



THE SUSTAINABLE SYNERGY: NAVIGATING CSR, GREEN INNOVATION, & DEVELOPMENT DYNAMICS

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KEYWORDS	ABSTRACT
Corporate Social Responsibility, Environmental Strategy, Green Innovation, Corporate Sustainable Development	Within the context of small and medium-sized businesses, primary focus of this research is on interrelationships that exist between Corporate Social Responsibility (CSR), green innovation, environmental strategy, as well as Corporation Sustainable Development. This research validates that there are notable correlations amid these components by utilizing correlation matrix. Significantly positive relationships have been shown between CSR and corporate social responsibility (CSD), and between green innovation education, employee happiness \mathcal{E} organization development. According to these findings, there is positive correlation between two, which suggests
ARTICLE HISTORY Date of Submission: 30-11-2023 Date of Acceptance: 30-12-2023 Date of Publication: 31-12-2023	that businesses that place emphasis on corporate social responsibility are likely to adopt integrated sustainable practices and an environmentally friendly attitude, in turn has a beneficial impact on employee satisfaction and organizational success. It is emphasized in the case study that small and medium-sized enterprises (SMEs) should incorporate CSR activities and green innovation not only because these are ethical goals, but also because they have the potential to be drivers of the overall sustainable development. 2023 Journal of Social Research Development
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INTRODUCTION

As global consciousness on environmental issues and societal welfare continues to grow, corporate practices in relation to sustainable development emerges as a crucial field of study (Sarfraz, Ozturk, Yoo, Raza & Han, 2023). The role of SMEs as important engines for economic growth, in promoting CSR initiatives, implementing green innovation and integrating environmental strategies towards achieving corporate sustainable development is now under the constant public scrutiny. This study

therefore analyses the intricate associations of CSR, green innovation, environment strategy and Closed-Sustainable Development (CSD) with in the SME arena of Karachi city's busy commercial center (Le, Tran, Lam, Tra & Uyen, 2023). In this linking, the development of Industry 4.0 should bring exponential improvements in productivity, time efficiency and cost reduction, which are the key goals of business, but progress is limited. Conversely, it will also help increase sustainability and profitability, also due to the phenomenon of globalization. As a result, stakeholders have expressed greater interest in business activities in the social sector to promote positive social outcomes as well as environmental sustainability. According to Freeman's stakeholder theory (1984), to be successful, the company must create value not only for shareholders but also for various concerned internal & external stakeholders.

The human resources like employees, customers, local communities and governments are dynamic sources for the sustainable development (Sarfraz, Ozturk, Yoo, Raza, & Han, 2023). Since there is so much information about environmental concerns, Stakeholders have credible organizations to take responsibility for protecting the environment and the nature layer and reducing the environmental impact of production activities. Job market is growing rapidly due to intense competition around the world. Thus, one must be responsible for the impact of one's actions upon the environment, while striving for profitability and competitive advantage. Today's work is still more important than the income from cultivation. Knowledge-based business view (RBV), but today's development requires companies to pay for environments (Pereira & Bamel, 2021). Hence, natural resources perspective can help the companies search for resources necessary for organization to better gain competitive advantage and achieve good results for the environment through participation in community work. Its impact and importance for businesses is great. Today, due to environmental concerns, CSR theory has attracted the attention of the extensive research and is considered an important phenomenon. Moreover, the increasing importance of social responsibility demonstrates importance of companies seeking to integrate the environmental, social and economic factors into their activities \mho business goals (Le et al., 2023).

The issues surrounding these three perspectives are not new, but it is becoming gradually important to combine these three concepts in a single study. According to the Social Investment Forum (Khan, Chen, & Hung), more than 8,000 companies in more than 160 countries have invested more than \$4 trillion in CSR, and Fortune Global 500 companies spend nearly \$20 billion on CSR annually. Assessing the health of the company. Data show that CSR practices are recognized worldwide and their scope is expanding (Pereira & Bamel, 2021). Effects of globalization have transformed social and environmental problems into global challenges that exceed the responsibility of any country, company or individual. As a result, actions of people, businesses, countries and regions have a huge impact on world at large. Regardless of its form, green innovation is often linked to improvements in operational efficiency, productivity, and financial efficiency. In this regard, for example, the use of technologies such as artificial intelligence and block chain technology has improved transparency and traceability of the product or service throughout its entire lifecycle. Therefore, this ultimately ensures competition and increases business stability. In this connection, the principles of CSD are also based on the integration process, which argues that the businesses should prioritize the use of

environmental plans, strategies and use innovations to produce environmentally friendly products as well as services.

LITERATURE REVIEW

The obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action that are desirable in terms of objectives and values of our society (Bowen, 1953) is first and most important definition of the corporate social responsibility. This definition was provided by Harvard Bowen, who is considered to be father of corporate social responsibility (Kraus, Rehman, & García, 2020). The need for leaders to be responsible for the public good was acknowledged by all other definitions from the early 1950s. These definitions stated that "it must be determined whether the decisions will promote public good, whether they will increase the religious level of our society, and whether they will contribute to stability, strength, and harmony." A business model that is selfregulating and enables a corporation be socially accountable to itself, its stakeholders, and general public is known as corporate social responsibility (CSR). Companies are able to be cognizant of the kind of the impact they are having on our society, including economy, social issues & environment, when they participate in the corporate social responsibility, which is also referred to as corporate citizenship (Yuan & Cao, 2022). In this linking, in the today's world, corporate social responsibility (CSR) has emerged as the topic of intense interest in the media and is frequently brought up in the business meetings. The benefits that corporate social responsibility (CSR) brings to society are also impartially boarder.

Green innovation technologies and corporate social responsibility have a favorable impact on both the environment and the performance of businesses. Recent studies have shown that the behavior of employees is a significant factor in overall improvement of working environment. The interaction between human management and environment, on other hand, has received relatively inadequate amount of attention. The goal of environmental corporate social responsibility (CSR) is to reduce the negative impact that business operations have upon environment (Yuan & Cao, 2022). Energy consumption, water consumption, waste management, recycling, emissions, the environment of the workplace, and the travel sector will be the primary topics of discussion during the activities. Green corporate social responsibility has potential to lower business risks, enhance reputation, and save money. Even most basic kind of energy conservation measures can result in cost savings and make a difference for your company. Thus, when a company's performance in the areas of corporate social responsibility (CSR) is higher, the breadth that same company bestows upon the CSD is also higher. Furthermore, a better level of expected social performance is the outcome of a company's expanded power to cover a wide variety of CSR topics from the point of view of its stakeholders through its CSD (Abbas & Sağsan, 2019). Therefore, the environmental strategy is a plan of action that outlines how the organization should manage environmental protection, pressures from the stakeholders, \mathcal{F} opportunities in market.

By implementing a unified collection of policies, investments, and initiatives, the industrial sector will be able to lessen its influence on the natural environment and produce competitive advantages through the production of environmentally friendly goods and services (Shahzad, Qu, Javed, Zafar, & Rehman, 2020). As result of stakeholder increased awareness of environmental issues, businesses

are now in the better position to respond more swiftly to demands from the stakeholders to promote environmental issues. In this linking, not only are social, economic, and environmental challenges theoretical constructs, but they also have the potential to push businesses to match their business models with their own organizational structures. Therefore, as a corporate strategy, ES is frequently considered to be a supplementary approach. There is a wide variety of approaches to dealing with environmental problems, such as the public, commercial, or non-commercial responses (Bhat et al., 2024). All sorts of invention that reduce the amount of damage done to the environment and make certain that natural resources are utilized in most efficient manner possible are together referred to as the "green innovation." Consequently, a company's competitiveness, economic performance, and the environmental performance can all be improved through the implementation of this particular management strategy.

Considerations include lowering the amount of energy used, recycling waste, reducing pollution, ensuring sustainability of resources, and designing environmentally friendly products (Liu, Chen, Ren, \mathcal{E} Jin, 2021). Therefore, when compared to the non-green inventions, green innovations are typically distinguished by their ability to lessen their adverse effects on the environment. Invention might be directed at a product, a technique, a service, or a system as its intended aim. In order to build a green offering, it takes into consideration and innovates throughout the whole product life cycle, while simultaneously meeting the expectations of customers and maintaining a competitive position in the market (Khan et al., 2021). Businesses, notably small and medium-sized enterprises (SMEs), should be encouraged to take substantial steps toward the implementation of the effective programs that can reduce waste, liquid pollution, and emissions. They have come to this conclusion because they acknowledge that green innovation (GI) is considered to be the exclusive solution for eco-innovation (Ngo, 2023). The organization has made it a priority to produce goods in a healthy and welcoming atmosphere. In addition to adhering towards environmental standards throughout the production process, they make use of materials δ packaging that are favorable to environment. Furthermore, they make use of renewable resources and methods that not only reduce waste but also cut fuel use.

As part of its efforts to lessen its negative influence on the environment, the company has put into place procedures that properly treat wastewater, recycle waste, and manage emissions. The most dependable factors of environmental performance are environmentally friendly technologies and environmentally sustainable management practices. In this linking, technology and goods that are environmentally friendly (Song & Yu, 2018). The scope of study encompasses green management, green goods, and green processes in the geographic area that was preferred. When it comes to the manufacturing of useful products from raw materials, the new green system's objective is to limit the number of resources that are used. New versions of current products / services, or enhanced versions of those items, are examples of green products. These products are made using materials that are non-toxic and biodegradable, or with less energy that is not renewable (Sheehy & Farneti, 2021). It has potential to improve energy efficiency by lowering waste levels. The term "green management" refers to the process of modernizing management systems, strategies, and policies that are already in place, and implementation of new management systems, strategies, and policies. The goal of green management is to lessen adverse effects that are caused by the organization's founding products &

management processes and to transform them into system that is more environmentally friendly (Le, Vo & Venkatesh, 2022).

Corporate sustainability has become a buzzword in companies big and small. Walmart Stores, Inc. (WMI), McDonald's Corporation (MCD), and other large corporations have named sustainability as a key priority moving forward. Now other companies are under pressure to commit towards finding sustainable ways to deliver their goods and services. At its essence, term "corporate sustainability" refers to an approach to conducting the business that creates sustainable, long-term shareholder, employee, consumer, and societal value by pursuing responsible environmental, social & economic (or governance) strategies (Marietza & Nadia, 2021). In these connections, the core importance of corporate sustainability lies in bringing companies and industries more in touch with the standards of sustainable development. Also, it is imperative to construct a rough roadmap for a rejuvenated, greener, and cleaner planet when it comes to global warming and climate change. Today, in the age of hyper-awareness about the social issues and environmental health, corporate sustainability has proven to be an integral tool to convince the customers about the intent as well as priorities of the organization. Thus, to put it simply, corporate sustainability matters as it enables companies to grow, adapt and rethink with the demands and needs of an evolving society as well as planet (Alketbi & Ahmad, 2023).

RESEARCH METHODOLOGY

Employing an empirical research design, the present study systematically evaluates and records CSR initiatives, green innovation practices, environmental strategies, and sustainable development practices among SMEs in Karachi. This strategy allows for a comprehensive analysis of the present situation relating to corporate responsibility and sustainability in the selected business setting. By applying the stratified random sampling technique, a representative sample has been ensured. The population is composed of small and medium enterprises from different sectors in Karachi. The size of sample was dictated by statistical considerations and included diverse sizes, sectors & industries where SMEs operate. A quantitative data collection instrument in form of questionnaire structured was created. This instrument features Likert-scale inquiries, multiple-option questions, and open-ended queries that ascertain the variety of replies and intelligence from SMEs. Key variables were identified as CSR initiatives, green innovation practices, environmental strategy and sustainable development efforts. Measuring is done via specific scales for each variable to make sure collected data are reliable and valid.

The structure of this research methodology provides elucidated and appreciative knowledge about CSR, green innovation, and environment strategy of SMEs in Karachi. Reflection and adaptability were employed at every stage of research to ensure study rigor. This study explains CSR measures \mathcal{E} geographical indication use and provides evidence to achieve better business performance. The need to integrate the economic actions with moral and environmental obligations has resulted in paradigm change requiring organizations to revise practices. Thus, knowing how these dimensions interplay within SME sector is crucial not only to organizational success but creating a sustainable future. This study aims to decipher the factors that affect responsible business conduct for SMEs in Karachi so as to provide guidance on how enterprises can achieve balance with their natural and

societal environment. This inquiry is set to boost broader conversation on sustainable development by unravelling particular aspects of SME culture, since strategical decisions within this context can trickle across populations and industries towards a responsible as well as resilient entrepreneurial environment.

RESULTS OF STUDY

Table 1 Saturated Model & Estimated Model

	Saturated Model	Estimated Model	
SRMR	0.048	0.048	
D ULS	0.592	0.592	
D_G	0.221	0.221	
Chi-Square	618.083	618.083	
NFI	0.912	0.912	

A comparison of the data obtained from two different SEMs, namely the saturated model and an approximated one, appears to be displayed in table. Within the context of theoretical framework, structural equation modeling (SEM) is a statistical tool that analyzes correlations between observed and unobserved variables. There are number of popular fit statistics that are presented in the table. These statistics measure how well a model fits to data that it has been given. There is a satisfactory level of quality fitting between estimated model and the saturated model, as indicated by the fact that the values of fit indices for both models are virtually identical. An additional rationale for the fit of an estimated model in accounting variance is the NFI, which compares the estimated model to a baseline model.

Table 2 Details of Coefficients

	R Square	R Square Adjusted
ES	0.567	0.565
OD	0.612	0.608

R2 and adjusted R2 values range from 0 to 1. A higher R2 indicates a better fit of model to the data. In both cases (ES & OD), the R2 values are relatively high, suggesting that significant proportion of variability in environmental strategies & organizational development is explained by independent variables in the regression models. The adjusted R2 values are very close to R2 values, indicating that the inclusion of predictors in models doesn't significantly impact goodness of fit. In summary, these R2, adjusted R2 values suggest that regression models for both environmental strategies and organizational development are effective in explaining substantial portion of variance in respective dependent variables.

Tuble & Correlation Finallysis							
	CSD	CSR	ES	GI	OD		
CSD							
CSR	0.475						
ES	0.697	0.427					
GI	0.893	0.550	0.778				
OD	0.889	0.439	0.610	0.779			

Table 3 Correlation Analysis

The correlation matrix reveals the strength and direction of relationships between variables. Strong positive correlations indicate that as one variable increases, other tends to increase, and vice versa. The results suggest interconnectedness among the studied constructs, highlighting potential areas of synergy and influence within the organizational context.

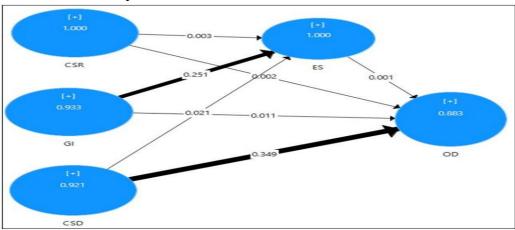
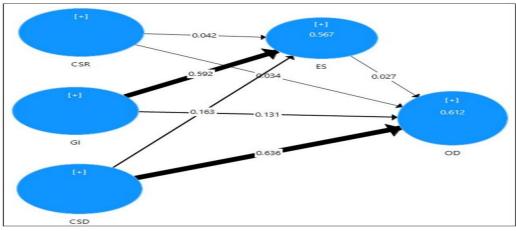


Figure 1 Direct Relationship

Figure 2 Indirect Relationship



DISCUSSION

According to the findings of this study, the nature of the relationships between the corporate social responsibility (CSR), green innovation, environmental strategy, as well as sustainable development is quite complicated. The strong positive correlations were observed particularly between corporate social responsibility (CSR) and corporate sustainable development (CSD), as well as that of green innovation with both employee satisfaction and organizational growth (Mendes, Braga, Correia, & Silva, 2023). These correlations demonstrated that organizations for small and medium enterprises (SMEs) sector in Karachi have the self-reinforcing nature (Sheehy & Farneti, 2021). Strong positive correlations indicate that as one variable increases, other tends to increase, and vice versa. There is a

strong positive correlation between corporate social responsibility (CSR) and corporate sustainable development, which shows that businesses that place an emphasis on social responsibility are more likely to take a more holistic approach towards the sustainability (Saeidi, Saeidi, Saeidi, Saeidi, Čarvajal, 2023).

The fact that there is a positive association between green innovation and employee satisfaction also underscores the notion that environmentally friendly activities are likely to contribute towards improvement in overall job satisfaction through their positive impact (Hu, Huang, & Zhong, 2021). Furthermore, the fact that there is a significant degree of association between green innovation and organizational change leads one to believe that environmentally friendly practices may be vital to overall recovery and development of small and medium-sized enterprises (SMEs) (Yang, Luo, Feng, & Pan, 2023). This conversation implies that promoting corporate social responsibility activities and embracing green innovation may not only be in line with ethical and environmental concerns, but they may also have potential to serve as strategic facilitators for comprehensive sustainability within the small and medium-sized enterprise (SME) sector in Karachi itself. As a result, there is a growing demand for an approach that is both holistic and integrated, one that is beneficial to the growth of organizations & welfare of society (Guoyou, Saixing, Chiming, Haitao, & Hailiang, 2013; Saeidi et al., 2023).

CONCLUSION

Finally, but not lastly, the notion of environment and green innovation has been advanced by using new technologies applying energy-saving policy to save the electricity; reducing waste costs with helping workers creating a better place for them. CSD and development of society. Additionally, the results of research support other initiatives that can then be established in Pakistan; agriculture, seafood and SMEs come to mind. The study shows one of the most fundamental findings that being a decision-making tool, it determines how community organizations react to environmental policies and green innovation affects steady employment. Besides, it helps SMEs in Pakistan to consider key issues when developing social business strategies and generating ideas that are environmentally sound. The following are some recommendations that we propose for the small and medium-sized enterprises (SMEs) in Pakistan's agriculture, seafood, and other industries, based on the findings of our research: First of all, in order to create stable business for SMEs social participation should be given more attention. It is critical for people in the high ranked position, management and policy agencies to integrate environmental ideas with green innovations of business supervision methods as well as manufacturing process handling. Thus, they should also reassess the company's ability to purposefully invest in environmentally conscious management and green processes for producing eco-friendly products.

Second, while embracing ES and GI, small-scale enterprises (SMEs) are to responsibly utilize energy as well as natural resources that can be both efficient in terms of economy with regards the needs of employees alongside society at large towards fostering a sustainable economic growth. Third, we will address social responsibility toward the outside and inside world by environmental policies \mathcal{E} green innovation. In this linking, this will enable us to create value and benefits for both population while achieving inclusive sustainability. This study has several limitations. First of all, the historical

research is carried out in Pakistan, which has a unique culture. This will affect how the results and implications of the study are used in different contexts. Second, data was collected from small and medium-sized companies; the research continued to integrate measurement and obtain cooperation from the large companies. Third, we do not know whether CSR, environmental strategies, and green innovation in SMEs will gradually have the same impact in the long run. The future research should include other situations, specific local characteristics, and comparative results, because there are some shortcomings. Additionally, in future studies, future researchers will need to collect data from large companies in order to provide the necessary results for the businesses to adapt to the needs of stakeholders. Finally, future researchers could test whether there is a positive relationship between social participation and firm performance by analyzing the mediating role of marketing and green HRM resources.

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