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Impact of Green Transformational Leadership on Corporate Environmental Performance with the Mediating Role of Dynamic Capabilities

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ABSTRACT

This research examines the impact of Green Transformational Leadership (GTL) on Corporate Environmental Performance (CEP) with the mediating role of Dynamic Capabilities (DC). Modern environmental consciousness and sustainable practices force businesses to develop eco-friendly approaches aligned with ecological sustainability. This research evaluates the influence GTL has on CEP while maintaining that Dynamic Capabilities serve as an essential mediator between these variables. The research bases its findings on the Resource-Based View and the Dynamic Capabilities Theory to study how leadership behaviour focused on environmental consciousness activates organisational transformation and innovation for better eco-friendly results. GTL is an ecological leadership framework that inspires staff members to adopt green practices, create joint environmental visions, and stimulate sustainable development. The ability of a firm to adapt its internal and external competencies through integration, building, and reconfiguration functions is an essential mechanism which GTL uses to impact CEP. In this study, the convenience sampling technique is used. The population selected for this study is the Manufacturing SMES employees in the Pakistan district. Employees are the ones who are directly linked to the customers. As the population is very large and unknown, the sample size would be 300 using sample size estimation. The unit of analysis is the employees working in automobile companies in South Punjab. Descriptive statistics, correlation analysis, reliability and validity were used in the data analysis, which was done using SPSS and AMOS. GTL leads to substantial CEP improvement in organisations through their dynamic capabilities, which function as partial mediators according to predicted findings. This research helps expand the knowledge on sustainable leadership and environmental management through a quantitative assessment of how leadership impacts ecological performance by developing internal abilities. Organizations and policymakers can use these findings to develop strategies to use transformational leadership for sustainable innovation and environmental responsibility.

Introduction

Green Transformational Leadership is a leadership approach that prioritizes sustainability, environmental accountability, and social awareness. Leaders that embrace this strategy strive to effect constructive transformations not only within their organizations but also in the wider sphere of environmental and social concerns (Balabantaray, 2023). Green leaders foster a culture of ecological consciousness inside the organization. Transformational leaders foster and promote new thinking and problem-solving (Shehzad, Zhang, Latif, Jamil, & Waseel, 2023). They ensure that the corporation not only adheres to environmental standards but also proactively tackles bigger environmental and social concerns. Leaders interact with diverse stakeholders, like as consumers, suppliers, and the community, to establish connections founded on openness, ethical obligations, and ecological guardianship (Waseel et al., 2023). Transformational leaders actively promote the implementation of environmentally-friendly technologies and practices (Weder, 2022). Green leaders promote the cultivation of flexibility and adaptability in order to effectively respond to evolving environmental legislation and public expectations (Woo & Kang, 2021). Green leaders integrate sustainability into their long-term strategic planning. This entails evaluating the ecological and societal consequences of business choices and guaranteeing that the organization maintains its ability to withstand forthcoming obstacles (Ansell, Sørensen, & Torfing, 2023). Transformational leaders promote resource efficiency, eliminating waste and optimizing resource utilization to minimize the ecological imprint of the firm.

Corporate Environmental Performance (CEP) pertains to the degree to which a firm effectively oversees and enhances its environmental footprint. It encompasses the evaluation of a company's actions, policies, and practices pertaining to environmental sustainability (Barauskaite & Streimikiene, 2021; Ma et al., 2022). CEP measurement encompasses several elements such as resource utilization, emissions, waste handling, and general dedication to environmental accountability. Several firms implement ISO 14001, a global standard for Environmental Management Systems, to formalize and enhance their environmental management processes (Massaro, Secinaro, Dal Mas, Brescia, & Calandra, 2021). Efficient environmental management entails the formulation and execution of policies, protocols, and methods to recognize, oversee, and alleviate environmental effects. Companies are progressively quantifying and disclosing their greenhouse gas emissions. This encompasses emissions stemming from operational activities, supply chains, and other related undertakings. Companies may give priority to acquiring goods and services from suppliers that comply with environmental standards and ethical practices. Companies convey their environmental performance through sustainability reports, encompassing essential measurements, objectives, and undertakings pertaining to environmental impact (Coluccia, Valente, Fusco, De Leo, & Porrini, 2020; Sibt e Ali et al., 2024). Interacting with stakeholders, like as consumers, investors, and communities, is crucial for ensuring openness and responsibility in environmental affairs. Complying with environmental rules and regulations is a crucial element of company environmental performance (Negri, Cagno, Colicchia, & Sarkis, 2021). Companies must guarantee that their operations comply with or beyond legal obligations.

Green Transformational Leaders communicate a clear and compelling vision for a future that prioritizes sustainability, and establish ambitious environmental objectives for their organizations. These objectives may encompass the reduction of carbon emissions, the minimization of waste, or the use of renewable energy sources (Woon et al., 2023). Transformational leaders inspire and involve employees by developing a feeling of purpose and shared ideals on environmental responsibility. This cultural transformation results in a staff that is dedicated to implementing sustainable practices and actively contributes to Corporate Environmental Performance (CEP)

(Hannan et al., 2020). Transformational leaders foster a culture that promotes the development and implementation of environmentally sustainable technology and processes. This may entail allocating resources towards research and development efforts aimed at creating sustainable products, processes, and services (Hoang & Nguyen, 2021). Green leaders guarantee the incorporation of environmental factors into everyday activities by establishing and enforcing strong Environmental Management Systems (EMS). This facilitates the identification, surveillance, and administration of environmental impacts. Transformational leaders demonstrate a strong dedication to sustainability across the whole supply chain (Alkadash, Almaamari, Mohsen Al-Absy, & Raju, 2020).

Dynamic capabilities pertain to a company's capacity to effectively incorporate, construct, and adapt both internal and external skills and resources in order to effectively respond to swiftly evolving circumstances. These talents are essential for organizations to adjust, create, and prosper in ever-changing and unpredictable business environments (Toubes, Araújo-Vila, & de Araújo, 2020). David J. Teece and his colleagues established the concept of dynamic capabilities in the late 1990s as an expansion of the resource-based view of the organization. Environmental scanning is the capacity to recognize and comprehend alterations, prospects, and risks in the surrounding circumstances (Carter et al., 2021). This entails the ongoing surveillance of industry trends, technology improvements, and other pertinent elements. Dynamic capabilities refer to the ability to promptly and resolutely take advantage of identified opportunities. Dynamic capabilities priorities a robust focus on learning within the organization (Carter et al., 2021). This entails a dedication to ongoing education, experimenting, and the attainment of fresh information and abilities. The capacity to incorporate and merge novel information into pre-existing organizational knowledge systems is a crucial facet of dynamic capabilities (Arokodare & Asikhia, 2020).

Green Transformational Leadership has a positive impact on the organizational culture, beliefs, and practices associated with environmental sustainability. GTL establishes ambitious objectives and motivates staff to actively participate in promoting environmental accountability and sustainable initiatives (Suliman et al., 2023). Green Transformational Leadership has a direct role in enhancing Corporate Environmental Performance by fostering a culture of sustainability, establishing environmental objectives, and advocating for responsible practices. Organizations that possess a robust Corporate Environmental Performance (CEP) due to Green Technology Leadership (GTL) are more likely to have a favorable reputation, attract customers who are environmentally sensitive, and establish trust with stakeholders (Suliman et al., 2023). Dynamic Capabilities refer to the capacity to effectively adjust to evolving conditions, restructure resources, and react to alterations in the environment. DC prioritizes a focus on learning, enabling organizations to gain new knowledge and skills essential for tackling environmental concerns (Khan & Urooj, 2023). Dynamic Capabilities serve as an intermediary by improving the organization's ability to adapt to the environmental initiatives established by Green Transformational Leadership. Green Transformational Leadership fosters creativity, whereas Dynamic Capabilities facilitate the adoption of creative solutions and technologies for environmental sustainability (Khan & Urooj, 2023). Green Transformational Leadership has a beneficial impact on Corporate Environmental Performance, and Dynamic Capabilities play an important role in turning leadership initiatives into measurable environmental results. The incorporation of these ideas contributes to the establishment of a sustainable organizational structure that is flexible, inventive, and capable of tackling the difficulties presented by environmental concerns.

Research Questions

There are following research question in this study:

1. Does there is significant impact of green transformational leadership on corporate environmental performance?
2. Is there significant relationship between green transformational leadership and dynamic capabilities?
3. Is there significant relationship between dynamic capabilities and corporate environmental performance?
4. Do dynamic capabilities mediate the significant relationship between green transformational leadership and corporate environmental performance?

Literature Review

Corporate Environmental Performance

As businesses realize more and more how crucial it is to incorporate environmental factors into their business plans, corporate environmental performance, or CEP, has attracted a lot of interest from both academic and corporate circles. The purpose of this review of the literature is to present a thorough summary of the major ideas, conceptual models, and empirical research pertaining to CEP (Elsayih, Datt, & Tang, 2021). Through a comprehensive analysis of many academic publications, books, and papers, this review aims to enhance comprehension of the variables affecting CEP and its consequences for enterprises and the ecosystem. Numerous theoretical frameworks have been put forth in an attempt to clarify the drivers and incentives behind corporate environmental performance (Noja, Cristea, Jurcut, Buglea, & Lala Popa, 2020). According to the stakeholder theory, an organization's environmental behaviors are shaped by a network of stakeholders, which includes consumers, investors, employees, and the community. Organizations follow society norms and expectations, according to institutional theory, whereas resource-based view places more emphasis on using environmental resources strategically to gain competitive advantage (Farrukh, Mathrani, & Sajjad, 2022). Organizations adopt environmentally responsible strategies for a variety of reasons. Crucial roles are played by market forces, stakeholder demands, and regulatory pressures. Businesses are legally obligated to implement environmentally friendly practices due to government legislation and policies. Furthermore, buyers are pressuring businesses to act responsibly as a result of their growing consideration of environmental performance in their purchase decisions. Adoption of sustainable practices is also attributed to greater financial performance and competitive advantages (Farrukh et al., 2022).

An overview of the main theoretical frameworks, motivations, obstacles, techniques for measuring, and effect studies pertaining to CEP is given in this review of the literature. Ongoing research is crucial to improving current ideas, addressing new issues, and directing the actual application of strategies as firms negotiate the intricacies of incorporating environmental factors into their operations.

Green Transformational Leadership

The Green Transformational Leadership (GTL) approach is a leadership methodology that places emphasis on environmental responsibility, sustainability, and integrating eco-friendly practices into a company's operations and culture. The body of research on Green Transformational Leadership has grown to explore the characteristics, outcomes, and challenges associated with this unique leadership approach, as businesses increasingly recognize the importance of environmental

responsibility (Begum, Ashfaq, Xia, & Awan, 2022). Bass's (1985) theory of transformational leadership, which emphasizes the importance of igniting motivation, promoting intellectual progress, demonstrating individual caring, and embodying idealistic influence, serves as the foundation for Green Transformational Leadership. GTL uses these concepts to address environmental challenges in particular, emphasizing leaders who motivate and inspire employees to embrace sustainable practices (ZEHİR & ÖZGÜL, 2021). Green Transformational Leaders set high standards for the environment and persuade the entire company of their compelling sustainability vision. Leaders set an example of environmentally conscious behavior and actively advocate for the importance of green initiatives.

GTL instills in its staff a culture of environmental responsibility and awareness, encouraging them to consider the environmental effects of their actions (ZEHİR & ÖZGÜL, 2021). By inspiring employees to develop and implement sustainable practices and environmentally friendly concepts, leaders cultivate an innovative culture. By creating a link between their work and a more general environmental goal, GTL fosters a sense of purpose and fulfillment that increases employee intrinsic motivation. Workers at GTL have a greater likelihood of following the company's eco-friendly policies and taking an active role in sustainability initiatives (Begum et al., 2022). GTL is associated with improved environmental performance, including lower resource use, waste, and carbon footprint. A number of studies show a clear connection between financial performance and green transformational leadership (Priyadarshini, Chatterjee, Srivastava, & Dubey, 2023). Businesses with a solid environmental reputation typically draw investors and clients who value environmental issues. The body of research highlights the challenges associated with the resistance to the operational and cultural changes required to achieve environmental sustainability. This research offers a foundation for understanding the characteristics of green transformational leaders, how they impact organizational culture and performance, and the challenges and opportunities associated with this style of leadership in the context of global environmental concerns.

The Relationship between Green Transformational Leadership and Corporate Environmental Performance

Interest in the nexus between environmental sustainability and leadership is growing in the field of organizational studies. The primary goal of this evaluation of the literature is to investigate the connection between corporate environmental performance (CEP) and green transformational leadership (GTL) (Hanif, Ahmed, & Younas, 2023). It is becoming more widely acknowledged that GTL, which is defined by leaders who encourage and inspire staff to adopt environmentally friendly behaviors, is a driving force behind sustainable projects in businesses. An expansion of the well-known transformational leadership theory, green transformational leadership places special emphasis on a leader's capacity to encourage and inspire followers to adopt environmentally friendly actions (Arici & Uysal, 2022). In order to achieve ecological sustainability goals, GTL includes components like visioning, individualized consideration, intellectual stimulation, and inspirational motivation (Shehzad et al., 2023). The relationship between GTL and CEP is theoretically based on transformational leadership theory, which holds that inspirational and visionary leaders have the power to change organizational practices and culture (Hanif et al., 2023). According to academics, GTL especially targets environmental issues and promotes an organizational climate that is focused on sustainability, going beyond the scope of typical transformational leadership. Researchers have determined important aspects of the leadership style in order to comprehend the influence of GTL on CEP. These might include the environmental consciousness of leaders, their capacity to articulate an engaging environmental vision, the cultivation of an eco-aware culture, and the delegation of authority to staff members to advance sustainability objectives (Ty, 2023). Every dimension is essential in determining how an

organization responds to environmental issues. It is critical to comprehend the relationship between Green Transformational Leadership and Corporate Environmental Performance as firms struggle with the demands of environmental stewardship. The theoretical underpinnings, significant aspects, mechanisms, empirical data, and difficulties related to this relationship are highlighted in this review of the literature, opening the door for further study and practical applications that will support environmentally conscious and sustainable organizational practices.

- H1: There is a significant relationship between green transformational leadership and corporate environmental performance

Dynamic Capabilities

In the field of strategic management, dynamic capabilities, or DC, are a key and evolving idea. They arose from the need for companies to adapt, generate fresh concepts, and thrive in dynamic and uncertain environments. Numerous academic disciplines, including as organizational theory, innovation studies, and strategic management, are included in the body of study on dynamic capabilities (Mikalef, van de Wetering, & Krogstie, 2021). This review of the literature provides a thorough analysis of the core concepts, theories, and patterns related to dynamic capabilities. The Resource-Based View is enhanced by Dynamic Capabilities, which emphasize an organization's ability to integrate, rearrange, and generate new resources to adapt to changing circumstances (Kero & Bogale, 2023). Unlike static resources, dynamic capabilities place particular emphasis on an organization's capacity for change and adaptation across time. Dynamic capabilities are closely linked to innovation because companies use them to create new products, services, or business models. The literature looks at how companies use Dynamic Capabilities to strike a balance between efficiency (exploitation) and creativity (exploration), with an emphasis on organizational ambidexterity. Businesses that possess dynamic capabilities are able to adapt their strategies over time and effectively adapt to changing conditions (Rihayana, SUPARTHA, Sintaasih, & Surya, 2023). One essential quality that enables businesses to thrive in unstable markets is organizational resilience, or the ability to adapt to external changes. Scholars have proposed the use of frameworks and indices to evaluate the effectiveness and scope of dynamic capabilities in organizations (Muneeb, Ahmad, Abu Bakar, & Tehseen, 2023). Research has looked at process-oriented approaches to implementing, emphasizing the core components of learning and organizational transformation. Dynamic Capabilities involve a mindset focused on learning, where firms continually receive, integrate, and apply fresh information. The literature examines how knowledge management systems, which provide easy information flow and organizational learning, support the development of Dynamic Capabilities (Antunes & Pinheiro, 2020). The study's main objective is to examine dynamic capabilities in the context of globalization, with an emphasis on how businesses adjust to diverse business environments and international markets. In the digital age, research has been done to examine how Dynamic Capabilities enable businesses to handle digital transformation successfully, emphasizing responsiveness and agility in particular (Giannakos, Mikalef, & Pappas, 2021).

The corpus of research on dynamic capabilities contributes significantly to our understanding of how businesses may become more adaptable, encourage innovation, and thrive in changing and uncertain environments. The notion remains crucial in strategic management discourse and continues to generate research on organizational learning, innovation, and strategy renewal.

The Relationship between Green Transformational Leadership and Dynamic Capabilities

The incorporation of sustainable practices in enterprises has emerged as a central topic of discussion among leaders. The purpose of this study of the literature is to examine the connection

between dynamic capabilities and green transformational leadership (GTL), with a focus on how these two concepts support organizational sustainability (Özgül & Zehir, 2023). GTL provides a leadership strategy that expands beyond traditional transformational leadership by including environmental factors. Leaders who demonstrate GTL encourage and inspire staff members to adopt eco-friendly behaviors, creating a sustainable culture inside the company. The ability of an organization to adjust, incorporate, and reorganize its internal resources and skills in reaction to sudden changes in the external environment is referred to as dynamic capabilities (Karman, 2020). Organizations need to have dynamic capacities in order to recognize, grasp, and take advantage of possibilities to improve environmental performance in the context of sustainability. This review's theoretical underpinnings come from the resource-based approach, dynamic capabilities theory, and transformational leadership theory (Bojesson & Fundin, 2021). According to the conceptual framework, GTL affects the growth of dynamic capabilities, resulting in an organizational setting that is better able to recognize and react to opportunities and problems in the environment. Researchers have defined certain GTL aspects that are especially pertinent to dynamic capacities in order to investigate the relationship. These could include the leader's capacity to articulate an inspiring environmental vision, raise staff members' understanding of environmental issues, and cultivate an innovative and adaptable culture in response to changing environmental conditions (Madi Odeh, Obeidat, Jaradat, Masa'deh, & Alshurideh, 2023). GTL influences dynamic capacities through fostering an environment inside the organization that prioritizes sustainability, fosters learning, and supports ongoing development. It advances a better knowledge of how leadership practices might influence an organization's dynamic capacity for environmental responsiveness and long-term sustainability by combining theoretical frameworks, important dimensions, mechanisms, and empirical data.

- H2: There is a significant relationship between green transformational leadership and dynamic capability

The Relationship between Dynamic Capabilities and Corporate Environmental Performance

In the contemporary business landscape, the integration of environmental sustainability into organizational strategies has become paramount. This literature review aims to scrutinize the intricate relationship between Dynamic Capabilities (DC) and Corporate Environmental Performance (CEP), shedding light on the mechanisms through which organizational adaptability and innovation contribute to sustainable outcomes (Arian & Sands, 2023). Dynamic Capabilities represent an organization's ability to adapt, integrate, and reconfigure its resources and competencies in response to dynamic and evolving environments. In the context of sustainability, dynamic capabilities are essential for organizations to identify, seize, and capitalize on opportunities that enhance environmental performance (Chokshi, Agrawal, Samadhiya, & Kumar, 2023). The theoretical foundations of this review draw upon dynamic capabilities theory, resource-based view, and organizational learning theory. It posits that organizations with strong dynamic capabilities are better equipped to navigate environmental challenges, innovate sustainable practices, and consequently, enhance their environmental performance (Kouloukoui, da Silva Gomes, Torres, & Torres, 2023). To explore the relationship, researchers have identified key dimensions of dynamic capabilities relevant to environmental performance. These may include the organization's ability to sense and respond to environmental opportunities and threats, reconfigure internal processes for sustainability, and learn and adapt to changing ecological demands. Dynamic capabilities enable organizations to sense changes in the external environment, both in terms of regulatory developments and stakeholder expectations related to environmental performance (Singh, Del Giudice, Chiappetta Jabbour, Latan, & Sohal, 2022). This literature review contributes

to the growing body of knowledge on the relationship between Dynamic Capabilities and Corporate Environmental Performance. By synthesizing theoretical frameworks, key dimensions, empirical evidence, and practical implications, it underscores the pivotal role of dynamic capabilities in shaping organizational responses to environmental challenges and achieving sustainable outcomes.

- H3: There is a significant relationship between dynamic capability and corporate environmental performance

The Mediating Role of Dynamic Capabilities between Green Transformational Leadership and Corporate Environmental Performance

The need of coordinating leadership strategies with environmental sustainability objectives is becoming more widely acknowledged, and this has led to a rise in the prominence of Green Transformational Leadership (GTL). The comprehension of the mediating function of dynamic capacities in the connection between GTL and Corporate Environmental Performance (CEP) is the main goal of this research review (Stein, Schuemann, & Vincent-Hoeper, 2021). It is proposed that a key intermediary role in converting GTL into concrete environmental effects is played by dynamic capabilities, which stand for an organization's capacity for innovation and adaptation. Leaders who practice green transformational leadership inspire and motivate their staff to adopt eco-friendly activities (Witcover & Williams, 2020). This leadership approach blends classic transformational traits with an emphasis on building an environmentally conscious and sustainable organizational culture. The ability of a company to adjust, incorporate, and reorganize internal and external skills in response to quickly changing circumstances is referred to as dynamic capabilities. Dynamic capabilities are seen in the context of GTL as the organizational structures that make it easier to convert leadership initiatives into practical environmental practices (Seng & Hee, 2021). The resource-based view, dynamic capacities theory, and transformational leadership all have theoretical underpinnings that are expanded upon in this literature study. It suggests that the dynamic capabilities of an organization are shaped by GTL, and that this in turn shapes how environmentally sustainable practices are implemented, mediating the relationship between environmental performance and leadership (Özgül & Zehir, 2023). The integration of conceptual models, fundamental aspects, factual data, and pragmatic ramifications underscores the importance of dynamic capacities as a pivotal pathway via which leadership approaches impact enduring results. By addressing methodological issues, improving theoretical models, and assisting organizations in their quest of environmental excellence, more study in this field can be beneficial.

- H4: The dynamic capability mediate the significant relationship green transformational leadership and corporate environmental performance.

Theoretical Support

The rise of Green Transformational Leadership (GTL) as a concept has become crucial for organizations that wish to connect their operations to environmental sustainability. GTL represents a leadership approach that enables leaders to drive employees past typical targets by establishing environmental principles across organizational vision development and strategic alignment and operational routines. Under GTL leadership one will find that leaders develop idealized influence combined with inspirational motivation and intellectual stimulation as well as individualized consideration through a green-focused framework. These leaders both stimulate staff to undertake environmentally responsible actions while building organizational cultures that promote ecological

innovation and environmental responsibility (Chen & Chang, 2013). The leaders enable team members to actively participate in sustainable corporate initiatives through shared vision development. A key process which allows GTL activity to produce concrete outcomes includes the establishment of dynamic capabilities. An organization can develop dynamic capabilities by uniting its internal and external competencies to adjust to changing environments (Teece et al., 1997). Organizations harness dynamic capabilities to discover green opportunities which they can obtain by allocating resources and redesign their processes to achieve better environmental performance and regulatory adherence. The organizational capabilities function as an element that lets leadership direction become tangible through strategic moves. Through dynamic capabilities such as green innovation processes, environmental learning and adaptive supply chain practices the organization achieves effective environmental challenge and demand response even though the initial sustainability promotion was led by a green transformational leader.

The series of steps leads to Corporate Environmental Performance (CEP) enhancement through measures including emissions control as well as energy efficiency and sustainable sourcing and waste reduction elements. Regulatory compliance together with corporate social responsibility and ecological stewardship represent demonstrated commitments of the firm (Hart, 1995). The execution of superior environmental performance increases corporate reputation while minimizing operational risks and leads to new possibilities in the developing green economy sector. The Natural Resource-Based View (NRBV) of the firm established by Hart (1995) represents the most suitable theoretical framework for this research since it builds upon Resource-Based View (RBV) with environmental elements for strategic management purposes. The NRBV innovates RBV theory by demonstrating that competitive advantage becomes sustainable when firms use environmentally friendly strategies and capabilities that contribute to sustainability (Barney, 1991(Waseel, Zhang, Shehzad, Hussain Sarki, & Kamran, 2024). The NRBV states that organizations should develop capabilities which focus on environmental protection and sustainability as businesses face increasing ecological concerns alongside stakeholder pressures. The NRBV outlines three strategic capabilities essential for environmental sustainability: pollution prevention, product stewardship, and sustainable development. Internal leadership dedication along with learning systems and innovation deliver these capabilities effectively. All these elements directly match important aspects of this study.

GTL operates as a fundamental internal resource through NRBV to establish capabilities which focus on environmental issues. Through green transformational leadership people get inspired with a sustainability vision that enables them to obtain shared environmental values for better execution of environmentally responsible behaviors. Chen and Chang (2013) maintain that GTL establishes the necessary organizational culture as well as organizational structure to support green innovation and ecological response. Within the NRBV only internal leadership can produce and foster capabilities linked to sustainability. Green transformational leaders possess both visionary capabilities and change-oriented characteristics which drive organizational learning and interdepartmental teamwork for constructing pollution reduction and resource conservation abilities that reflect core NRBV principles. Dynamic Capabilities (DC) serve as mediating mechanisms under the NRBV because they explain how leadership transforms green visions into organizational action. The firm’s capability to change its internal and external resources and integrate them into new configurations stands as dynamic capabilities according to Teece et al. (1997). Organizations applying dynamic capabilities for environmental sustainability develop their ability to recognize green opportunities while taking advantage of them by effectively mobilizing resources to improve their ecological operational processes. Firms require these capabilities for

innovative implementation of NRBV principles by gaining environmental knowledge and adapting to ecological changes. Openness and commitment to learning within organizational environments at GTL enable new ways of operating through sustainability innovations.

CEP functions as the end variable which the NRBV needs to evaluate. A firm demonstrates effective CEP when it reduces environmental impacts while achieving higher productivity and remaining competitive. A firm's successful development of pollution prevention and resource efficiency strategies which are built upon green leadership and dynamic capabilities produces dual benefits of ecological reduction while securing lasting economic benefits. High-scoring firms in CEP demonstrate sustainability leadership beyond regulatory compliance that delivers enhanced market perception along with cost reductions and trust from stakeholders (Hart, 1995; Russo & Fouts, 1997). The joint efforts of GTL which develops sustainable organizational culture and DC which enables green strategies help CEP reach better performance. The NRBV framework offers strong backing to the GTL-CEP relationship which depends on DC.

Theoretical Model

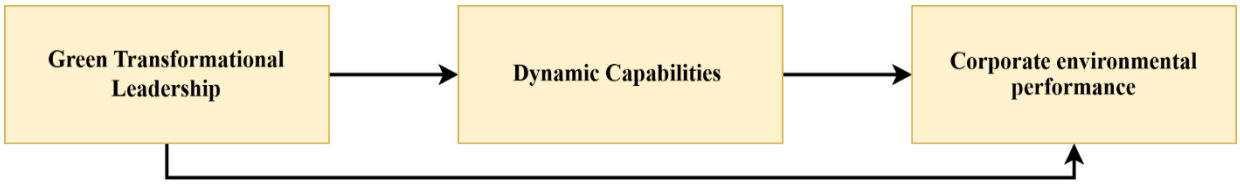


Figure 1: Research Model

Methodology

Research Methods

This study is hypothesis testing in nature as the intention is to validate the relationships among Green Transformational Leadership, Corporate Environmental Performance, and Dynamic capabilities. Thus, this study is hypothesis testing in nature as the intention is to validate the relationships among Green Transformational Leadership, Corporate Environmental Performance, and Dynamic capabilities. The major entity that is to be analyzed in the study is called unit of analysis (Zikmund, 1997). In this study, the cross-sectional research design is used to collect data from the respondents regarding Green Transformational Leadership, Corporate Environmental Performance, and Dynamic capabilities. The rationale behind selection of cross-sectional design is that is suitable for the similar kind of studies that is hypothesis testing, this design allows a careful observation from the selected sample of the population. Moreover, cross-sectional design allows collecting data from a large sample easily and comparison is easy due to collection of data on the same point of time, Cross sectional studies are relatively easy and convenient as compared to longitudinal design (Mann, 2003). Multiple choice questionnaires are the suitable tool for cross sectional studies to measure degree of agreement and importance. Survey techniques are being widely used in research studies related to consumer behavior (Day, 1976). The rationale behind using survey questionnaire for this study is;

Sampling

A list of complete population is called a sampling frame, and the sample is selected from this sampling frame (Frazier, Tix, & Barron, 2004). Sampling frame should include complete list of

every possible unit of population, and all the units of population must be represented only once. Having a complete list of population is very difficult and mostly an appropriate list of population is made. This situation is also faced by this research, as it is practically not possible to get the list of all the employees. The sampling frame is based on data collected by investigating the trait in manufacturing SMES in Rahim Yar Khan, which also happens to be my population. A sample is a subset of the population that is representative of the entire population. Two typical sampling strategies are probability and non-probability sampling. The statistical conclusions are generated via probability sampling (Hair et al., 2007). In this study, convenience sampling technique is used. In convenience sampling technique, the researcher selects the sample which is convenient to be selected and analyzed. It. The rationale behind selecting the convenient sampling is that the sample is very much scattered and highly differ in some characteristics like age group, income level, social class, etc.

Population

Population selected for this study is employees of the Manufacturing SMES in district Rahim Yar Khan, Pakistan. Employees are the ones who are directly linked with the customers. As the population is very large and unknown, the sample size would be 300 by using sample size estimation (Hair et al. 2007). Unit of analysis is the employees working in automobiles companies in South Punjab.

Research Instrument

All perceptual constructs were measured using multiple items from different studies in the extant literature. The GTL of managers was measured using six items from Chen and Chang (2013). Responses to items in Green Transformational Leadership were rated on five-point scales ranging from 5 (strongly agree) to 1 (strongly disagree). Higher scores indicated higher levels of each construct." The Corporate Environmental Performance Scale (four items) was used to operationalize Corporate Environmental Performance (Sajan, Shalij, Ramesh and Biju Augustine, 2017). Response options for items in Corporate Environmental Performance ranged from 5 (strongly agree) to 1 (strongly disagree). Six items adapted from Damanpour (1992) and (Elenkov and Manev 2005) were used to operationalize Dynamic capabilities. Responses to items in Innovation capabilities was rated on five-point scales ranging from 5 (strongly agree) to 1 (strongly disagree). Higher scores indicated higher levels of each construct."

Procedure

Data analysis is performed to assess the opinion of the respondents according to different variables such as demography etc. (janssen et al., 2008). Reliability is the extent up to which multiple items of the scale are having internal consistency (Hair et al., 1998). Reliability is the internal consistency of the scale. It is measured by the Cronbach's alpha.

Method of Analysis

Descriptive statistics, correlation analysis, reliability and validity were used in the data analysis, which was done using SPSS and AMOS. Both qualitative and quantitative data can be used with SPSS. Approximately 85% of research professors carry quantitative data for additional analysis, even if all data sets are equally valuable. Because SPSS programed offers a perfect graphical representation and an appropriate result for the given data, it will be used for further analysis. It is straightforward for research academics to learn how to use and conduct analysis using SPSS because it is a drag-and-drop tool that incorporates nearly all basic and some advanced statistical analysis. Results were produced graphically and statistically in this case using SPSS 21.0. By using

SPSS, Correlation and Regression analysis was made to investigate the relationship among the study variables. AMOS is used for hypothesis Analysis to check the reliability and validity. The confidence interval of the study is 95% with 5% of significance.

Results

Response Rate

We took the sample of 300 respondent and employees. The total of 230 of employees are administered finally for further result. These questionnaire demonstrating the total percentage of 76.66 percent questionnaire, questionnaire structure and confidentiality of respondents). Some survey questionnaire is useless because of missing data and some are filled carelessly by respondent and they choose wrong option representing 20 percent of misleading data which is not included in the final study.

Table 1: Respondents' Profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	122	53.3	53.3	53.3
	Female	107	46.7	46.7	100.0
Age	18-24	60	26.2	26.2	26.2
	25-34	50	21.8	21.8	48.0
	35-44	62	27.1	27.1	75.1
	45-54	42	18.3	18.3	93.4
	55 to Above	15	6.6	6.6	100.0
Education	Graduation	55	24.0	24.0	24.0
	Master	59	25.8	25.8	49.8
	M.Phil/ MS	63	27.5	27.5	77.3
	Doctorate	21	9.2	9.2	86.5
	Other	31	13.5	13.5	100.0
	Total	229	100.0	100.0	

There are 53.3% were male, and 46.7% were female who respond to the questionnaire in this research. The respondents with age from 18-24 years were 26.2, the age from 25 to 34 were 21.8%, 35 to 44 years age respondents were 27.1%, the age of respondents from 45 to 54 were 18.3%, and in the last there were 6.6% from 55 to above. The education of respondents in graduation were 24.0%, with master degree respondents were 25.8%. Mphil degree holder were 27.5%, and doctorate degree holder were 9.2%, and in the last other degrees holder were 13.5%.

Descriptive Analysis

This segment depicts the descriptive analysis of the extents of Green Transformational Leadership, Corporate Environmental Performance, and Dynamic Capabilities. The important idea was to evaluate the mean, kurtosis, standard deviation, skewness and to classify the reliability and normality of scales. So the Cronbach alpha of each variable. The variable having the items used in developing an obvious pattern matrix. The total summary of the items is shown in the table which describe the values of mean, standard deviation, kurtosis and skewness. All the values are acceptable because they lie in the range suggested by author. Skewness and kurtosis is less than ±3.0, a standard suggested by (Lei & Lomax, 2005), and (Tabachnick & Fidell, 2001). The mean value for the Green Transformational Leadership was 3.4297, and std. deviation was .62883. The

mean value for the Corporate Environmental Performance was 3.5223, and std. deviation was .61322. The mean value for the Dynamic Capabilities was 3.6188, and std. deviation was .62648.

Table 2: Descriptive Analysis

Descriptive Statistics									
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**	**Skewness**		**Kurtosis**	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
M_GTL	229	1.30	4.80	3.4297	.62883	-.684	.161	1.197	.320
M_CEP	229	1.10	4.80	3.5223	.61322	-.682	.161	.986	.320
M_DC	229	1.14	5.00	3.6188	.62648	-.601	.161	.800	.320
Valid N (listwise)	229								

Exploratory Factor Analysis (EFA)

The exploratory factor analysis was utilize to remove basic factors and to inspect the uni dimensionality of constructs. For this reason, it can used principal component factor investigation with Promax rotation and maximum likelihood estimation technique was working. Additionally, the next way is values were sorted by size and small coefficients were suppressed absolute value below of 0.3. The firstly Exploratory Factor Analysis contain all 34 items used in the computation of result. The value of KMO is 0.797 which is considered as satisfactory. According to Hair et al. (2010) the value of KMO is more then 0.5. The Bartlett's Test of Sphericity value was also important.

Table 3: Exploratory Factor Analysis

Rotated Component Matrix[a]			
	Component		
	1	**2**	**3**
SMEAN(GTL7)	.746		
SMEAN(GTL2)	.683		
SMEAN(GTL5)	.652		
SMEAN(GTL1)	.618		
SMEAN(GTL3)	.608		
SMEAN(GTL4)	.497		
SMEAN(CEP1)		.799	
SMEAN(CEP4)		.709	
SMEAN(CEP3)		.634	
SMEAN(CEP2)		.426	
SMEAN(DC1)			
SMEAN(DC2)			.787
SMEAN(DC3)			.774
Extraction Method: Principal Component Analysis.			.751

Rotation Method: Varimax with Kaiser Normalization.[a]
a. Rotation converged in 4 iterations.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.797
Bartlett's Test of Sphericity	Approx. Chi-Square	1057.376
	df	105
	Sig.	.000

Reliability Test

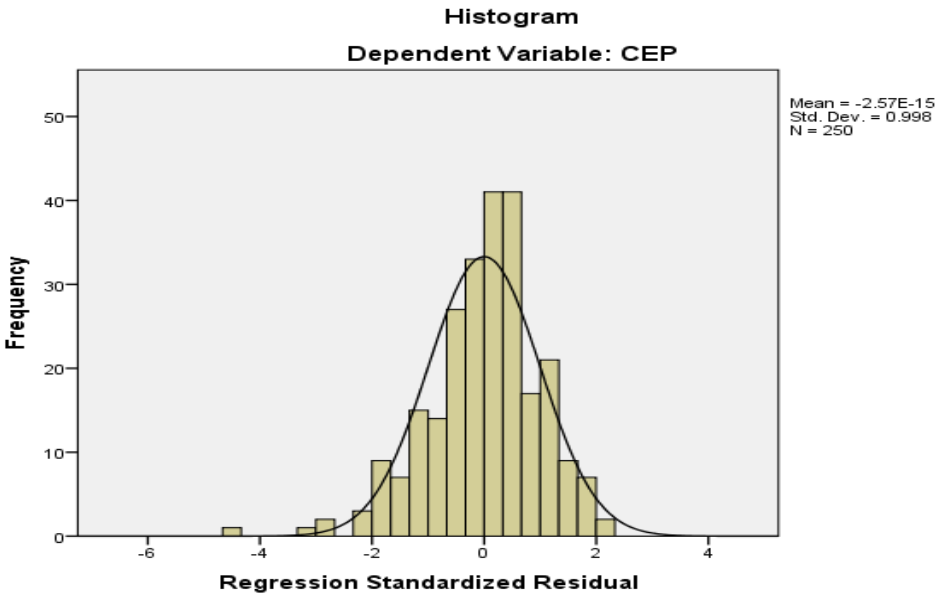
The Cronbach Alpha Values for Green Transformational Leadership is .744, the Cronbach Alpha Values for Corporate Environmental Performance is .758, and Cronbach Alpha Values for Dynamic Capabilities is .856.

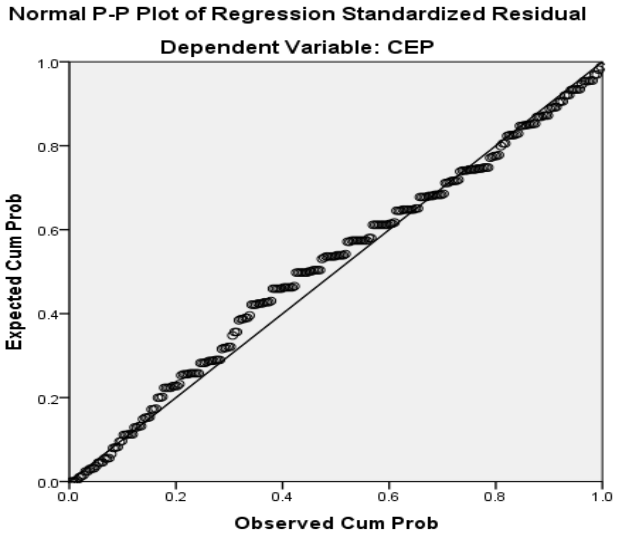
Table 4: Reliability Test

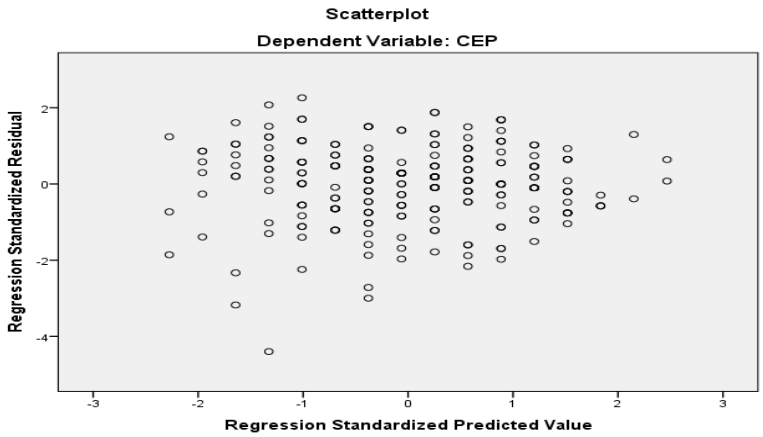
Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
M_GTL	7.1411	1.223	.761	.744
M_CEP	7.0485	1.269	.747	.758
M_DC	6.9520	1.349	.643	.856

Normality Test

Normality assumption was evaluated with a standard P-P regression and histogram. Figures 4.1 and 4.2 indicate that normality expectations are not violated. Normality assumption was evaluated with a standard P-P regression and histogram.
Figures 4.1 and 4.2 indicate that normality expectations are not violated.


Histogram
Dependent Variable: CEP
Mean = -2.57E-15
Std. Dev. = 0.998
N = 250
Frequency
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: CEP
Expected Cum Prob
Observed Cum Prob


Scatterplot
Dependent Variable: CEP
Regression Standardized Residual
Regression Standardized Predicted Value

Correlation

A Pearson correlation was used to find the significant relationship among the variables such as Green Transformational Leadership, Corporate Environmental Performance and Dynamic Capabilities as shown in Table.

Table 5: Correlation

Correlations				
		M_GTL	**M_CEP**	**M_DC**
M_GTL	Pearson Correlation	1	.749**	.610**
	Sig. (2-tailed)		.000	.000
	N	229	229	229
M_CEP	Pearson Correlation	.749**	1	.592**
	Sig. (2-tailed)	.000		.000
	N	229	229	229
M_DC	Pearson Correlation	.610**	.592**	1
	Sig. (2-tailed)	.000	.000	
	N	229	229	229

****. Correlation is significant at the 0.01 level (2-tailed).**

Hypothesis Testing

Table 6: Hypothesis Testing

Path	Estimates	S. E	Critical Ratio	P-value	
M_DC <--- M_GTL	.608	.052	11.63	0.000	Supported
M_CEP <--- M_GTL	.602	.052	11.51	0.000	Supported
M_CEP**<--- M_DC**	.211	.052	4.022	0.00	Supported

Table 7: Testing the Mediating Effects

	Corporate Environmental Performance				
Green Transformational Leadership	**Beta**	**S.E.**	**L.B.**	**U.B.**	**P-Value**
Total Effect	0.721	0.164	.730	.211	0.000
Direct Effect	0.429	0.250	.602	.211	0.000
Indirect Effect	0.678	0.000	.602	.211	0.000

- ✓ Green Transformational Leadership have positive impact on Corporate Environmental Performance (S.E= 0.52, p < .000).
- ✓ Green Transformational Leadership have significant positive impact on Dynamic Capabilities (S.E= 0.52, p < .000).
- ✓ Dynamic Capabilities have significant positive impact on Corporate Environmental Performance is positive (S.E= 0.52, p <.000).

- ✓ Total effect of Green Transformational Leadership on Corporate Environmental Performance with inclusion of Dynamic Capabilities is positive (S.E= 0.164, p <.000).

Discussion

The subject matter explores the complex workings of green transformational leadership and its impact on altering the environmental performance of corporations. Green transformational leadership entails a proactive stance towards sustainability, where leaders actively advocate for ecologically responsible behaviors and activities within their organizations. This leadership style prioritizes vision, inspiration, and empowerment, motivating people to adopt sustainable concepts and incorporate them into their daily activities. Green transformational leaders establish ambitious environmental objectives, cultivate a culture of ingenuity and cooperation, and demonstrate their dedication to sustainability by personal devotion. The influence of green transformational leadership on business environmental performance is complex and extensive. Green transformational leaders initially provide a collective understanding of purpose and dedication to sustainability among employees, so promoting increased involvement and responsibility towards environmental objectives (Çop, Olorunsola, & Alola, 2021). These leaders motivate people to embrace sustainable practices, decrease resource usage, and mitigate environmental effects in different areas of operations by integrating organizational principles with environmental stewardship. Furthermore, green transformational leadership fosters ingenuity and originality within companies, propelling the advancement of environmentally sustainable goods, procedures, and technologies. Leaders who promote innovation, risk-taking, and learning foster a culture of ongoing enhancement and adjustment towards sustainable goals. The presence of an innovative culture within organizations allows them to identify possibilities to improve efficiency, reduce waste, and innovate in terms of the environment, so boosting their total environmental performance. Moreover, green transformational leaders serve as agents that stimulate change, propelling organizational transformation towards practices that are more sustainable. By employing efficient communication, advocacy, and collaboration, these leaders rally stakeholders throughout the organization to adopt sustainability as a key strategic objective (Priyadarshini et al., 2023). Green transformational leaders promote collaboration across different departments and eliminate barriers between them. They enable the incorporation of sustainability factors into decision-making, supply chain management, and corporate strategy development.

Furthermore, green transformative leadership has a widespread impact that extends outside the firm, shaping industry standards, stakeholder perspectives, and regulatory structures. Companies headed by green transformational leaders can strengthen their reputation, attract environmentally concerned investors, and acquire a competitive edge in the marketplace by showing a strong dedication to sustainability and presenting concrete environmental accomplishments. Green transformational leadership, which entails visionary leadership that inspires and motivates staff to achieve sustainability objectives, has been identified as a significant catalyst for enhancing corporate environmental performance (Ershadi, Jefferies, Davis, & Mojtahedi, 2021). This conversation examines the complex connection between green transformational leadership and company environmental performance, specifically emphasizing the role of dynamic capacities as a mediator. Green transformational leadership refers to a proactive approach to sustainability, where leaders actively promote environmentally responsible behaviors and activities within their organizations. These executives establish ambitious environmental objectives, cultivate a culture of ingenuity, and enable staff to adopt sustainability concepts. Green transformational leaders encourage dedication and engagement towards environmental stewardship by effectively communicating and setting a good example, resulting in beneficial changes within the firm. Dynamic capabilities pertain to an organization's capacity to adjust, create, and react to evolving

external circumstances (Kumar, Mishra, Upadhyay, Srivastava, & Pathak, 2023). They possess the ability to perceive alterations in the environment, exploit favorable circumstances, and adapt resources and procedures to accomplish strategic goals. Dynamic skills empower firms to effectively handle unpredictable circumstances, seize opportunities presented by developing trends, and maintain a lasting competitive edge. Dynamic skills are essential in the realm of sustainability as they facilitate the incorporation of environmental factors into an organization's strategy, operations, and decision-making processes. The correlation between green transformational leadership and corporate environmental performance is influenced by dynamic skills. Green transformational leaders motivate and authorize people to cultivate and utilize adaptable skills that allow the organization to efficiently tackle environmental obstacles and take advantage of sustainability prospects.

Green transformational leadership promotes strategic agility by fostering flexibility and adaptation in order to respond to environmental changes and regulatory needs. Leaders who foster a culture of innovation and experimentation empower the organization to cultivate dynamic abilities in recognizing and pursuing viable business prospects (Waseel, Zhang, Zia, Mohsin, & Hussain, 2024). Green transformational leaders enable the reorganization of resources by redirecting them towards sustainable activities and investments (Priyadarshini et al., 2023). By efficiently allocating resources and aligning with sustainability objectives, firms can develop adaptable abilities to optimize resources, minimize waste, and improve eco-efficiency, ultimately boosting their environmental performance. Green transformational leadership promotes stakeholder involvement and collaboration, cultivating partnerships with consumers, suppliers, and communities to advance sustainability efforts. Organizations can enhance their ability to create value, improve their brand reputation, and achieve beneficial environmental outcomes by utilizing stakeholder insights and forming partnerships. Green transformational leaders promote innovation and learning by cultivating a culture of ongoing improvement and information exchange (Kumar et al., 2023). By allocating resources towards employee training and development, firms can cultivate dynamic abilities in environmental innovation, product design, and process optimization. This, in turn, promotes sustainable practices and enhances corporate environmental performance. To summarize, the influence of green transformational leadership on corporate environmental performance is facilitated by dynamic skills. Green transformational leaders facilitate organizational adaptability and success in a dynamic sustainability environment by promoting agility, reconfiguring resources, engaging stakeholders, and fostering innovation. Through the development of adaptable abilities that enable the incorporation of environmental factors into the strategic and operational aspects of organizations, businesses can attain enhanced sustainability results and contribute to a more ecologically conscientious future.

Practical Implications

Organizations should give top priority to developing a culture of environmental stewardship by actively supporting and encouraging green transformational leadership. This entails granting authority to leaders at every level to advocate for sustainability programs, motivate staff involvement, and integrate environmental factors into the business culture. Through cultivating a collective dedication to sustainability, firms can provide the groundwork for developing dynamic skills that propel ongoing enhancement in corporate environmental performance. It is crucial to invest in leadership development programs that prioritize green transformational leadership competencies in order to effectively facilitate sustainable organizational change. Training programs should prioritize the enhancement of leaders' capacity to articulate a persuasive vision for sustainability, enable employees to assume responsibility for environmental activities, and cultivate a culture that promotes creativity and continuous learning. Organizations can expedite the

enhancement of environmental performance by providing leaders with the necessary skills and mentality to promote sustainability, hence fostering the growth of dynamic capacities. Organizations should promote cross-functional collaboration and knowledge exchange to utilize a wide range of viewpoints and experience in tackling environmental concerns. Green transformational leaders are crucial in promoting collaboration between different departments and business divisions to discover synergies, exchange best practices, and jointly develop new solutions for sustainability challenges. Through the dismantling of isolated departments and the promotion of cooperation, businesses can develop flexible capacities to incorporate environmental factors into every facet of their activities. It is crucial to align incentives and performance indicators with sustainability goals in order to emphasize the significance of improving environmental performance. Organizations ought to include environmental metrics, such as targets for reducing carbon emissions or rates of waste diversion, into their key performance indicators (KPIs) and incentive systems in order to motivate environmentally friendly actions and acknowledge success. Organizations can encourage employees to actively participate in environmental projects and cultivate their ability to sustainably adapt by aligning rewards with sustainability achievements. Sustained surveillance and adjustment are crucial to ensure that environmental endeavors consistently fit with business objectives and priorities. Organizations must to periodically evaluate their advancement towards sustainability goals, collect input from stakeholders, and carry out environmental performance assessments to pinpoint areas in need of enhancement. Green transformational leaders must to foster a culture of education and adjustment, encouraging staff to engage in experimentation with novel methods, derive lessons from setbacks, and modify plans in accordance with evolving environmental circumstances. Organizations can enhance their ability to sustain and improve their corporate environmental performance by cultivating a culture that prioritizes ongoing improvement and fosters dynamic capacities.

Future Research and Limitations

Performing longitudinal research to investigate the enduring impact of green transformational leadership on company environmental performance and the evolution of dynamic capacities over an extended period. This would offer valuable perspectives on the long-term viability of environmental efforts and the development of organizational capacities in adapting to shifting environmental circumstances. An investigation on the influence of green transformational leadership and dynamic capabilities on company environmental performance in various cultural settings. Comparative studies can reveal cultural subtleties in leadership styles, organizational methods, and stakeholder expectations regarding sustainability. This information can be used to create customized strategies for enhancing environmental performance in various worldwide contexts. Analyzing the unique dynamics of different sectors and the contextual aspects that impact how successful green transformational leadership and dynamic capabilities are in promoting corporate environmental performance. Conducting comparative studies across different industries can provide valuable insights into the specific issues, opportunities, and best practices related to sustainability leadership and the development of capabilities. Investigating supplementary mediating processes that could impact the correlation between green transformational leadership, dynamic capabilities, and corporate environmental performance. Further research might explore how corporate culture, stakeholder engagement, institutional pressures, and legal frameworks influence the effectiveness of sustainability initiatives and attempts to develop capabilities. Creating mathematical models to evaluate the proportional impact of green transformational leadership and dynamic capabilities on corporate environmental performance results. Quantitative analysis can assist in identifying the primary causes, interactions, and moderating elements that impact the effectiveness of sustainable leadership and capability-

building projects. An inherent constraint of this study is the possible difficulty in precisely quantifying and evaluating concepts such as green transformational leadership, dynamic capabilities, and corporate environmental performance. To improve the reliability and validity of research findings, future studies could utilize validated measuring scales and mixed-methods approaches. The generalizability of findings may be constrained by the narrow scope of specific industries, organizational environments, or geographic locations. Subsequent investigations should strive to reproduce results in a wider array of circumstances in order to evaluate the strength and relevance of findings in various environments.

The inclusion of dynamic capacities as a mediator in the study model adds complexity due to the presence of several interrelated variables and potential moderating factors. In future research, it would be beneficial to utilize sophisticated statistical methods, such as structural equation modeling or hierarchical regression analysis, to investigate the fundamental mechanisms and examine any limitations or interaction effects.

Conclusion

The complexity and dynamic character of sustainability inside businesses is highlighted by the interaction between corporate environmental performance, dynamic capacities, and green transformational leadership. During this conversation, we have examined how green transformational leaders motivate and enable employees to adopt sustainability objectives, encourage creativity, and facilitate organizational transition towards environmental responsibility. In addition, we have analyzed the mediating function of dynamic capabilities, which empower firms to adjust, create, and react efficiently to environmental problems and opportunities. The results indicate that green transformational leadership acts as a catalyst for organizational sustainability by altering corporate environmental performance through its visionary guidance, inspirational influence, and dedication to environmental stewardship. Green transformational leaders cultivate an atmosphere of ecological accountability, stimulate cooperation, and advocate for strategic congruence with sustainability objectives, so instigating beneficial transformations throughout the firm. In addition, dynamic capabilities play a role in connecting green transformational leadership with corporate environmental performance. They allow businesses to cultivate the ability to adapt, be flexible, and foster creativity, which are essential for effectively addressing the challenges of sustainability. Dynamic capabilities enable businesses to effectively respond to changing circumstances and enhance their performance by cultivating a culture of learning, adaptation, and continuous development. This allows them to capitalize on opportunities, overcome problems, and successfully achieve their strategic goals in relation to environmental sustainability.

By utilizing green transformational leadership and dynamic skills, companies can improve their environmental performance and make a positive impact on creating a sustainable future. Organizations can achieve significant progress towards sustainability goals by investing in leadership development, establishing a culture of environmental responsibility, and supporting cross-functional collaboration. Nevertheless, it is crucial to recognize that this research is subject to some limits and problems, such as difficulties in measuring, concerns over endogeneity, and the intricate nature of mediation. Subsequent studies should focus on overcoming these constraints and investigating supplementary variables that could impact the correlation between green transformational leadership, dynamic capacities, and corporate environmental performance.

Ultimately, the influence of green transformational leadership on the environmental performance of companies, facilitated by dynamic capabilities, highlights the significance of forward-thinking leadership, adaptability within the company, and alignment of strategies in promoting sustainable results. By adopting these principles and cultivating a culture centered around sustainability, firms may provide value for stakeholders, reduce environmental risks, and position themselves for enduring success in a swiftly evolving business environment.

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