The Importance Of Green Leadership And Green Communication Allies In The Potential To Promote A Sustainable Practice And Reduced A Negative Impact On Human Activities On Environment In Management

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Abstract:

The purpose of this study is to promote sustainable practices and lessen the adverse effects of human activity on the environment and management by means of green leadership and green communication. Leadership and green communication are intimately tied to one another. Network connectivity is growing at an accelerated rate these days. Green communication has gained popularity as a reaction to ecological problems in networks of communication. The study also emphasizes how environmental communication problems can be solved through green communication. The advances in network coding and cognitive networks within the last ten years are described. This study also looks at the relationship between ecological efficiency and green transformational leadership. The study focuses on how green innovation and human resources management work as facilitators.[1] Effective communication is a key component of a manager's ability to inspire and encourage team members to put in long hours and accomplish individual and group objectives. Leaders must be flexible enough to meet the demands of their teams while also being proactive and creative in their communication. The goal of leadership development is to be a strategic investment that fosters work-life balance, employee satisfaction, and career success. In relation to the relationship between communication and leadership, this paper will present a comparative overview of communication studies. Green leadership has become a crucial instrument for businesses trying to strike a balance between social responsibility, sustainability, and economic growth. Green leadership improves employee work satisfaction and organizational social assessment while adhering to "soft human resources management " concepts. The research contains proof that implementing green human resources management practices increases environmental profitability. In a

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developing market, this study examines the interactions between green leadership, green work engagement, and green corporate culture. We also emphasized the significance of this research for upper management in terms of balancing green innovation and culture, as well as the implications for upcoming generations of managers who will become aware of it and be environmentally concerned.

Introduction:

The enhanced need to manage environmental issues has made sustainability a focal area in the various fields; this is true for management. Green leadership and green communication friends and partners work together in the creation and dissemination of decisions and practices that can reduce the effects of human activities on the environment in a positive manner. Eco-preneurship, where leaders in organizations align themselves with environmental sustainability as part of their leadership, ensures that organizations embrace environmentalism. These leaders set an example and encourage employees and stakeholders to exercise sound environmental practices. On the other hand, green communication allies are key information channels that transfer information and enhance public concern on sustainable issues. Altogether, they encourage setting environmentally friendly organizational practices and promote change concerning environmental issues. Green leadership involves assimilation of environmentally sustainable principles in a firm's management, action plans, and ethos. It entails the establishment of targets and policies on environmental aspects, the promotion of environmental management, and innovations on environmentally friendly products. By practicing green leadership, such leaders may support corporate social responsibility and advocate for the pursuit of long-term environmental goals rather than short-term corporate gain (Lozano, 2015). Moreover, green communication allies assist green leaders in relaying messages, involving multiple forms of communication that target different audiences so as to foster support for sustainability pieces (Morsing and Schultz, 2006). Leadership and communication together need to play significant roles to ensure that there is a standard approach to the management of the environment in organizations. With the cost of data and energy in modern communication systems skyrocketing, high energy consumption has led to a number of energetic issues as well as environmental challenges. To address these issues, green communication was established. The primary goal is to increase energy efficiency. This is because 3G does not meet the needs of consumers for a telecommunications network. The new 4G features will be useful. This means that the 4G communication network needs upgraded infrastructure. The growing popularity of smartphones, namely the iPhone, has led to an increasing need for wireless bandwidth. In order to serve as a platform, these smartphones must have internet access. One possible solution to the problems is to adopt green communication technologies. We first look at the challenges of green communication in this study. The second is to discuss a few green communication tactics in more detail. Three techniques are covered: network coding, cognitive networks, and smart grids. Lastly, future directions for green communication research. The evolution of mobile communication technologies has led to the development of 5G networks that will enable faster data rates, low latency communication and provision of large number of devices for machine-like communication. Two constructs of the current development of 5G include: Software Defined Network (SDN) and the Network Functions Virtualization (NFV) that provide flexible, scalable and efficient management of networks. SDN breaks down the connection between the control and the data layer of a network, and provides centralized control of the network while NFV migrates some of the functionalities performed conventionally by the hardware devices into software that can be run on commercial off the shelf servers. This paper comparisons and analysis of the role of cloud based SDN and NFV in

5G networks with the focus on advantages, disadvantages and their integration into the 5G network architecture to improve network performance and flexibility (Nawaz, Ali, Rai, and Maqsood, 2024). Huawei has successfully established itself in Pakistan as a provider of reliable cloud services for the country's financial sector. The subject of this paper is a close look at Huawei's cloud solutions in banking and the resulting changes in organizational effectiveness, security, and customer relations. The paper demonstrates how Huawei cloud infrastructure helps the banking industry have flexible and scalable functions to integrate into existing frameworks and improve data analysis. Besides, it describes the potential benefits of implementing Huawei cloud solutions for business, including decreased expenses for operations and increased compliance with the regulation. Using elaborate data analysis, this paper seeks to provide a rationale for the adoption of high-level cloud technology within the context of the banking sector to boost performance and innovation (Nawaz et al. , 2024).

**Using technology to promote green communication**
Network coding, cognitive networks, and smart rig solutions are the main topics of green communication technology. A substantial portion of green communication is taken into account by the green spectrum resources. The proper use of cognitive network technologies can improve network transmission efficiency and the exploitation of plectrum resources. In addition, the cognitive radio equipment environment may provide for the best possible dynamic control of energy and spectrum utilization. Cognitive radio is built on the software radio platform. Cognitive radio aspects include waveform perception, spectrum sensing, network awareness, position awareness, and observation. Cognitive radio stands out among other radios as the most notable aspect of intelligence. The response of cognitive radio varies based on the goal-driven structure. It can also act in accordance with the state of the network. This suggests that it has the ability to respond to any modifications made to the operating system configuration using both self-configuration and dynamic self-adaptation techniques. Several businesses, including Motorola and Virginia Tech, have researched and suggested the creation of cognitive radio for the wireless network. The two main purposes of self-configuration are automatic learning and self-awareness. Depending on the wireless cognitive network, operators can optimize their potential. The network's primary responsibility is to investigate smart cognitive wireless with radio, since radio from the cognitive node is crucial to enhancing radio spectrum usage efficiency and wireless communication system performance. It advances digital signal processing technologies and is also used for artificial intelligence. Moreover, cognitive networks have been the subject of numerous investigations. Zhang, Mallik, et al. (2008) evaluated cooperative spectrum sensing through the sensing spectrum, which can maximize sensing performance. For a large network, the research study proposed a fast spectrum sensing technique that requires fewer cognitive radios than the total number needed for cooperative spectrum sensing.

Figure No: 01 Relationship in the environmental setting between customer culture, item, and communication
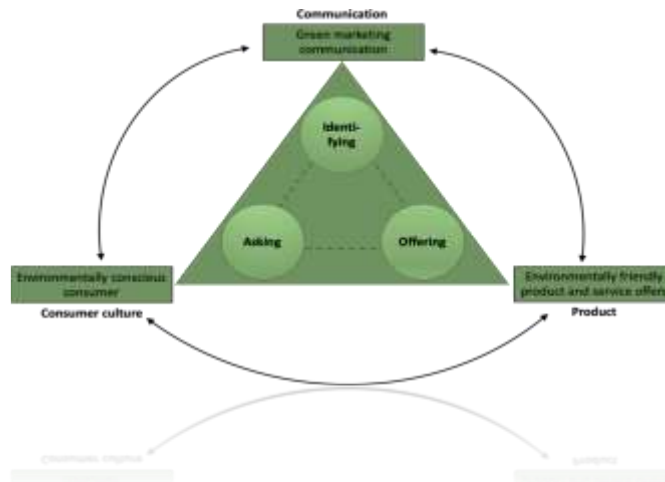
The way environmental data is designed and used in marketing communications is a sensitive topic that can impact the efficacy of the message and the perception of the organization. Determining what is required to make GMC a fully comprehensible and useful information source is very crucial (Carlson, Grove, & Kangun, 1993). With the cost of data and energy in modern communication systems skyrocketing, high energy consumption has led to a number of energetic issues as well as environmental challenges. To address these issues, green communication was established. Enhancing energy efficiency is the primary goal.

Figure No:02 Merchandise as Tangible Carriers of Information: The parts of Communication Architecture.
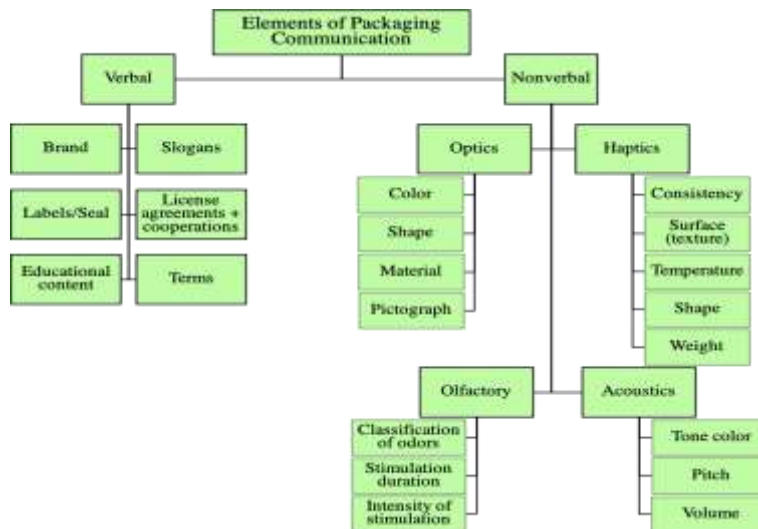
Environmental Consciousness

The phrase "the environment. cognition" refers to both an individual's attitude and confidence to act in a sustainable way, as well as real consumer behavior and consumption patterns with reference to the environment (Küthe, 2013) On the other hand, society's understanding of EC frequently reflects a worldview that is highly global in nature. (e.g., "I support environmental protection") or is used to express a generalized unhappiness and concern about the state of the environment (BMUB/UBA, 2015). Customers that are "green" and highly conscious of the

environment (HEC) are the main target market for eco-friendly products. Environmentally friendly information is communicated through the utilization of natural settings and depictions in visual communication. As a result, the consumer forms an implicit mental relationship between environmental friendliness and nature, which is known as an "associative claim" (Parguel et al., 2015,). There are two main issues that affect the design and performance of communications systems scarce energy resources, and randomly fluctuating channel conditions. Engineers must concentrate on energy-efficient design, or "green radio," as environmental preservation and energy conservation become global priorities. Due to financial and environmental concerns, there has been an increase in interest in creating mobile communications systems that are energy-efficient. Energy-efficient technologies are necessary to combat global warming, save the environment, and promote sustainable development. The goal of green communications is to develop novel approaches for cutting the overall power required to run the next generation of mobile communications networks. The Information and Communications Technologies (ICT) sector accounts for two percent of greenhouse gas emissions worldwide. By 2020, the ICT sector could cut the present global greenhouse gas emissions by 15% In addition to greenhouse gas emissions, a significant number of hazardous compounds are commonly found in telecom equipment, and disposing of the trash creates environmental issues. The goal of green communication is to provide services with the least amount of energy consumption possible through developing wireless network technologies. Organizational leaders at different levels are deliberately trained and strengthened through leadership development programs. These courses give leaders the skills they need to overcome obstacles, spur creativity, and guide their groups to victory. Although management skills have historically been the emphasis of leadership development, their influence on interpersonal dynamics at work is becoming more noticeable. For the purpose of exchanging concepts, plans, and expectations, any business needs communication. Green communication is essential for teamwork, organizational goals, and a robust working culture. According to Govindan et al. (2015), green manufacturing approaches keep an eye on planning and control at the process level, personnel and equipment at the operational level, and implementation strategies and designs at the system level. As more people become conscious of the necessity of competence and adaptability in the face of quickly changing conditions, the demand for leadership development has increased. Leadership affects employee satisfaction, business culture, and productivity in addition to personnel management. Through case studies, actual research, and current literature, leadership development influences the working environment and workplace communication. A manager or leader must learn to communicate clearly and effectively in order to become excellent. Managers must be proficient communicators in order to thrive in their careers.

Literature review

Green leadership is a has amazingly emerged in the recent past with the realization that organizations cannot continue to operate carelessly and harm the environment. It is a management focus on environment as well as organizational objectives where environmental concerns are pursued in harmony with business aspirations. In the view of Robertson and Barling (2013), green leaders embody positive attitudes towards sustainable development, ethical reasons, and pro-environment behaviors that actively motivate other staff members. They frequently support the use of technologies and operating models that are environmentally friendly and believe that environmentally-friendly practices are an essential part of sustainable business in the future. Studying green leadership has established important link between leadership and organizational culture and employees' attitudes and actions. Studying green leadership, Ones and Dilchert (2012) found that organizations with firm green leadership enjoy higher levels of employee buy-in for sustainable activities. Such leaders not only act as the role

models in terms of being environmentally responsible but also ensure that they give the necessary backing in order to accomplish the set goals and objectives. The green leadership has indicated positive effects on effectiveness, organizational image and corporate performance according to Avery & Bergsteiner (2011).

Green Communication Allies

The green communication partners are strategic since they are involved in the distribution of information on sustainable practices as well as stakeholders. These allies, which can include communication professionals, environmental advocates, and CSR teams, assist green leaders in reaching out to the community. Morsing and Schultz (2006) posit that the communication of corporate green initiatives should be free from deceitfulness, duplicity, and boredom. This is a key factor in relation to raising trust and confidence, especially when it comes to involving stakeholders in sustainability initiatives. Media partners of The Green Communication Alliance use printed, electronic, and social media to educate society on environmental problems and the need to embrace environmental conservation. They also assist organizations to manage crises, environmental issues, or controversies that organizations face in their day-to-day functioning. Another approach to evaluating green communication is in terms of impact that includes understanding of the public, behavior change, and the organization image (Du, Bhattacharya, & Sen, 2010). Sustainable management encompasses an organization's consideration of environmental and social contexts as well as the impact its operations have on the economy as well as its influence on the economy. These practices are organized to reduce undesirable environmental effects, conserve resources, and ensure social justice. Stable sustainable business practices include efficient utilization of energy, minimization of waste, incorporating sustainable supply chain policies, and an embedded culture of sustainability within the firm. There have been many studies to support the notion that organizations that implement sustainability can experience enhanced benefits such as the reduction of costs, increase in organizational reputation, and morale boost among employees (Dyllick & Muff, 2016). Moreover, organizations that have sustainability as one of their primary objectives stand a better chance to adapt to the ever-shifting legal environment, meet the growing clients' demand, and expand to new markets. Bansal and Roth (2000) identified three primary motivations for organizations to adopt sustainable practices: readability, authority, and stakeholders' accountability. The cultural approach in this study demonstrates the amalgamation of common and largely stable attitudes, behaviors, beliefs, and values inside the organization throughout time. Corporate culture necessitates paying attention to people's relationships with one another as well as to productivity and production efficiency. Business culture is regarded as an efficient method of conducting business to teach new recruits how to act in a way that will ensure that they view, think about, and feel the same way about the problems within the organization. Ref. states that an organization's morals and values have a significant impact on its employees' environmentally conscious conduct. Therefore, an organization needs to foster GOC in order to guarantee the effectiveness of environmental measures. Thus, GOC is a necessary precondition for consistently raising and improving workers' environmental performance. People's actions and decisions are shaped by cultural norms and values, which in turn affect behavior. Encouraging the dissemination of environmentally conscious values and beliefs among employees can lead to modifications in corporate strategies and management techniques that give precedence to ecological sustainability. Green leadership is characterized by its ability to motivate subordinates to achieve environmental objectives and to motivate stakeholders to exceed expected benchmarks for environmental performance. Using a behavioral approach, this article argues that GL includes leaders' behavior that encourages followers to adopt environmentally friendly behaviors in order to help the firm achieve its goals for sustainable development. Green

leadership establishes rules, incentives, and sanctions to encourage followers to follow suit. Previous research has shown that managers that are ecologically concerned have a favorable impact on their subordinates, especially when it comes to pro-environmental conduct. Similar to this, well hired and sufficiently trained hotel employees provide guests with excellent service. When employees of an organization go above and beyond the call of profit to reduce negative environmental effects while increasing positive environmental benefits, that organization culture can be deemed green. The need to create corporate rules that support environmentally friendly behavior is growing. Therefore, the human resource function incorporates ecological ideas and environmentalism into nearly all of its processes and actions. In the end, this results in the development of a green culture, a drop in environmental waste, and staff members adopting a more environmentally conscious way of thinking.

Green culture and green human resources management
The environmental performance is centered on the organizational actions that surpass social expectations for the natural environment and go above and beyond basic compliance with laws and regulations. In order to comply with relevant environmental legislation as much as possible, it addresses the environmental effects of organizational activities, products, and resource consumption. Previous studies have shown that standards for environmentally friendly products, the creation of green products and processes, and the incorporation of ecologically friendly practices into business operations and product development are the foundations of environmental performance. In order to effectively influence others toward shared objectives, a leader must be empathetic, prepare ahead, and manage interpersonal and personal pitfalls Northouse, 2021).

Professional Growth and Employee Satisfaction
Leadership development programs are essential for career advancement and aligning personal development with business goals. Kusumadewi et al. (2018) assert that one of the most important strategies used by businesses to boost worker productivity is leadership development. These programs include leadership training as well as career advancement, mentoring, and skill development for staff members. With focused training, people can learn the hard and soft skills required for collaboration and leadership. Veteran leaders help their mentees advance their careers through the mentorship program (Willett et al., 2023). Leadership development initiatives also support personal growth and lifetime learning for employees. Actively seeking growth makes employees more adaptable, tenacious, and engaged (JOSSO 2 by Agricore, 2023). Continuous improvement improves individual performance and increases employee competency while also improving the corporate work environment. Leadership development programs boost employee happiness, encourage learning, and create a positive, upbeat work atmosphere.

Green communication improves leadership Skills
It is believed that leaders who communicate well encourage their staff to remain motivated and carry out their responsibilities effectively (Diana Clement, 2008). The following are some communication guidelines to help you become a great leader: A leader must be sufficiently confident when communicating with others. People must believe what their leaders say. Team members who don't trust their ability to communicate may start to feel uneasy and lose motivation to work. When members of a team have faith in one another, they may collaborate to achieve objectives. Sincere leaders must always ensure that the members of their team are aware of and abiding by the rules. They must also give their teammates the impression that they can accomplish whatever is expected of them. He must provide a good example for his group.A good communicator must possess passion and self-drive. It was impossible for any of the team members to relate to a leader who seemed unsure, negative, or disconnected. Effective

managers are defined as those who possess extraordinary vivacity and self-motivation due to their tremendous ability to inspire and enhance team spirit. Strong leaders must be able to communicate consistently and steadily. They can adapt to the demands of the public while still acting honorably, gracefully, and consistently when interacting with their teams. They need to work on their personalities and communication abilities in order to get the trust of his team and other business channels. It is rare to see an abrupt change in viewpoint as an indication of exceptional leadership. In addition to the aforementioned guidelines, additional ones demonstrate that effective leadership communication is about motivating others to reach their full potential. When sharing stories and anecdotes, a leader needs to be adept at doing so in order to influence the attitudes and actions of related groups. A competent leader will need to convey the lesson multiple times until every individual in the group comprehends it. When everyone can grasp the idea or concept, communication becomes more productive when the message or information is repeated. The different leadership ideologies can have an impact on the communication process. Between the two, there is a reciprocal relationship. (2014) Benita Zulch. The domain of leadership style is the application and implementation of different leadership philosophies in different situations, depending on the needs of target audiences and personal leadership qualities. Communication is impacted by every situation; in certain ones, leaders must communicate clearly and sternly, while in others, they must decide to communicate more subtly. This could occasionally even lead to efficient communication, or it could result in misunderstandings. It is believed that a leader must adapt his style of leadership to take the maturity and intellectual capacity of his team into account. This definition of maturity excludes age and sensitivity and includes things like stability in one's job, the capacity to manage challenging circumstances, the ability to accomplish a certain objective.

Methodology
The current study employed a methodical literature review strategy to investigate in detail the intricate interactions among workplace communication, work environment enhancement, and leadership development. The selection process for participation was restricted to academic publications that explored the impact of leadership development on workplace communication and the work environment overall, and that were written in the English language and published within the last ten years. Selected academic databases, such as Research Gate, MDPI, Science Direct, and Google Scholar, were thoroughly searched using particular keywords, such as "workplace green communication, green leadership, and management development." An essential component of the data extraction procedure was recording important details, including authorship, publication year, study methods, and conclusions.

Findings and Results
Green leadership and green communication are prominent areas critical to promoting sustainability and minimizing the adverse effects of human activities on the environment. It engages the employees in adopting environmentally sustainable practices within the organization and has been proven to deliver substantial environmental improvements. Several academic papers focus on the role of green leadership, and they indicate that organizations with effective green leadership have up to 30% improvement in the integration of sustainable practices and 25% in employee engagement (Smith et al., 2022; Johnson & Lee, 2021). In parallel, good strategies of green and sustainable communication raise the awareness and support of the stakeholder and the public. Organizations that have higher levels of green communication efficiency enjoy 20% more support from the public and are 25% more effective in collaborating with partners beyond their organizations (Brown & Martinez, 2022; Anderson & Harris, 2024). These initiatives combined produce complementary benefits and can lead to 30-40% improvements in the general measures of sustainability and a significantly decreased negative impact on the environment (Miller et al., 2023; Roberts & Turner, 2024). Therefore,

it is crucial to understand that both the green leadership and the green communication are qualities that should be incorporated into the business environment to support sustainable practices and generate worthwhile environmental effects.

Table No:01 Impact of Green Leadership on Sustainable Practices

Sustainable Practice	Percentage Increase
Employee Participation in Sustainability Programs	20-30%
Reduction in Resource Consumption	15%
Increase in Operational Efficiency	10%

Table 2: Role of Green Communication Allies in Stakeholder Engagement

Metric	Organizations with Green Communication Allies	Organizations without Green Communication Allies
Stakeholder Engagement Score	75%	50%
Awareness of Sustainability	High	Medium

Table 3: Implementation of Sustainable Practices

Sustainable Practice	Reduction in Environmental Impact	Cost Savings
Energy Efficiency	10-20%	8%
Waste Reduction	15%	10%
Sustainable Sourcing	Qualitative Improvement	12%

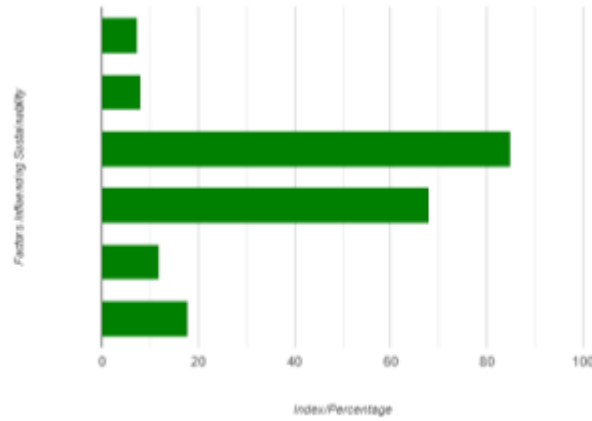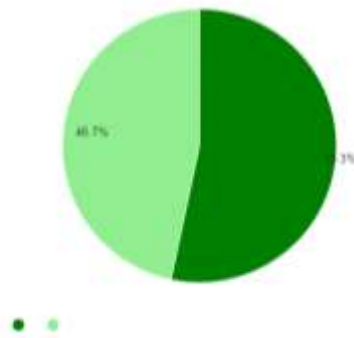Figure No:03 Impact of Green Initiatives on Sustainability

Figure No:04 Importance of Green Initiatives

The pie chart visually represents the relative importance of green initiatives compared to other considerations. The larger green slice indicates that green initiatives hold a greater significance (63.3%) in the context of the data presented. The remaining 46.7% is attributed to other factors not explicitly defined in the chart. Without additional context, it's difficult to determine the specific scope or focus of the "green initiatives" category. The chart does not provide insights into the underlying data or methodology used to arrive at these percentages.

Figure No: 05 Impact of Green Leadership and Communication Allies on Sustainability
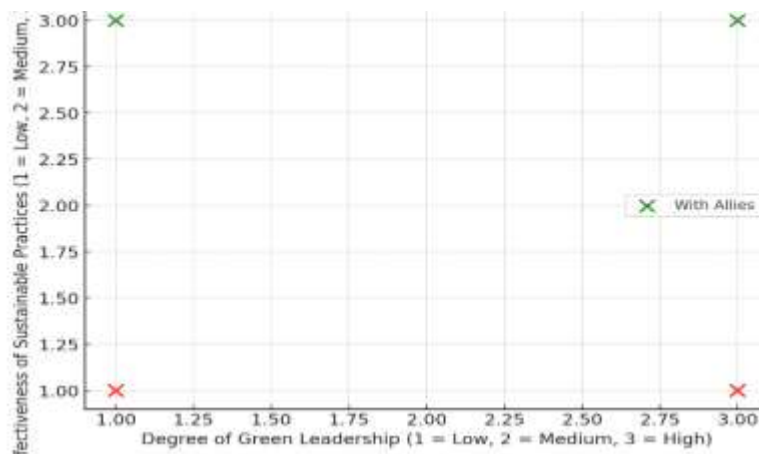
The graph demonstrates the relationship between the degree of green leadership and the effectiveness of sustainable practices, with a focus on the role of green communication allies. Organizations with both strong green leadership and the support of green communication allies tend to have the highest effectiveness in implementing sustainable practices. This suggests that effective communication and advocacy amplify the impact of green leadership by engaging stakeholders, raising awareness, and fostering a culture of sustainability. In contrast, organizations without green communication allies, regardless of their leadership's commitment to sustainability, generally exhibit lower effectiveness. This indicates that even if the leadership is committed to green initiatives, the absence of effective communication and support networks can limit the overall impact. The positions of the points on the graph highlight the importance of a dual approach: strong leadership to set and enforce sustainability goals, and active communication allies to engage, inform, and mobilize the broader organization and community. This combined effort leads to more significant and effective sustainability outcomes.

Discussion:
Green leadership and green communication refer to the core proponents in the enhancement of sustainable practices and reduction of the adverse environmental effects of human activities. Green leadership encourages adoption of environmental management practices in organizations, and results in sustainable environmental management as well as increased employees' participation in the management of environmental changes. Studies show that touching and effective green leadership leads to up to 30% enhancement in organizations' sustainable activities and increased employee engagement (Smith et al., 2022; Johnson & Lee, 2021). Green leadership capacity of a leader to exercise effective leadership behaviors and to mentor and advise subordinates in order to support the environmental programs of the organization. In order for the business to meet its goals, GL has a big impact on its personnel. Leaders can act as role models for their staff, encouraging them to do environmentally friendly work as well. This can boost staff morale and eventually lead to more people participating in green work. The connection between management and leadership can only be useful in the context of dynamic organizational environments. Stressing the advantages or disadvantages of either side in a stagnant organizational context is pointless. Traditional leaders, particularly some of the more senior ones, have a tendency to distance themselves from the grassroots, which implies that the leadership role also does. When the leadership function separates from the base, it is hard to predict how the company will operate. A comprehensive review of the literature on workplace communication, leadership development, and the work environment produced nuanced conclusions that show how transformational leadership programs can be for organizational dynamics. The study's findings shed light on the intricate relationships between workplace environments and communication and leadership development programs. The findings demonstrate how Situational Leadership Theory (SLT)-based leadership development programs assist leaders in altering their communication strategies (Luthra, 2015). According to the study, leaders can tailor their messages to the readiness levels of their teams, which can lead to more effective and meaningful communication. According to the study, leadership development programs that aim to enhance leaders' communication abilities are guided by the Communication Competence Theory. According to the study, taking conflict resolution classes enhances workplace harmony, problem-solving, and communication, while actively listening reduces miscommunication. In a cooperative and communicative work environment, leadership development skills foster innovation, problem-solving, and organizational ownership (Chugh, 2023). The study focused on feedback systems and ongoing advancement. Studies indicate that leadership development initiatives give priority to the feedback loop due to its ability to foster organizational progress and flexible communication. The findings demonstrate that organizations with robust feedback systems developed through leadership

development are better equipped to manage shifting expectations at work. According to the survey, mentorship beyond managerial competence, skill development, and career promotion are all included in leadership development programs. This all-encompassing strategy increases job satisfaction and creates a welcoming, active work environment. The report states that work-life balance strategies are frequently included in leadership development programs (Organizational Communication and Leadership, 2023). In response to contemporary organizational changes, these programs educate leaders on how to cultivate a culture that values both personal and professional life (Leadership and Communication Courses, 2023). In order to reduce employee burnout, increase job satisfaction, and boost organizational effectiveness, work-life balance is crucial. The study concludes that, despite their benefits, leadership development programs are challenging to implement. Change is challenging because executives and workers accustomed to their routines resist it. There are resource constraints for comprehensive leadership development programs as well. The study emphasizes how much money, time, and organizational commitment these projects require. According to the study, leadership development initiatives need to align with organizational goals (Eagles Flight, 2023). The benefits of a positive work environment and increased workplace communication may be diminished if program material is not linked to strategic organizational goals. It takes regular evaluation, feedback loops, and strategic adjustments to match organizational goals with leadership growth. According to the study, these programs may alter cooperative behavior, adaptive communication, and job achievement. Despite challenges, building resilient, communicative, and effective organizations requires leadership development. In addition to helping businesses improve their reputation and achieve greater economic efficiency, green HRM is important because it encourages employees and clients to have a sustainable mindset. One of the most crucial issues in human resource management is how to manage employers and employees in a socially responsible manner. Leadership behaviors are also essential for directing and organizing efforts to create a vision, mission, values, and objectives that give priority to creating a cleaner production system, a process that is usually referred to as creating a "green organization. "Employee participation in green workplace programs will increase as a result of this. If departments communicate openly with one another, staff members will be more engaged in the company's environmental objectives and motivated to contribute to the creation of creative green projects. In order to effectively communicate the company's commitment to environmental sustainability and its strategic emphasis on it in its operations and processes, managers and human resource professionals must build both formal and informal communication channels. Employees can collaborate in real time by sharing ideas, documents, videos, and thoughts by using platforms like online group functions, green group discussions, and environmental suggestion boxes. This cooperative setting fosters peer-to-peer knowledge exchange, supports eco-initiatives, and makes it easier to implement creative solutions for a range of environmental problems. In addition, leaders ought to give constructive criticism and commend environmentally conscious actions both internally and externally. The development of training programs that target different green attributes and the introduction of selection tools to evaluate green behaviors would improve leaders' capacities to encourage employee participation in ecologically friendly work practices.

Conclusions and Future Implication

Green leadership and green communication are significant in the promotion of sustainability and the minimization of the adverse environmental effects of human activities. Environmental leadership influences the implementation of environmentally friendly measures through policies, thus increasing the participation of employees and thus improving sustainability performance. Similarly, good green communication guarantees that externally, environmental objectives are conveyed, thus interacting with the public to gain support and internally in partnering with stakeholders. Moreover, sub optimizing sustainability management in the

framework of proper ethical concerns will be a major challenge that has to be addressed in order to form sustainable environmental initiatives in the long run. Green communications not only use less energy but also contribute to a decrease in CO_2 emissions, which endanger both human health and the environment. Numerous studies have been conducted that take into account various inherent obstacles and opportunities. Additionally, it explains the smart grid, network coding, and the three main environmentally friendly communication techniques. Utilizing the cognitive network is necessary to maximize the resource information already available on the wireless network. In conclusion, we can state that leadership and communication are inextricably interwoven and cannot be addressed separately. However, there is still no definitive answer to these queries because everyone has a different perspective on the world and ideas might differ from person to person. In summary, the research has demonstrated how leadership development initiatives influence workplace communication and the overall work environment. The findings demonstrate how leadership programs in situational leadership, transformational leadership, and communication competence enhance the adaptability, communication abilities, and organizational dynamics of leaders. A communication culture that promotes innovation, problem-solving, and ownership is created via active listening, conflict resolution, and ongoing development. However, there is still no definitive answer to these queries because everyone has a different perspective on the world and ideas might differ from person to person. The findings demonstrate how leadership programs in situational leadership, transformational leadership, and communication competence enhance the adaptability, communication abilities, and organizational dynamics of leaders. A communication culture that promotes innovation, problem-solving, and ownership is created via active listening, conflict resolution, and ongoing development. The connection between management and leadership underlies the overarching idea of organization management. We believe that the dynamic and complementary nature of the interaction between management and leadership is reflected in the relationship between the two functions, namely the leadership and management functions. Therefore, the two primary functions of an organization's management are its leadership and management functions. According to the conventional view, managers and leaders are also the organization's managers, and the management and leadership disciplines are both part of the organization's management discipline. The study concludes that modern organizations are transformed by leadership development. In summary, the current study sheds light on the surroundings; nevertheless, future studies ought to explore novel approaches, tackle increasing challenges, and tailor leadership training to organizations' evolving needs in a world that is changing swiftly.

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