Behavior**

Green Transformational Leadership is an approach to empower employees with direction and freedom to pursue environmentally friendly initiatives (Yang, 2019). Leaders however take ownership of their organization's environmental challenges and recognize it as a core responsibility (Graves, 2019). These leaders consider all aspects of economic, social, and environmental sustainability (Lu, 2022). Green Leaders through their clear communication can help reduce employee stress (Khan, 2022). However, in developing economies, budget constraints often force hospitality businesses to prioritize financial performance. This can create tension for employees, as some environmentally friendly initiatives (PEBs) might seem expensive. However, this holistic approach can reduce employee confusion about which performance metric to prioritize, especially in budget-conscious hospitality businesses. (Carbone, 2006). A leader's strong environmental commitment can inspire employees to take an interest in pro-environmental behaviors (PEBs)

(Boukis, 2020). Studies show leaders with a clear environmental focus can significantly influence employees' ecological values and actions (Khan,2022).

GTL fosters a culture of environmental responsibility within the hospitality sector by taking ownership, promoting sustainability, and demonstrating commitment, leaders can therefore inspire employees to embrace PEB. In contrast to SOR theory, a research Agenda" by Steg (2009) explains how environmental stimuli impact individuals' internal processes, including their attitudes and values towards sustainability. The research proposed a general framework, comprising: (1) identification of the behavior to be changed, (2) examination of the main factors underlying this behavior, (3) design and application of interventions to change behavior to reduce environmental impact, and (4) evaluation of the effects of interventions.

***Proposition 2: Green transformational Leadership positively influences employee Pro-Environmental Behavior***

### **Pro-Environmental Behavior and Environmental Performance**

Over the past few decades, there have been numerous concerns raised by employees' PEB, which is defined as their "willingness to engage in pro-environmental activities" (Scherbaum, 2008). Studies have examined workplace spirituality, intrinsic motivation, environmental passion, leadership and the organization's CSR strategy as potential factors influencing employees' PEB (Shah, 2021).

Research shows that employees' behavior has a big influence on the company, but not much research focuses on employees' equity. (Shah, 2021). It has been discovered that employee participation in PEB can result in a "win-win" scenario, not only does it safeguard the environment but also improves environmental performance, leader effectiveness, and employee job satisfaction (Robertson & Barling, 2013).

The existing literature provides a comprehensive review demonstrating that environmental stimuli, when effectively applied, can shift internal attitudes and values towards sustainability, resulting in positive environmental behaviors, researchers have highlighted the importance of implementing effective green strategies to foster pro-environmental actions by linking with SOR theory. (Linda Steg, 2009). It becomes a significant pre-condition that implementing effective green leadership strategies aids in fostering pro-environmental behavior in the hospitality sector which ultimately paves the way for Environmental Performance.

***Proposition 3: Employees Pro-Environmental Behavior Positively effects Environmental Performance***

### **The Mediating Role of Pro-Environmental Behavior:**

Green Transformational Leadership initiates change in organizational culture and practices, encouraging sustainable behaviors. Pro-Environmental Behavior, however, is the internal response of individuals to these stimuli. Employees adopt and internalize sustainable practices due to the influence of green leadership ultimately environmental Performance improves as a result of the cumulative pro-environmental behaviors practiced within the organization. Zhang (2020) found that green transformational leadership significantly influences employee green behavior, which in turn enhances environmental performance. The present study highlights the mediating role of pro-

environmental behavior and the leader's focus on sustainability translates into concrete environmental outcomes through the actions of employees.

The Stimulus Organism Response theory, on the other hand, explains how our internal processing of external stimuli affects our emotions, which in turn impacts our behavior, because of their position, status, and authority, organizational leaders are in a prime position to act as role models (Brown, 2005). By creating positive environmental cues in the workplace, companies can incentivize Pro-Environmental Behavior from their workforce. Support from green leaders can increase workers' PEB in attaining environmental performance (Cheng, 2022). Thus, a leader who supports environment-friendly behavior would positively contribute to the overall corporate green development.

***Proposition 4: Pro-Environmental Behavior mediates the relationship between Green Transformational Leadership and Environmental Performance***

### **Discussions:**

Previous research underlines that the Pro-Environmental behavior of employees positively influences the environmental performance of firms (Ahmed, 2022). Thus, it can be deduced that propositions developed in this study if tested statistically may yield similar results. Moreover, green transformational leadership plays a pivotal role in advancing environmental performance within the hospitality sector by fostering a culture of sustainability and innovation.

Green transformational leadership not only enhances operational efficiency and cost-saving measures but also attracts environmentally conscious guests, boosts reputation, and ensures compliance with regulatory standards. By integrating environmental Performance as their core value, hotels led by transformational leaders contribute positively to both their bottom line and the broader ecosystem, paving the way for a more sustainable future in the hospitality sector. The research conducted by Reyes-Santiago (2019) demonstrated that a hotel's environmental performance can be positively predicted by its proactive environmental policies. Furthermore, (Tan, 2017) suggested that an improved environmental conservation strategy enhances an organization's entire financial performance in addition to its environmental performance. Thus, it can be deduced that green leadership leads to pro-environmental behavior of employees which in turn leads to the environmental performance of the hospitality sector.

Moreover, the above discussion can also be extended from the perspective of stimulus organism response theory. Given that this theory explains to leaders to apply green leadership strategies in shaping organizational culture and practices towards sustainability. Leaders within hotels and resorts initiate transformative changes by implementing eco-friendly policies and promoting sustainable practices such as energy efficiency measures and waste reduction strategies. These initiatives serve as a stimulus that inspires employees to adopt Pro-Environmental Behavior (PEB), encompassing actions like recycling efforts, water conservation, and support for green initiatives. As employees internalize these values and behaviors, they contribute to improved Environmental Performance within their organizations. This encompasses measurable outcomes such as reduced environmental footprint, enhanced resource efficiency, and heightened guest satisfaction due to the alignment with eco-conscious values.

### **Theoretical and Practical Implications:**



The current study critically advances the available literature on green leadership, employee behavior, and environmental conservation strategies. Initially, the present study differs from the current pool of research about PEB. The subject of how PEB can guide a business toward improved environmental performance has not been addressed in a large number of previous studies. Instead, PEB has been viewed as an outcome variable. (Asante, 2024). As a result, the current study adds to the body of knowledge on PEB from an environmental performance perspective.

A second key theoretical conclusion of this study is a function of altruistic ideals in inducing environmental performance via GL and PEB. Though studies have highlighted how green leadership leads to environmental performance and pro-environmental behavior (Asante, 2024; Van, 2023) still, how they jointly achieve environmental performance through the current perspective in the domain of environmental management has not been thoroughly investigated.

Another major theoretical implication of the current work is the consideration of the service industry, particularly the hotel sector in Pakistan. In this regard, the majority of previous research was conducted in an industrial context, from the perspective of manufacturing industries (Neppach, 2017; Martinez, 2018). However, the current study contributes to the literature by emphasizing the role of the hospitality sector in improving the environmental footprint of a country.

Simultaneously, the study contributes to the hotel industry by providing several practical implications. In this regard, the current study's propositions can be used by hotel policymakers to understand how green leadership can influence not only employee environmental behavior but also a hotel's overall environmental performance.

The propositions of the current study similarly emphasize the importance of altruistic values for improving the environment. In light of this, it is advised that hotel management take this into account when hiring and choosing employees. Furthermore, for the existing workforce to become involved in various environmental causes at work, the management must host a variety of seminars and workshops where workers can learn about environmental values. Finally, if hotel businesses hope to continue operating in the future, their adverse impacts on the environment must be reduced.

### **Limitations and Future Research Directions:**

Although the current work has significant theoretical and practical implications, it has its limitations. These limitations, however, provide additional possibilities for later studies. Accordingly, the first constraint has to do with the statistical analysis, as the research only gives propositions. Therefore, to achieve better aspects, it would be ideal for future researchers to take into account the statistical analysis of the above-given propositions. Second, the study solely documents environmental performance and green leadership in terms of perception. While many studies have found relevance in utilizing such perceptual measures, future research may produce more realistic results if these variables are evaluated rigorously.

### **Conclusion:**

With growing environmental concerns all sectors are recognizing the significance of sustainability, given that environmental concerns have taken centre stage in today's debates. Due to the hotel industry's excessive carbon footprint, it is becoming increasingly important to reconsider sustainable practices to achieve Environmental Performance in the hospitality sector. The current study contributes to sustainability by emphasizing the value of Green

Transformational Leadership (GTL) in enhancing a hotel's environmental performance through its workforce. Since this industry employs millions of people nationwide, encouraging environmentally conscious conduct within its workforce is crucial to achieving positive environmental outcomes. In this sense, an employee's behavior is primarily influenced by organizational factors and personal ideals (altruism).

In conclusion, Green Transformational Leadership in the hospitality sector is instrumental in fostering a culture of sustainability and driving positive environmental outcomes. By initiating and supporting eco-friendly practices, leaders inspire employees to adopt proactive environmental behaviors. This collective effort not only enhances Environmental Performance within organizations through reduced resource consumption and waste generation but also strengthens their competitive edge by meeting the expectations of environmentally conscious guests. Embracing Green Leadership not only supports operational efficiency but also contributes significantly to global sustainability goals, making it a cornerstone of responsible business practices in the hospitality industry.

The study's findings can be used to examine how the hotel industry is implementing sustainable practices. Nonetheless, the present investigation is accompanied by certain constraints. The study used data from the hotel sector, integrating PEB, EVP, and introducing PEB's mediating role. Future research, though, might take into account additional mediating factors. The study model can also be used to validate findings in other sectors. The fact that the study only included a sample of data from two places in the nation raises doubts about the study's adaptability. However, to increase adaptability, other studies might be taken into account in future research.

## References

- Abdul Karim Khan, M. K. (June 2022). COVID-19-related job insecurity and employees' behavioral outcomes: the mediating role of emotional exhaustion and moderating role of symmetrical internal communication. *International Journal of Contemporary Hospitality Management*.
- Asante, K. (2024). Hotels' green leadership and employee pro-environmental behaviour, the role of value congruence and moral consciousness: evidence from symmetrical and asymmetrical approaches. *Journal of Sustainable Tourism*, 1370-1391.
- Assistance, P. (2023, May 13). *stimulus-organism-model (S-O-R) model*. Retrieved from PhD Assistance: <https://www.phdassistance.com/blog/stimulus-organism-response-sor-model/>
- Awan, S. K. (2019). Creativity enables sustainable development: Supplier engagement as a boundary condition for the positive effect on green innovation. *Journal of cleaner production*, 172–185.
- Bilal Ahmed, H. X.-U.-D.-U.-D. (2022). Fostering the Environmental Performance of Hotels in Pakistan: A Moderated Mediation Approach From the Perspective of Corporate Social Responsibility. *Organizational Psychology*.
- Boukis, A. (2020, April). *Effects of Customer incivility on frontline employees and the moderating role of supervisor leadership style*. Retrieved from ScienceDirect: <https://doi.org/10.1016/j.tourman.2019.103997>
- Brown, M. E. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organ. Behav. Hum. Decis. Process.* 97., 117–134.

- CA Ramus, U. S. (2000). The roles of supervisory support behaviors and environmental policy in employee “eco-initiatives” at leading-edge European companies. *Academy of Management Journal*, 43(4), 605–626.
- Carbone, M. (2006). Sustainable Tourism in Developing Countries: Poverty Alleviation, Participatory Planning, and Ethical Issues. *The European Journal of Development Research*, 559-565.
- Chan, E. (2021). Why do hotels find reducing their carbon footprint difficult? *international Journal of Contemporary Hospitality Management*, 1646–1667.
- David J. Telfer, R. S. (n.d). *Tourism and Development in the developing world*. London and Newyork: Taylor and Francis.
- Emir, A. H. (2016). Factors influencing online hotel booking intention: A conceptual framework from stimulus-organism-response perspective. *International Academic Research Journal of Business and Technology*, 2(2), 129–134.
- Heesup Han, H. J. (2015). Hotel customers’ environmentally responsible behavioral intention: Impact of key constructs on decision in green consumerism. *International Journal Of Hospitality Management*, 22-23.
- Hien Vo Van, T. T. (2023, August). *Green Transformational Leadership and Green Mindfulness as Contributors to Green Innovation and Environmental Performance: Evidence From Manufacturing Firms in Vietnam*. Retrieved from Sage: <https://doi.org/10.1177/21582440231193919>
- IQAir. (2024). *Live most polluted major city ranking*. Retrieved from IQAir: <https://www.iqair.com/world-air-quality-ranking>
- Julian Barling, K. E. (2009). Predicting workplace aggression and violence. *Annual review of psychology*, 60, , 671–692.
- Kim, M. (August 2020). A systematic literature review of the personal value orientation construct in hospitality and tourism literature. *International Journal of Hospitality Management*, 89.
- Laura M. Graves, J. S. ( 2019, , Jnauary). *Employee pro-environmental behavior in Russia: The roles of top management commitment, managerial leadership, and employee motives*. Retrieved from ScienceDirect: <https://doi.org/10.1016/j.resconrec.2018.09.007>
- Linda Steg, C. V. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, 309-317.
- Lu, H. ( 2022, March 8). *Does top management team responsible leadership help employees go green? The role of green human resource management and environmental felt-responsibility*. Retrieved from Wiley: <https://doi.org/10.1002/csr.2239>
- M del Rosario Reyes-Santiago, P. S.-M.-P. (2019). The influence of environmental dynamic capabilities on organizational and environmental performance of hotels: Evidence from Mexico. *Journal of cleaner production*, 414-423.
- Mittal, D. (2016). Effect of green transformational leadership on green creativity: A study of tourist hotels. *Tourism Management*, 57,, 118–127.
- Olfat, M. (April 2024). The influence of employees’ work-related use of social media on their service innovation behavior: the SOR paradigm. *Digital transformation and Society*.
- Ozturk, I. (October, 2021, October 6). *Investigating the nexus between CO2 emissions, economic growth, energy consumption and pilgrimage tourism in Saudi Arabia*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/full/10.1080/1331677X.2021.1985577>



- Phillip M. Jolly, S. E. (16 December 2021). Family-supportive supervisor behaviors and employee turnover intention in the foodservice industry: does gender matter? *International Journal of Contemporary Hospitality Management*, 0959-6119.
- Sara Martinez, M. M. (2018). Organization environmental footprint applying a multi-regional input-output analysis: A case study of a wood parquet company in Spain. *Science of The Total Environment*, 7-14.
- Scherbaum, C. A. (2008). Exploring individual-level factors related to employee energy-conservation behaviors at work 1. *J. Appl. Soc. Psychol.* Retrieved from doi: 10.1111/j.1559-1816.2007.00328.
- Serdar Çop, V. O. (2020, October 21). *Achieving environmental sustainability through green transformational leadership policy: Can green team resilience help?* Retrieved from Wiley: <https://doi.org/10.1002/bse.2646>
- Shah, S. H.-G. (2021). Perceived corporate social responsibility and pro-environmental behaviors: the role of organizational identification and coworker pro-environmental advocacy. *Corporate Soc. Responsibility Environmental Management* 28., 366–377. Retrieved from 10.1002/csr.2054
- Shijie Song, X. Y. (2020). *What motivates Chinese consumers to avoid information about the COVID-19 pandemic?: The perspective of the stimulus-organism-response model.* Retrieved from <https://doi.org/10.1016/j.ipm.2020.102407>
- Simone Neppach, K. R. (2017). Organizational Environmental Footprint in German Construction. *Journal of Cleaner Production* 142, 78-86.
- Siow-Hooi Tan, M. S.-K.-W. (2017). The impact of the dimensions of environmental performance on firm performance in travel and tourism industry. *Journal of Environmental Management*, 603-611.
- Tourism, U. (2023, November 10). *Tourism's Importance for Growth Highlighted in World Economic Outlook Report.* Retrieved from UN Tourism: <https://www.unwto.org/news/tourism-s-importance-for-growth-highlighted-in-world-economic-outlook-report#:~:text=Tourism%20has%20again%20been%20identified%20as%20a%20key,new%20report%20by%20the%20International%20Monetary%20Fund%20%28IMF%29>.
- Yang, W. (2019). Who can improve the environment—Me or the powerful others? *Resource, Conservation and Recycling*, 55-67.
- Yang, X. (2019). Who can improve the environment? *Resources, Conservation and Recycling*, 55-67.
- Zhang, & L. (2020). The Impact of Green Transformational Leadership on Employee Green Behavior: The Role of Green Psychological Climate and the Moderating Role of Individual Green Values. *Sustainability*, 12(18).
- Zujie Cheng, B. W. (2022, November 8). *The impact of employees' pro-environmental behaviors on corporate green innovation performance: The mediating effect of green organizational identity.* Retrieved from Frontiers: <https://doi.org/10.3389/fpsyg.2022.984856>