



RESEARCH PAPER

The Impact of Social Responsibility on Sustainable Performance: Mediating Role of Green Leadership

¹Erum Gul and ²Irfan Ullah Khan

1. PhD Scholar, Department of Public Administration, Gomal University, Dera Ismail Khan, KP, Pakistan
2. Assistant Professor, Department of Public Administration, Gomal University, Dera Ismail Khan, KP, Pakistan

Corresponding Author: erumbaloch1980@gmail.com

ABSTRACT

This study investigates the impact of social responsibility upon sustainable performance in banking sector with mediating role of green leadership. The social considerations are becoming part of core business and organizational operations and strategies in banking sector, as organizations are being called upon to incorporate them into their long-term sustainability. In order to examine the linkages among variables, this study used quantitative research technique by collecting data from employees in banking sector through structured questionnaires. The correlation and mediation procedures are used to analyze the relationships between social responsibility, green leadership, and sustainable performance. The results revealed that social responsibility has a positive significant impact upon sustainable performance by boosting the efficiency of the organization, satisfying the stakeholders, and strengthening competitiveness in long run. The findings also suggest that there is a significant mediation between social responsibility and sustainable performance through green leadership. The research highlights the standing of integrating responsible business practices with environmentally conscious leadership to enhance the organizational sustainability, competitive advantage, and long-term success.

Keywords: Social Responsibility, Green Leadership, Sustainable Performance, Mediation & Banking Sector

Introduction

In developing countries, social responsibility positively influences sustainable performance in the banking sector by promoting ethical practices, community development, and environmental awareness (Lozano & Collazzo, 2022). The green leadership strengthens this relationship by encouraging eco-friendly policies, sustainable decision-making, and responsible organizational behavior, which enhance long-term organizational growth and sustainability (Sehat, Dharma & Indra, 2024). In contemporary competitive environment, organizations are continuously trying to pursue their responsibilities toward the workforces, stakeholders and communities in order to meet their business operation efficiently and culminates at corporate image and reputation towards desired sustainability (Lee & Kim, 2020). These responsibilities under corporate social responsibility are amalgamation of different practices that ensure organizational effectiveness toward desired developments in diverse contexts including banking sector (Qureshi, Baig, Dar & Malik, 2025). These responsibilities need commitment from the responsible manner towards anticipated outcomes.

The sustainable performance involves realizing long-term success while considering economic, social, and environmental impacts toward the stakeholders and societies in order to ensure their contributions towards developments (Inayat, Afridi & Javed, 2022). The linkages among social responsibility, green leadership, and sustainable performance are dynamic features of banking sector sustainability. The green leadership

involves the leaders who are environmentally aware, help sustainability, and integrate eco-friendly practices into banking strategies (Nasir, Zakaria & Zien, 2022). The green leaders play vital role in shaping and implementing corporate social responsibility initiatives related to the environmental sustainability, ethical practices, economic concerns and social responsibility (Tosun, Parvez, Bilim & Larry, 2022). The engagement in social responsibility activities supports banking sector to build positive reputation and strong corporate image as the customers desire banks that establish commitment to social, economic, ethical and environmental issues (Elving, Lange & Ban, 2019), in order to ensure the desired and leading outcomes.

The corporate social responsibility initiatives contribute towards trust and loyalty of various stakeholders, includes customers, investors, employees, stakeholders and community as banks' ethical and responsible behavior fosters long-term relationships (Aguilera, Rupp, Williams & Ganapathi, 2017). The corporate social responsibility initiatives help banks in managing and mitigating risks linked with the environment, social, and governance factors and by addressing these issues proactively, prevent potential financial and reputational risks (Haider & Qayyum, 2018). Thus, adopting CSR practices contributes to long-term sustainability and resilience of banking sector by addressing social and environmental issues to build stable and responsible financial effective system (Ahmad, Jawaid, Arshad & Paracha, 2021). The social responsibility is highly important in the banking sector for variety of reasons as social responsibility practices enhance reputation of banks, contributing to increased public trust and positive public image is vital for attracting and retaining the customers (Qureshi, Baig, Dar & Malik, 2025), to improve the corporate reputation.

The customers, especially in modern era, are conscious of social and ethical issues as the banks that demonstrate social responsibility are likely to attract and retain customers who align with these values (Alam & Islam, 2021). The socially responsible banking involves ethical lending practices, ensuring that funds are allocated to projects that benefit societies. In this linking, avoiding investments in socially and environmentally harmful activities is key aspect of ethical advancing (Cheema & Javed, 2017). The banks can design products and services that cater to the needs of underserved or financially excluded people, contributing to social development (Gössling, Polonsky & Voola, 2020). These features of social responsibility and sustainable performance are intimately linked in situation in banking sector since banks are at the center of economic development, determining the flow of investment, and positively affecting the well-being of the society (Qureshi, Baig, Dar & Malik, 2025). The green leadership aligns with the broader global efforts toward sustainable development, environmental protection and corporate social responsibility.

Literature Review

The corporate social responsibility has dynamic role in sustainable performance of banking sector since banks are important intermediaries in economic growth, financial stability and societal development and decisions made determine not just the financial markets but also environmental and social performance (Islam, Ahmed, Ali & Sadiq, 2016). The sustainable performance in banking sector involves being lucrative and responsible that lend in the ethical fashion, good governance, environmental responsibility, trusted customers, as well as ensuring institutional stability in long term (Yusliza, Yong, Tanveer, Faezah & Muhammad, 2020). The banks can enable sustainable development responsible businesses and environmentally friendly initiatives through the responsible lending practices which ensure that they do not finance the activities that may harm environment society (Inayat, Afridi & Javed, 2022). Therefore, such compatibility of financial services with the related principles decreases the vulnerability to environmentally and socially hurtful investments and indorses long-term financial stability in diverse circumstances.

The green leadership involves leaders who are environmentally aware, help sustainability, and integrate the eco-friendly practices into banking strategies (Buil, Martínez & Matute, 2019). The green leaders play crucial role in shaping and realizing diverse corporate social responsibility initiatives related to environmental sustainability, ethical practices, economic concerns as well as social obligation (García, Jiménez & Gutiérrez, 2022). Thus, the green leaders influence the organizational culture, fostering commitment to sustainability among employees overcome at the desired sustainable performance (Abasilim, Ugochukwu & David, 2014). The green leaders are instrumental in aligning talent management practices with organizational green objectives, ensuring a workforce that shares and implements sustainable values (Koh, Lee & Joshi, 2019). The environmental corporate social responsibility practices lead to ethical values, resource efficiency, reduced environment impact, and innovation in sustainable technological progress overwhelmed at sustainability and desirability towards attainment of desired developments and anticipated successes.

In this drive, the corporate social responsibility dimensions, when effectively implemented and positively influence the sustainable performance leading towards the desired reputation and anticipated successes (Mughal, Jehangir, Khan & Saeed, 2020). The banks that embrace CSR include energy reduction, emissions, waste reduction, or use of technologies that are thus eco-friendly (Elving, Lange & Ban, 2019). These programs not lessening environmental footprint but also enhance efficiency, cost cutting of its operations, hence contributing to environmental sustainability and financial results (Perez, Martinez & Bosque, 2013). In this drive, sustainable performance indicates that how organization attains balanced results in terms of the financial prosperity, environments, societal well-being and corporate social responsibility for objectives (Cheema & Javed, 2017). The strategic direction and ethical foundation are set through the corporate social responsibilities and related sustainability principles are incorporated within organizational culture and practice through green leadership for realizing desired and leading required consequences.

It helps in fostering innovation and competitive advantages since ideas make banks create the sustainable financial products, services as the CSR offers the strategic justification to invest in such actions as green bonds, sustainable lending, and digital banking solutions that will cut environmental footprints (Yusliza, Yong, Tanveer, Faezah & Muhammad, 2020). Therefore, they trust to indorse stakeholder confidence, ease innovation, reinforce risk management, and sustainable performance making the banks responsible participants who can contribute towards economic growth, protecting environment and societal welfare (Achim, Borea & Miron, 2017). Therefore, the green leadership can influence and guide integration of CSR dimensions into organizational strategy as assurance to the environmental responsibility, ethical practices, and social initiatives sets the tone for the entire banking sector (Inayat, Afridi & Javed, 2022). Green leaders play pivotal role in driving performance as vision, commitment, and ability to inspire and activate teams donate to effective execution of sustainable practices, leading to improved performance

The green leaders are influential in shaping culture of environmental responsibility within the organization. In this linking, they influence green management by attracting, developing and retaining employees who share a commitment towards the sustainability (Lozano & Collazzo, 2022). Although CSR activities indicate how much bank is keen on welfare of the society and the environment, their success in ensuring sustainable performance that usually relies upon the organizational processes that transform these activities to active and strategic performance (Brown & Smith, 2020). The extent wherein green leadership and sustainable performances become vital conforming structures that enable the process of performance (Pantouvakis & Vlachos, 2020). The corporate social responsibility includes incorporation of ethics, social, and environmental factors into organizational strategies along with operations for desired outcomes (Gössling, Polonsky &

Voola, 2020). In this linking, the leaders who espouse ideals of the sustainability establish interstellar where CSR diverse practices are internalized as opposed to peripheral concerns.

The empirical research shows that green leadership improves alignment of CSR strategies with organizational goals, therefore, improving the chances that environmental and social initiatives would lead to meaningful contribution towards sustainable performance (Achim, Borea & Miron, 2017). The CSR aspects in banking usually includes the environmental accountability, community relationships, ethical management, comprising the financial practices (Gössling, Polonsky & Voola, 2020). The green leadership has been theorized as the way of leadership where the leaders of organization are devoted to environment, long-term strategic orientation, and fostering the pro-environmental attitude among workers (Elzek, Gaafar & Abdelsamie, 2021). Thus, the green leadership ensures that the banks' strategies and practices align with the sustainability goals, promoting environmentally responsible and socially conscious business operations. Green leadership is identified as important strategic capability that contributes to process of realizing sustainable performance by banks in terms of economic, environmental, and social aspects.

In banking industry, sustainable performance is not merely about financial performance but includes operational effectiveness and efficiency, environmental stewardship, satisfaction of the stakeholders, risk management, resiliency over long term (Jiang, Zhao, Jiong, 2017). The connection that exists between green leadership and sustainable performance attributes is based on the assumption that a leader has a say upon organizational priorities, culture, and resource utilization (Khaw, Teoh, Khalid & Letchmunan. 2022), therefore defining the extent to which sustainability has banking strategies and day to day operations (Li, Bhutto, Xuhui, Zafar & Bhutto, 2020). According to scholars, sustainable leadership is not just about profitability but also about making ethical choices and pursuing and social outcomes and makes the banks the force behind sustainable development (Gössling, Polonsky & Voola, 2020). Therefore, this study is an effort to examine the relationships among social responsibility, green leadership and sustainable performance in order to test the theoretical model in banking sector to ensure innovative contributions.

Hypotheses

- H₁. There is a significant association among social responsibility, green leadership and sustainable performance in banking sector
- H₂. The green leadership significantly mediated the relationship amid social responsibility and sustainable performance in banking sector

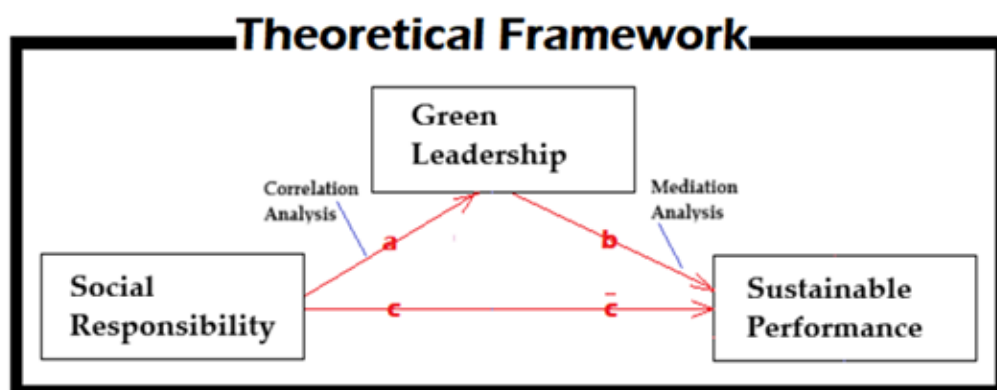


Figure 1 Theoretical Framework

Material and Methods

The research design helps in designing overall roadmap and guiding principle for exploring the research issues likewise social responsibility, green leadership, and sustainable performance in particular context. The research design helps in understanding the nature of variables and their interrelationships in producing the desired outcomes (Saunders, Thornhill & Lewis, 2007). In quantitative studies, surveys play pivotal role in as it provides systematic and structured means of collecting data from defined population (Saunders, Lewis & Thornhill, 2009). The standing of survey stems from its ability to generate numerical data that can be analyzed statistically to test hypotheses, uncover patterns, and support generalizations. The research approach provides the directions towards application of certain methods towards the approachability parameters (Ridenour & Newman, 2008). The research approach in quantitative studies is basic element that shapes research process from formulating hypotheses to data collection, analysis, and interpretation. It provides plan for how study is conducted and ensures that findings are reliable valid, and generalizable.

The population is considered as important element for conducting research on particular issues in the particular contexts over required sample to ensure generalizability (Palys & Atchison, 2014). The population in this research comprising employees from banking sector in southern region, Pakistan. The convenient simple random sampling approach be suitable to ensure the representation of diverse segments of this sector (Patton, 2015). The determination of sample-size depends upon various factors, including the precision required and the resources available (Yamane, 1967). Therefore, a sample (339) was selected from entire population (2244), over sampling formula as entire population is not vital to access not it is not needed for conducting research on particular issues. Therefore, 339 questionnaires were distributed wherein 322 were recollected and used for data analysis in order to examine variables and their interrelationships to extract the desired leading information for reaching the conclusion. The data collection and its analysis are important phases in research aims at reaching the desired conclusion as well as making the decisions

Similarly, combining quantitative and qualitative methods and ensuring rigorous data analysis, it helps in gaining the comprehensive understanding towards the research variables and their interrelationships in particular context (Saunders, Lewis & Thornhill, 2009). Thus, the well-designed questionnaire ensures that research objectives are translated well into the measurable items, empowering statistical meaningful analysis and valid conclusion as questionnaire is not only data collection tool, it is rudimentary part that determines the success of study (Ridenour & Newman, 2008). The validity and reliability are important pillars of quality in quantitative research as it ensures that collected data is consistent, accurate, and truly reflective concepts being studied. The mediation analysis is the statistical tool and procedure used to explore the mechanism where variables (independent and dependent) are affected by another (mediating variable) (Preacher & Kelley, 2011). It helps in understanding intermediate paths that explain the relationship between an independent variable, and dependent variable over the mediators for reaching conclusion.

Results and Discussion

The results of study for confirming the association and mediation analysis among social responsibility, green leadership, and sustainable performance are produced in this section in order to analyze variables and extract desired outcomes for reaching the conclusion and making decisions based upon the outcomes from the correlation procedure and regression procedure in study.

Table 1
Descriptive Statistics

	N	Minimum	Maximum	Mean	SD
Social Responsibility	322	1.30	4.80	3.2437	.74280
Green Leadership	322	1.60	4.60	3.4482	.65535
Sustainable Performance	322	1.63	4.70	3.3649	.60377
Valid N (listwise)	322				

The descriptive statistics are foundational tools in research, enabling scholars to summarize and interpret the large volumes of data in comprehensible manner that how it contributes to research outcomes and refer to statistical techniques, organize and summarize characteristics of a data set about mean, minimum and maximum response rates of respondents for measuring the research issues, and standard deviation. The descriptive statistics in current study provide the significant information in describing the research variables in describing variables from the particular perspectives.

Table 2
Reliability Analysis

Research Variables	Items	Alpha
Social Responsibility	10	0.722
Green Leadership	10	0.866
Sustainable Performance	10	0.833
Valid N (listwise)	30	0.896

The reliability statistics is vital aspect of quantitative research, mainly in fields like education, psychology, and social sciences. It helps that tools or instruments used for data collection measure consistently what they are supposed to measure in realizing leading desired outcome based upon valid and reliable information. In this drive, reliability statistics provide significant information about internal consistency among research variables that are above the threshold values (.6), as evident in above table and therefore instrument have valid and reliable Cronbach values in the study.

Table 3
Correlation Analysis (H1)

		[1]	[2]	[3]
Social Responsibility [1]	Pearson Correlation	1	.442**	.633**
	Sig. (2-tailed)		.000	.000
	N	322	322	322
Green Leadership [2]	Pearson Correlation	.442**	1	.524**
	Sig. (2-tailed)	.000		.000
	N	322	322	322
Sustainable Performance [3]	Pearson Correlation	.633**	.524**	1
	Sig. (2-tailed)	.000	.000	
	N	322	322	322

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

The correlation procedure was used to examine association amid social responsibility, green leadership, and sustainable performance that was hypothesized from first hypothesis in study in order to confirm relationship with respect to strength and direction in association. The results from correlation offer significant information about association where positive and significant association was evident like social responsibility and sustainable performance ($R = .633$ & $P = .000$), green leadership and sustainable performance ($R = .524$ & $P = .000$) and thus from the correlation results and outcomes, the first hypothesis about association is accepted in current research study.

Table 4
Model Summary (H2)

R	R Square	MSE	F	df1	df2	p
.4424	.1957	.3465	60.1763	1.0000	320.0000	.0000

Table 5
Coefficients of Regression (H2)

Model	Coefficient	se	t	p	LLCI	ULCI
Constant	2.1821	.1596	13.6745	.0000	1.8682	2.4961
Social Responsibility	.3903	.0503	7.7573	.0000	.2913	.4893

Predicting Variable: Social Responsibility, Criterion Variable: Green Leadership

Table 6
Model Summary (H2)

R	R Square	MSE	F	df1	df2	p
.6888	.4744	.1928	146.1730	2.0000	319.0000	.0000

Table 7
Coefficients of Regression (H2)

Model	Coefficient	se	t	p	LLCI	ULCI
Constant	1.0865	.1466	7.4096	.0000	.7980	1.3750
Green Leadership	.2796	.0489	5.7203	.0000	.1834	.3758
Social Responsibility	.4052	.0392	10.3470	.0000	.3281	.4822

Predicting Variable: Social Responsibility & Green Leadership

Criterion Variable: Sustainable Performance

Table 8
Model Summary (H2)

R	R Square	MSE	F	df1	df2	p
.6327	.4003	.2193	228.8606	1.0000	320.0000	.0000

Table 9
Coefficients of Regression (H2)

Model	Coefficient	se	t	p	LLCI	ULCI
Constant	1.6967	.1161	14.6113	.0000	1.4682	1.9251
Social Responsibility	.5143	.0340	15.1281	.0000	.4474	.5812

Predicting Variable: Social Responsibility, Criterion: Sustainable Performance

The mediation procedure is used to examine that green leadership mediated relationship amid social responsibility and sustainable performance by using Hayes process Macro model over four different paths determining direct and indirect relationships amid the research variables for reaching desired conclusion and making decision that whether it is partial mediation or full mediation. In this linking, first path revealed that there is 19.57% change in green leadership is due to the social responsibility with its significant impact ($\beta = .3903$ & P-value = .0000). The second and third paths revealed that there is 47.44% change in sustainable performance is due to social responsibility ($\beta = .4052$ & P-value = .0000), green leadership ($\beta = .2796$ & P-value = .0000), with significant impact that provides clues towards four paths of the mediation leading procedure in study.

The fourth path, while decisive direct relationship amid social responsibility and sustainable performance revealed that there is 40.03% change in sustainable performance is due to social responsibility with the significant impact ($\beta = .5143$ & P-value = .0000). In this connection, all the four paths of mediation provide significant information in reaching the mediation decision that whether it is partial mediation or full mediation in this study. The results confirmed that green leadership partially mediated relationships amid social responsibility and sustainable performance due to decrease in coefficient value from (.5143) in direct relationship to (.4052) in indirect relationship, remaining p-values remained significant and unchanged which thus confirmed the partial mediation role in linking predicting and criterion variables and therefore hypothesis was accepted.

Discussion

The basic research in banking settings has shown that aspects of CSR, such as environmental responsibility, ethical governance as well as the community engagement, have positive effects on sustainable performance when mediated by green leadership and green talent management (Haider & Qayyum, 2018). The green leadership boosts motivational and strategic alignment of CSR, which makes initiatives to be pursued and integrated throughout organizational levels. Meanwhile, the green talent management supports operationalization of CSR as it provides the employees with skills, knowledge and engagement they need to carry out sustainable practices (Peng, Yin, Hou, Zou & Nie, 2020). On the same note, the resource-based and resource-based views hold that organizational resources such as human capital and leadership skills have the potential to offer sustainable competitive advantages (Khan, & Mughal, 2026). Green banks to transform CSR initiatives to the quantifiable environmental, social, and financial performance influences which ultimately contributes to financial sustainability in long run, regulatory and competitive advantage.

According to the literature, these mediating factors contribute to the increase of organizational innovation, lessening environmental threats, better social outcomes, and financial resilience, which all lead to the sustainable performance (Ahmad & Arshad, 2019). The green leadership in effect, serve as intermediation channel which CSR initiatives affect long-term organizational sustainability, altering abstract commitment into action plan and measurable results (Lozano & Collazzo, 2022). On the other hand, green leadership classifies banks who have implemented the CSR as having increased operational efficiency, stakeholder participation and innovation ability (Cheema & Javed, 2017). Thus, research points out that leadership practices and staff competencies may increase the effects of CSR on the environmental and social performance, which ultimately contributes to financial sustainability in long run, regulatory and competitive advantage (Khan & Mughal, 2026). The leadership foster positive climate, inspiring employees to reciprocate thereby actively participating in the CSR diverse initiatives, thereby influencing sustainable performance.

Besides, the introduction of the concept of green leadership in mediation of CSR sustainable performance relationship supports establishment of sustainability-related organizational culture (Elzek, Gaafar & Abdelsamie, 2021). The mediating position of the green leadership and green talent management is also quite important in the highly competitive banking context when the CSR initiatives might be not gains (Lozano & Collazzo, 2022). Finally, it is shown in the literature that the importance of CSR in ensuring sustainability in performance of the banking sector depends on the mediating role of green leadership and management of green talent (Yusliza, Yong, Tanveer, Faezah & Muhammad, 2020). Thus, the green leadership offers the integrations in organization, green talent management offers employees the knowledge, skills, and engagement to put initiatives to work, activities not have significant impact on sustainable performance (Pantouvakis & Vlachos, 2020), without presence of effective leadership and talented human capital to make them symbolic or incomplete from realizing the outcomes in the particular context.

Conclusion

The present study aimed at examining mediating role of green leadership in linking the social responsibility and sustainable performance that how green leadership provides facilitations for enhancing positive impact of CSR on sustainable performance. The study confirmed that social responsibility, when executed holistically across social perspective, contributes effectively to long-term sustainable outcomes when bank foster leadership committed towards environmental values and strategically in alignment with the green practices. This highlights the standing of organizational capabilities in translating CSR efforts into sustainable results. By mixing green leadership and talent management into CSR strategies, banks not only fulfill social tasks but attain sustainability outcomes, like

efficiency, social equity and economic viability. The green leadership helps translate the social responsibility into sustainability outcomes by motivating employees and aligning organizational activities with the environmental and social goals. The study emphasizes that integrating social responsibility with the green leadership is essential for achieving sustainable performance in the banking sector, particularly in developing economies where financial institutions face increasing pressure to contribute toward economic, social, and environmental sustainability.

Recommendations

- The human resource policies should be tailored to recruit, train and retain employees who are environmentally conscious, aligned with CSR values. This includes integrating sustainability criteria into performance evaluation, career development, and culture of the banks in particular context.
- The banks should empower and develop leaders who rank environmental sustainability, long-term social responsibility, ethical decision-making. The leadership development programs should include sustainability skills to ensure that leaders align CSR efforts with banking sector goals.
- The banks should implement systems to regularly assess effectiveness of CSR practices and role of mediators like leadership strategies. This will allow for constant perfection and help ensure that sustainability objectives and tasks are met efficiently as well as evidently in banking sector.
- The banks should holistically gadget the CSR initiatives that equally address ethical, social, and economic responsibilities. The integrated strategies will yield the stronger sustainable performance when perfected by internal mechanisms like green leadership as well as talent management.

References

- Abasilim, F., Ugochukwu, U., & David. (2014). Green Leadership Style and its Relationship with employees Performance: A Review. *Journal of Business and Management*, 16 (9), 01-05.
- Achim, M. V., Borea, N. S., & Miron, G. M. (2017). Corporate governance, corporate social responsibility and business performances. A global perspective. *Economica*, 2(100), 1-9.
- Aguilera, V., Rupp, E., Williams, C. A., & Ganapathi, J. (2017). Putting the back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review*, 32(3), 836-863.
- Ahmad, M. M., & Arshad, S. (2019). Impact of Corporate Reputation on Customer Loyalty: A Study in the Banking Sector. *International Journal of Management, Economics and Social Sciences*, 8(3), 173-185.
- Ahmad, M., Jawaid, A., Arshad, Z., & Paracha, S. (2021). Corporate Social Responsibility and Customer Loyalty: Role of Satisfaction and Corporate Image in Banking Industry. *Market Forces, College of Management Sciences*, 16 (1), 67-84.
- Alam, S., & Islam, Z. (2021). Examining role of environmental corporate social responsibility in building green corporate image and green competitive advantage. *International Journal of Corporate Social Responsibility*, 6 (8), 2-16.
- Brown, A., & Smith, J. (2020). Perceived corporate social responsibility and employee organizational citizenship behavior: The mediating role of shared values. *Journal of Business Ethics*, 175(2), 395-409.
- Buil, I., Martín, E., & Matute, J. (2019). Green leadership & employee performance: The role of identification, engagement, and proactive personality. *International Journal of Hospitality Management*, 77, 64-75.
- Cheema, S., & Javed, F. (2017). The effects of corporate social responsibility toward green human resource management: The mediating role of sustainable environment. *Cogent Business & Management*, 4(1), 1310012.
- Cheema, S., & Javed, F. (2017). The effects of corporate social responsibility toward green human resource management: The mediating role of sustainable environment. *Cogent Business & Management*, 4(1), 1310012.
- Elving, W. J. L., Lange-Ros, A. M., & Ban, M. S. (2019). The association between corporate social responsibility, corporate reputation, and employee citizenship behavior. *Frontiers in Psychology*, 10, 1016.
- Elzek, Y., Gaafar, H., & Abdelsamie, H. (2021). Impact of green innovation on sustainability performance: The moderating role of environmental commitment. *International Journal of Hospitality & Tourism Systems*, 14(2), 15-24.
- García, V. J., Jiménez, M. M., & Gutiérrez, L. (2022). The green leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research*, 65(7), 1040-1050.

- Gössling, T., Polonsky, M. J., & Voola, D. R. (2020). The Corporate Social Responsibility communication in the banking sector: A systematic literature review. *International Journal of Bank Marketing*, 38(1), 175-198.
- Haider, M. I., & Qayyum, A. (2018). Impact of corporate social responsibility activities on customer loyalty with mediating role of brand trust in the banking industry of Pakistan. *Journal of Managerial Sciences*, 11 (3), 83-99.
- Inayat, A., Afridi, S., & Javed, A. (2022). Green intellectual capital and sustainable performance: Roles of green absorptive capacity and green dynamic capabilities. *City University Research Journal*, 12(2), 152–170.
- Islam, T., Ahmed, I., Ali, G., & Sadiq, T. (2016). Behavioral and psychological consequences of the corporate social responsibility: need of the time. *Social Responsibility Journal*, 12(2), 307-320.
- Jiang, W., Zhao, X., Jiong, B. (2017). The Impact of Transformational Leadership on Employee Sustainable Performance: The Mediating Role of Organizational Citizenship Behavior. *Sustainability* 2017, 9, 1567.
- Khan, I. U., & Mughal, Y. H. (2026). The Sustainable Leadership & Sustainable Performance in Higher Education: Mediating Role of Sustainable Culture. *Journal Of Social Research Development*, 7(1), 01–12.
- Khaw, T. Y., A. Teoh, P., Khalid, S. N., & Letchmunan. S. (2022). The impact of digital leadership on sustainable performance: a systematic literature review. *Journal of Management Development*, 41, (9/10), 514–534,
- Koh, D., Lee, K., & Joshi. K. (2019). Green Leadership & Creativity: A Meta-analytic Review and Identification of an Integrated Model. *Journal of Organizational Behavior*, 40 (6), 625–650.
- Lee, H., & Kim, S. (2020). The Community-based corporate social responsibility and employee organizational citizenship behavior: mediating role of social responsibility. *Journal of Business Ethics*, 167(1), 41-56.
- Li, W., Bhutto, A., Xuhui, W., Zafar, U., & Bhutto, A. (2020). Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. *Journal of Cleaner Production*, 255, 120229.
- Lozano, C., & Collazzo, P. (2022). Corporate social responsibility, green innovation and competitiveness: causality in manufacturing. *Competitiveness Review: International Business Journal*. 32 (7), 21-39.
- Mughal, Y. H., Jehangir, M., Khan, M., & Saeed, M. (2020). Nexus between corporate social responsibility and firm's performance: A panel data approach. *International Journal of Finance and Economics*, 1–16.
- Nasir, A., Zakaria, N., & Zien, R. (2022). The influence of green leadership on organizational sustainability in the context of industry. Mediating role of innovative performance. *Cogent Business & Management*, 9: 2105575.
- Palys, T., & Atchison, C. (2014). Research decisions: Quantitative, qualitative, & mixed methods approach (5th ed.). Toronto, Canada: Nelson Education.

- Pantouvakis, A., & Vlachos, I. (2020). The talent and leadership effects on sustainable performance in the maritime industry. *Transportation Research Part D Transport and Environment*, 86, 102440.
- Patton, Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Thousand Oaks, CA: SAGE Publications.
- Peng, J., Yin, K., Hou, N., Zou, Y., & Nie, Q. (2020). How to facilitate the employee green behavior: Joint role of green transformational leadership and green human resource management practice. *Acta Psychologica Sinica*, 52(9), 11–27.
- Perez, A., Martnez, P., & Bosque, I. R. (2013). The development of a stakeholder-based scale for measuring corporate social responsibility in banking industry. *Service Business*, 7 (3):459-481.
- Preacher, J., & Kelley, K. (2011). The effect size measures for mediation models: quantitative strategies for indirect effects. *Psychological Methods*, 16(2), 93.
- Qureshi, A., Baig, A., Dar, I., & Malik, Q. (2025). Corporate Social Responsibility in Pakistan's Banking Sector: A Critical Analysis, SDG Alignment and Way Forward. *Pakistan Business Review* 27 (2): 189-99.
- Ridenour, S., & Newman, I. (2008). *Mixed methods research: Exploring interactive continuum*. Carbondale: Southern Illinois University Press. *Journal of Mixed Methods Research*. 3. 197-198.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.
- Saunders, M., Thornhill, A., & Lewis, P. (2007). *Research methods for business students* (4th Edition), London: Financial Times Prentice Hall.
- Sehat, S., Dharma, B., & Indra, I. (2024). The Impact of Green Leadership and Organizational Culture on Enhancing Employee Performance in Organizations. *Pakistan Journal of Life and Social Sciences*, 22(2):14749-14756.
- Tosun, C., Parvez, O., Bilim, Y., Larry. Y. (2022). Effects of green transformational leadership on green performance of employees via mediating role corporate social responsibility. *International Journal of Hospitality Management*, 103, 103218.
- Yamane, T. (1967). *The Statistics: An Introductory Analysis*, 2nd Edition, The New York: Harper and Row.
- Yusliza, Y., Yong, Y., Tanveer, I., Faezah, N., & Muhammad, Z. (2020). A structural model of the impact of green intellectual capital on the sustainable performance. *Journal of Cleaner Production*, 249, 119334.