# Multifaceted Corporate Social Responsibility: Advancing Organizational Strategic Planning for Better Environmental Prospects in Healthcare Sector

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Abstract: Integrating corporate social responsibility (CSR) practices in an organization is known as a strategic instrument for attaining green performance. This study's aim to investigate the impact of corporate social responsibility (CSR) practices on Firm Sustainable performance (FSP) as well as investigate the causal relationship between CSR practices and FSP. In particular, this study is based on Green and Stakeholder theory. After an inclusive review of the literature, six main hypotheses have been anticipated and tested through mediation of strategic planning. The researcher collected data from 369 participants across 123 large and medium-sized private hospitals in Pakistan. The structural analyses revealed that CSR practices have positive and significant impact on FSP. This demonstrates that CSR practices substantially augments organizational competencies to achieve objectives related to green performance. CSR practices also revealed a positive and significant impact on strategic planning; besides, a parallel impact of SP is seen on FSP. Finally, SP is positively and significantly mediated the relationship between CSR five practices and FSP. This article also encompasses to the existing body of literature by determining the results of the conceptual framework and in addressing the implications for Pakistan.

## 1. Introduction

In modern times, businesses, especially the service sector, have begun to encounter increased pressure from various stakeholders to think about their actions affecting the natural environment and society (1). The ecologists' constant struggle to raise public awareness of the decline in natural reserves (2). The variation in the natural environment and the substantial intensification air, land and water pollution lead organizations to shift their dependence on fossil fuels producing ecological concerns and to taking advantage of renewable resources utilization (3–5). Moreover, to enhance public awareness, provincial and international laws to save the natural environment also obliged the firms to be concerned about their activities affect the natural environment and adopt green or environmentally friendly production processes (6,7). According to Masocha (8), this situation has also altered stakeholders ' preferences and needs and urged them to choose the firm's products or services that cause the least harm to the natural environment. However, firms need to assure the standard of their services and goods and their actions' effect on the environment.

Firm green approaches can address natural environment concerns. Such activities are characterized by environmentally friendly practices that an organization adapted to become a more sustainable organization. These businesses focus on reducing their impact on the environment through initiatives that reduce their unethical environmental practices by providing a minimum level of

sustainability inside corporate practices. Corporate green practices fluctuate from sector to sector and are often unique to its type and the product or service it provides (9). The corporate green performance (FSP) concept centres on upgrading in current practices or launching new products and practices in such a way that it fulfils both perspectives of stakeholders' in term of quality, as well as outcomes in enhanced environmental performance (10). FSP is related to green management, green infrastructure, and procedures to lessen the environmental problems triggered by the organization's activities (4,11). Another factor connected to FSP is green innovation by which organization present unique ideas that empower management to think and work for society and other environmental hazards. Nevertheless, according to Wang (2019) and Zhang et al. (2019), FSP research is in the initial stage, and there is a strong need for literature to be enriched in this field.

Corporate social responsibility (CSR) is a relevant factor that could assist organizations to improve their green performance (14). CSR covers companies' legal, fiscal, discretionary and ethical duties concerning their stakeholders (15,16). CSR is a voluntary effort by businesses to incorporate social and environmental issues into business processes (17). CSR demands derived from the external stakeholders, such as concerned authorities with unique demands or societies with general standards of social legitimacy (18,19). Other CSR demands come from internal stakeholders, representing the employees' instrumental, emotional and moral needs (20).

Based on the strategy literature, a primary approach for organizations to address stakeholders is to determine their preferences through structured strategic planning procedure. For instance, via active environmental analysis, businesses account for externalities, including create effective responses and social problems (21–25). By definition, the strategic planning efforts of an organization should drive the appropriate environmental adaptation activities, including those related to CSR (23–26). Therefore, theoretical CSR approaches suggest that formal strategic planning may not be the only internal component to influence CSR, and that organizational culture is equally important (19). Unfortunately, there is little to no conceptual linkages have seen among organizational factors such as strategic planning, CSR and FSP.

Expanding the concept of social responsibility from the developed world to the developing world is a challenge and an opportunity that ought to be explicitly taken on. Social responsibility and social responsiveness of health care would suggest both a new social aspect of care and new organizational practices of hospitals and other health-care organizations (27). However, malfeasance may ruin an organization, particularly a hospital or other health care organization (28). This sector involves a varied group of stakeholders, as well as patients, regulators, political authorities, health specialists, the media, general public and NGOs. All these stakeholders expect that companies should understand their social and environmental obligations so that they alleviate the adverse effect of their operations and contribute for the betterment of the community.

Companies that implement CSR practices and green performance initiatives have great potential to address issues related to evolving consumer expectations about quality and green environment (14,29). Moreover, Fernando et al. (6); Wang et al. (30) and Khalil and Muneenam (31) believed that the concept of green performance is at the introductory stage, and the literature in this area strongly needs to be enriched. Additionally, various research related to this issue has concluded mixed results. Shahzad et al. (32) analysis on effect of CSR and knowledge absorptive capacity on FSP and revealed positive and significant outcomes. Though, Zhang et al. (13) named role of government financial and technical support in the achieving FSP goals results in amplified time and cost of production. Makanyeza et al. (33) in which they found the positive and significant impact of CSR practices on company performance in the context of service sector. Furthermore, Gallardo-Vázquez & Sanchez-Hernandez (34) concluded the positive and significant impact of CSR practices on competitive success of firms in European context.   On the other hand, Iqbal et al. (35) study which they conduct in Pakistani banking sector and observed a negative link between CSR practices and organizational performance.

Such diverse results concerning to various dimensions of CSR, FSP and SP indicate the necessity for a thorough analysis of the relationship between these variables. In addition, as per Abbas (14), paucity research on CSR and FSP relationship especially in Pakistan and developing nations, where concepts of green performance and sustainability are at preliminary stage. Bearing in the mind the significance of CSR in the modern business era, this study will illustrate how private health sector move towards CSR practices to reach sustainable performance goals along with mediation of strategic planning in this relationship. Based on the Abbas

(14), the researcher adopted five CSR practices including CSR towards society, CSR to customer, CSR to employees, green management and green infrastructure. Following the recommendations of Li et al. (4) and Xie et al. (11), FSP is calculated by two dimensions: green HR practices and environmental performance. Lastly, SP is quantified through MBNQA (36) and Galbreath (37). Thus, the present study goals to retort the following questions:

RQ1: What is the impact of corporate social responsibility practices on firm sustainable performance?

RQ2: Do strategic planning mediate the relationship between corporate social responsibilities practices and firm sustainable performance?

*1.1 Structure of the Study*

Moving ahead, the structure of the paper is as follows: Section 2 is based on brief explanation of theoretical background, including supported theories, and present CSR as an independent variable construct. Going forward, we develop hypotheses in same section and introduce a comprehensive framework. Moreover, we discuss the methodology specifically, sample of the study, the measurement model, and data collection procedure in Section 3. In Section 4, results are presented which are trailed by discussion on the implications and limitations (Section 5), followed by conclusions part (Section 6).

## 2. Theoretical Background

*2.1 Green Theory*

The utilization level of natural resource by the manufacturing sector has been massively high in terms of producing goods and making big money with the advent of the industrial revolution (38). This phenomenon has led to a dearth of natural resources, especially for forthcoming peers, and drastic changes in form of global warmingto the environment (3). In this respect, the United Nations Global Compact (UNGC) proclaimed it mandatory worldwide for all organizations to adopt environmentally sustainable strategies and green traditions(39). UNGC is the most prominent initiator of environmental sustainability globally, comprising of more than 12,500 signatories from over 160 countries, both commercial and non-commercial. Considering Raimi's (40)recommendations, the environment experts have urged organizations to integrate CSR programs and green mindset within their operations. This reflects the impact on organizational financial performance in a significant and positive way and on social impacts.

The green theory, a modern multidisciplinary style of thought, has been conceptualized by Eckersley (41) and centers on sustainability, globalization, corporate responsibility towards society, corporate governance and forms of social rights. The green theory aims to ensure environmental sustainability at all three levels: local, state and internationally. The green performance derives its conceptual origins from green theory and FSP is the relation between the activities of an organization and the environment (42). This offers key details about organizational structures and their adherence with environmental standards, describing the efficacy and efficiency of organizational environmental behavior (43). As per Yuan & Xiang (44), the organization is focused on turning operations into environmentally friendly practices by introducing fundamental changes into product/service operating processes to become a green organisation.

The services and manufacturing companies in particular shift the conventional perspective of the product life span from resource extraction to development of product, distribution, use and finally recycling (45). Companies aspiring to green strategies have enormous potential to gain market share (46). Therefore, concerned authorities and management support are necessary to enable businesses to move from conventional production means to green operating sources (13).

Following Li et al. (4), firm green performance is epitomized by green management practices. Furthermore, green management and green performance are divided into the green HR practices and environmental performance (14,47).

- Green HR practices outlines the organization's resolution to use the crossing point of each employee to promote environmental performance initiatives, increase employee awareness and sustainable activities, and thereby increase employee awareness of environmental concerns (48).

- Environmental performance is defined as the effectiveness of an organization in meeting and exceeding the standards of society with respect to natural environmental concerns. Besides, since businesses are accountable not only to regulatory bodies but to numerous environmental stakeholders, environmental success extends to a positive approach on potential environmental issues beyond mere compliance with current regulations (47).

*2.2 Corporate Social Responsibility*

CSR is a green organizational approach meant at preserving the economic, cultural and social aspects of the climate in which a company functions (40). During the last decade, the CSR concept has received ample attention, and its importance is continually increasing in the corporate sector (49). CSR operations rely on a various factors, including laws and regulations, economic conditions, market competition and corporate culture and actions (50). CSR activities greatly boost the ability of companies to take strategic advantage of sustainable development targets (51). Such programs not only boost the image of businesses, but also increase the employees satisfaction and customers' commitment and loyalty (52).

As per Awan et al. (53), the involvement of industrial organizations in social responsible initiatives and the recognition of the environmental effect of their activities not only contributes to a rise in market share and market advantage, but also decreases waste, pollution, emission and saves resources. For this cause, environmentalists and numerous stakeholders have urged manufacturing companies to implement green management techniques and CSR activities into their process (10). Considering stakeholders pressure, Turker (54) suggested a comprehensive model and characterized CSR activities in four sub groups, including CSR to employees, CSR to stakeholders, CSR to consumer, and CSR to government. In addition,    Maignan & Ferrell (16) also partitioned CSR practices into four groups, specifically economic, ethical, legal and discretionary responsibilities. The existing study studies five dimensions of CSR, namely CSR to the society (CSRS), CSR to customers (CSRC), CSR to employees (CSRE), green management (GM) and green infrastructure (GI).

- CSRS states to organizational programs for the growth of society, such as financial support for non-governmental organisations and educational institutions, the preservation of cities and regions, the promotion of culture and related activities for the well-being of society. This is focused on corporate social responsibility and ethical obligations that expect organizations to be bound by moral expectations and a suitable code of ethics characterized by the community under which they function. The following hypotheses are proposed under this dimension for the current study.

**H1:** CSRS has a positive influence on FSP.

**H1a:** CSRS has a positive influence on SP.

**H1b:** SP significantly mediates the relationship between CSRS and FSP.

- CSR to customers (CSRC) reflects the obligations of businesses to their customers, such as developing and delivering goods as per customer demand at a fair price, supplying customers with the right details, ensuring customer loyalty through quality product and service, addressing complaints from customers, and ensuring prompt solutions. Organizations do not, for instance, market any goods that have detrimental effects on the health of consumers (15). In addition, as part of CSR procedures, companies are expected to warn their clients about materials that will impact the use of a consumer (such as goods containing alcohol and nicotine) in their products (55). The following hypotheses are proposed under this CSR practice for the current research.

**H2:** CSRC has a positive influence on FSP.

**H2a:** CSRC has a positive influence on SP.

**H2b:** SP significantly mediates the relationship between CSRC and FSP.

CSR to employees (CSRE) states to meeting the needs of workers, such as maintaining a fair and secure working atmosphere, providing a valuable pay package, a balance of professional and personal lives, empowering and improving employees through education and training, and respecting the opinions of employees. In general, this involves creativity, expertise, and the motivation of employees to uphold the environmental performance programs of the company (56). With regard to CSR practices as a finest strategy to accomplish

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the environmental performance of the organization, Dutta (57) showed that CSRE is the best strategy that benefits the organization by creating a 'green employee' who values and accepts the environmental performance of an organization by concentrating on green recruiting and hiring; green training and development, green rewards and enhancement. In addition, through this approach, a company can encourage sustainable business process within the organization by using any employee crossing point to promote the source of environmental issues (58). The following hypotheses are proposed under this practice for the current study.

  **H3:** CSRE has a positive influence on FSP.

  **H3a:** CSRE has a positive influence on SP.

  **H3b:** SP significantly mediates the relationship between CSRE and FSP.

 • The Green Management (GM) agenda focuses on finding best practices that simultaneously minimize the negative impacts on the natural environment of business operations and lead to improved firm performance. GM consists of organizational processes that originate from within a business, unlike regulatory requirements that are derived from the outside. A GM is a series of internal business operations and execution efforts. GM consists of a corporate strategy and a series of business processes that enable businesses to analyze their environmental impacts, define environmental goals, undertake environmental activities, monitor the accomplishment of objectives and undergo management review (59). The following hypotheses are proposed for this dimension in current study.

  **H4:** GM has a positive influence on FSP.

  **H4a:** GM has a positive influence on SP.

  **H4b:** SP significantly mediates between GM and FSP.

 • Green infrastructure is the ability to design buildings and utilizing environmentally friendly and resource-efficient methods over the life cycle of a building, from location to design, construction, service, repair, reconstruction and deconstruction (60). Some researchers define this term as an infrastructure focused on resource-efficient ecological design that aims to create a safe indoor climate. The use of electricity, water, and other resources in green infrastructure/buildings is significantly reduced by using different strategies, such as using solar panels and capturing stormwater. Furthermore, it is understood that green buildings have a healthier atmosphere. The following hypotheses are developed under this CSR dimension for the current study.

  **H5:** GI has a positive influence on FSP.

  **H5a:** GI has a positive influence on SP.

  **H5b:** SP significantly mediates between GI and FSP.

**Strategic Planning**

Strategic planning (SP) is considered an appropriate aspect of socially responsible practices and total quality management. Abbas (14) indicated that for the implementation of CSR practices, a consistent company strategic plan is needed, such as by the placement of a successful strategic plan that is continually monitored and enhances corporate efficiency and sustainability of stakeholders (61). These strategic plans are built on the basis of the vision, mission, and priorities of an organization; therefore, the organizational strategy should concentrate on balancing the desires and needs of its stakeholders. The vision statement of a company should depict its agenda and vision, and such plans can include a business plan, a plan for quality management and practices based on the environment oriented approach (62,63). The following hypotheses are proposed for the current study.

  **H6:** SP has a positive influence on FSP.

**Figure 1:** Corporate Social Responsibility, Strategic Planning and Corporate Green Performance
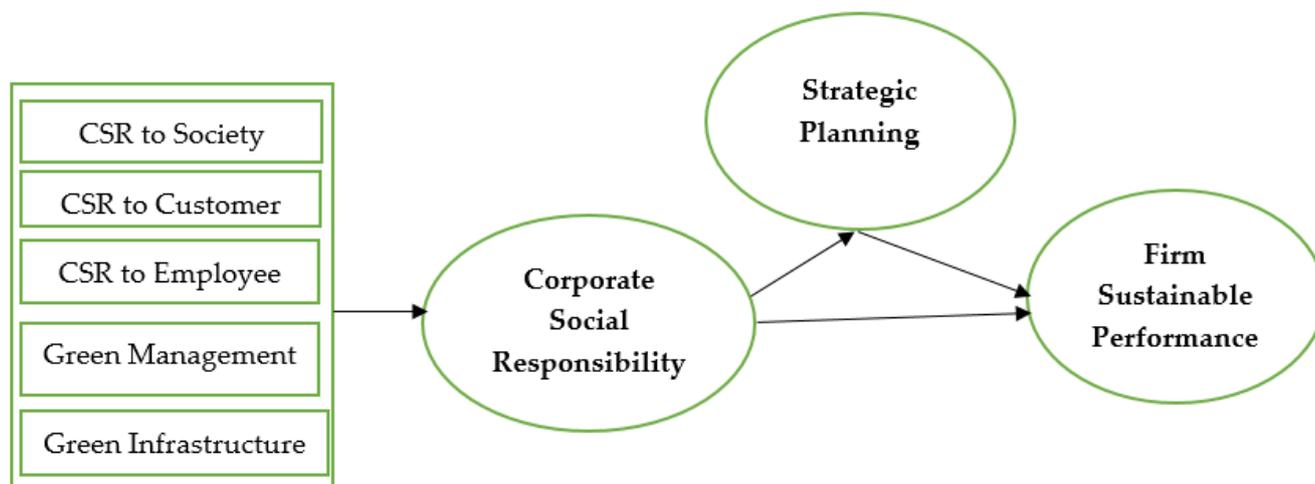


## 2. Research Methodology

### 3.1 Target Audience and Sampling Technique

The abovementioned mixed findings relating to CSR, FSP, and SP offer a compelling reason for a comprehensive study of the relationship between these variables. Furthermore, less attention has been paid to developing countries, such as Pakistan, where the concepts of green performance and environmental sustainability are in the introductory phase, and where the relationship between CSR and FSP in the health sector has rarely been examined (14). Thus, it is worth conducting a research study focusing on the health sector as a separate part of the services sector. The target population for the current research was large and medium-sized private hospitals listed with the Ministry of National Health Services Control and Coordination of Pakistan (NHSRC). The NHSRC is the most detailed and most extensive catalogue of hospitals functioning in Pakistan. Han et al. (64) and Handayani et al. (65) concluded that ISO 9000 certification efforts and CSR practices have a significant and positive relationship, and that ISO 9000 certification may be the first step for CSR implementation. Furthermore, Abdullah (66) suggested that ISO 9000 provided a structured approach for the development and implementation of quality management systems. Still, it is only considered as a minimal standard for an excellent quality management system. Therefore, companies should consider implementing ISO 9000 standards as the first milestone in the path to CSR and quality excellence. Similarly, the researchers approached only ISO 9001 accredited hospitals who have, have applied for, or plan to use ISO 14001 and 26000 certificates. These contradictory findings on CSR, FSP, and SP highlight the compelling need for a complete investigation of the link between these factors. Furthermore, in developing countries and on concerned sectors, such as Pakistan, less attention has been paid to the concerned relationship of CSR and FSP, where the concepts of green performance and environmental sustainability are still in their infancy and the health sector has rarely been touched for such relationships. The data was collected from large and medium-sized private hospitals situated in six major commercial cities in Pakistan, namely Karachi, Lahore, Multan, Islamabad, Peshawar, and Faisalabad, via personal visits during August 2020 to October 2020 and following a non-probability convenience sampling technique. The selection of the abovementioned cities was based on population density, literacy rate, and on their having highly developed hospitals with modern facilities. Besides, the three major provinces of Pakistan were also represented by these cities; for example, Karachi represents the province of Sindh; Lahore, Multan, and Faisalabad represent Punjab; Peshawar represents the province of Khyber Pakhtunkhwa (KP); and Islamabad is a separate territory and the capital of Pakistan. The researchers congregated data from management personnel at the lower, middle, and upper levels, providing detailed information on organizational policies and practices. In addition, they are also the key people in their organizations who exchange data and enforce organizational policies. The present research's total population includes a total of 180 private hospitals from 124 medium- and 56 large-size private hospitals listed with the NHSRC. The target population of 180 was sampled at a 95% confidence level with a +/- 5% confidence interval, meaning the sample size was 123 private hospitals. Firstly, the personnel responsible for TQM, CSR, FSP, and OP in the targeted private hospitals were approached using purposive sampling. Afterwards, they advised the next respondents in the hospitals for all lower, middle, and upper-level management staff, meaning that snowball sampling was used. Following this approach, the total number of respondents in this research was 369 respondents (=123 x 3). The researcher obtained 369 responses which were used for data analysis in response to 123 targeted private hospitals. In Tables 1 and 2, detailed demographic information is provided.

**Table 1:** City-wide list of contacted and responded hospitals with accurate responses

| Province | Cities | Number of Private Hospitals (Medium) | Number of Private Hospitals (Large) | Questionnaire Distributed | Response from Hospitals (Medium) | Response from Hospitals (Large) |
|---|---|---|---|---|---|---|
| Sindh | Karachi | 17 | 7 | 72 | 51 | 21 |
| Punjab | Lahore | 15 | 8 | 69 | 45 | 24 |
| - | Multan | 10 | 6 | 48 | 30 | 18 |
| - | Faisalabad | 15 | 7 | 66 | 45 | 21 |
| Capital City (Separate Territory) | Islamabad | 19 | 8 | 81 | 57 | 24 |
| Khyber Pakhtunkhwa (KP) | Peshawar | 8 | 3 | 33 | 24 | 9 |
| | Total | 84 | 39 | 369 | 252 | 117 |

### 3.2 Instrument Design

The instrument of the current article comprised of 42 questions that determine the 7 main variables. The questions used in this study to measure each construct were adopted from several authors, corporate green performance Yusoff & Nejati (47) and Fayyazi et al. (48), strategic planning MBNQA (2019), CSR to society, CSR to customers, CSR to employees, green management, and green infrastructure (4,14). The questionnaire also included an introduction letter from the researcher' academic institution, and within the introduction letter, the objectives and the merits of the research were included. We ensured the respondents with complete anonymity and confidentiality.

Certain questions were revered from negative to positive and vice versa to avoid biased results before conducting the actual survey. Moreover, the researcher has performed some causality tests to ensure the relationship's direction; however, for brevity purposes, the results are not reported in the document. SmartPLS is used for Structure Equation Modeling(SEM).

### 3.3 Demographic Variable Description

Accordingto Ooi (67),hospitalsizewas consideredto be a demographic in this research, as large-sized hospitals or companies have more capital and infrastructure than small companies.Theresearcherdividedhospitalsintotwogroups (medi-umandlarge)aspertheirnumberofstafforemployees by considering the recommendations (68). Following Hoang et al. (68) approach, hospitals with less than one hundred personnel were judged as the medium, while hospitals were considered large with more than a hundredemployees.Table2explainthedemographicprofile ofrespondents.

**Table 2:** Demographic Information (n = 369)

| Specifics | Description | Values | Percentage |
|---|---|---|---|
| Gender | Male | 220 | 59.60% |
| | Female | 149 | 40.40% |
| | SUM | 369 | 100.00% |
| Total Responses | Medium | 252 | 68.29% |

| | | | |
|---|---|---|---|
| | Large | 117 | 31.71% |
| | SUM | 369 | 100.00% |
| Job Level | Lower Management | 123 | 33.33% |
| | Middle Management | 123 | 33.33% |
| | Upper Management | 123 | 33.33% |
| | SUM | 369 | 100.00% |
| Years of Experience | Less than 6 Years | 175 | 47.42% |
| | 6-10 Years | 93 | 25.10% |
| | 11-15 Years | 87 | 23.71% |
| | More than 15 Years | 14 | 3.77% |
| | SUM | 369 | 100.00% |

## 3. Data Analysis

PLS-SEM is used for the analysis of data in this study due to its ability to measure complicated models. It is generally more appropriate to use when the study includes numerous variables and complex models together (69). Hult et al. (69) propose that PLS_SEM can offer a strong ground for the confirmation of theories and obtained results that assist us in explaining the application of theories.

Structure equation modeling composed of two sub-models in SmartPLS, (1) The Inner Model and (2) The Outer Model. The Inner model refers to the relationship between the dependent and independent variables, but the outer model explains the relationship between the dependent variable and their observed indicators (69). Further, for testing common method bias, this study used Lindell & Whitney's (71) and Podsakoff et al. 's (72) method. In this study, we employ a theoretically unrelated construct (innovation) to adjust the correlation among the principal constructs. For instance, the "InnVar" is used as the innovation variable. After running the test, the correlation between Innovation and other variables, such as innovation and strategic planning or innovation and training, is very low. After squaring the correlation, the maximum shared variance with the other variables can be noticed. The maximum shared variance was about 0.1, so we can conclude that we do not have common method bias.

The presentation of results in this study would follow the style explained by (70). With reference to their style, at first, we need to check the reliability and validity of the variables by generating reliable estimates by using PLS Algorithm for the outer model, which also refers to a measurement model. Later, we provide an estimation of a structural model by using the Bootstrapping option for the inner model in SmartPLS. The results demonstrate the estimation of the measurement model in which we generally, estimate the relationships between construct (latent variable) and its indicators.

The results of composite reliability (CR), Cronbach's alpha, and average variance extracted (AVE) for the variables used in this study shown in Table 3. Results clearly show that all the values of composite reliability and Cronbach's alpha are higher than 0.7 which has passed the minimum acceptable criteria. For each variable, the values of AVE are more than 0.5 which meets the criteria for acceptable convergent validity.

Table 3: Results of Cross Loadings, Composite Reliability, Cronbach's Alpha and Average Variance Extracted (AVE)

| Constructs | Cross Loadings | Cronbach's Alpha | Composite Reliability | Values of AVE |
|---|---|---|---|---|
| CSRC | | 0.898 | 0.925 | 0.711 |
| CC1 | 0.792 | | | |
| CC2 | 0.855 | | | |
| CC3 | 0.884 | | | |
| CC4 | 0.832 | | | |
| CC5 | 0.852 | | | |

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| | | | | |
|---|---|---|---|---|
| **CSRE** | | 0.817 | 0.873 | 0.585 |
| CE1 | 0.819 | | | |
| CE2 | 0.569 | | | |
| CE3 | 0.842 | | | |
| CE4 | 0.855 | | | |
| CE5 | 0.698 | | | |
| | | | | |
| **CSRS** | | 0.931 | 0.948 | 0.785 |
| CS1 | 0.889 | | | |
| CS2 | 0.906 | | | |
| CS3 | 0.885 | | | |
| CS4 | 0.875 | | | |
| CS5 | 0.874 | | | |
| | | | | |
| **FSP** | | 0.955 | 0.961 | 0.691 |
| COSP1 | 0.865 | | | |
| COSP2 | 0.832 | | | |
| COSP3 | 0.880 | | | |
| COSP4 | 0.823 | | | |
| COSP5 | 0.759 | | | |
| COSP6 | 0.782 | | | |
| COSP7 | 0.817 | | | |
| COSP8 | 0.882 | | | |
| COSP9 | 0.824 | | | |
| COSP10 | 0.844 | | | |
| COSP11 | 0.830 | | | |
| | | | | |
| **GI** | | 0.776 | 0.847 | 0.529 |
| GI1 | 0.682 | | | |
| GI2 | 0.816 | | | |
| GI3 | 0.583 | | | |
| GI4 | 0.785 | | | |
| GI5 | 0.747 | | | |
| | | | | |
| **GM** | | 0.936 | 0.949 | 0.726 |
| GMN1 | 0.884 | | | |
| GMN2 | 0.857 | | | |
| GMN3 | 0.897 | | | |
| GMN4 | 0.906 | | | |
| GMN5 | 0.892 | | | |
| GMN6 | 0.756 | | | |

| | | | | |
|---|---|---|---|---|
| GMN7 | 0.756 | | | |
| SP | | 0.794 | 0.869 | 0.631 |
| SP1 | 0.561 | | | |
| SP2 | 0.841 | | | |
| SP3 | 0.872 | | | |
| SP4 | 0.861 | | | |

Discriminant validity shows that the measure of each variable is greatly related to its own variables and less allied to other variables in the study (Campbell & Fiske, 1959). There are two tests for discriminant validity (1) Cross-Loading (2) Fornell-Larcker Test. Cross-loadings used to measure the indicator level of discriminant validity while the Fornell-Larcker test is a test to measure the variable level discriminant validity. The values for cross-loadings are also shown in Table 3. Results demonstrate that all indicators have the highest relationship with their own variables.

The results of the Fornell-Larcker test illustrates in Table 4. For a construct to stand valid, it must have more variance with its own indicators than the measures of other variables. Results show that all variables share the highest variance with their own variables. Furthermore, the present study meets the mandatory criteria of Heterotrait-Monotrait Ratio (HTMT) suggested by (69) (See Table 5).

**Table 4:** Fornell-Larcker Criterion

| Variable | CSRC | CSRE | CSRS | FSP | GI | GM | SP |
|---|---|---|---|---|---|---|---|
| CSRC | 0.843 | | | | | | |
| CSRE | 0.679 | 0.765 | | | | | |
| CSRS | 0.657 | 0.042 | 0.886 | | | | |
| FSP | 0.600 | 0.594 | 0.275 | 0.832 | | | |
| GI | 0.536 | 0.438 | 0.143 | 0.481 | 0.727 | | |
| GM | 0.699 | 0.597 | 0.070 | 0.764 | 0.401 | 0.852 | |
| SP | 0.857 | 0.689 | 0.057 | 0.660 | 0.502 | 0.742 | 0.794 |

**Table 5:** Heterotrait-Monotrait Ratio (HTMT)

| Variables | CSRC | CSRE | CSRS | FSP | GI | GM | SP |
|---|---|---|---|---|---|---|---|
| CSRC | | | | | | | |
| CSRE | 0.792 | | | | | | |
| CSRS | 0.177 | 0.166 | | | | | |
| FSP | 0.637 | 0.648 | 0.286 | | | | |
| GI | 0.631 | 0.573 | 0.330 | 0.523 | | | |
| GM | 0.757 | 0.656 | 0.121 | 0.805 | 0.448 | | |
| SP | 0.651 | 0.632 | 0.172 | 0.749 | 0.623 | 0.732 | |

### 4.1 The Structure Model and Hypotheses Testing

The structural model measures the relationship between the given variables of a study. It is nothing more than the regression analysis. The results of the structure model including a Beta value which reflects the value of the impact of the explanatory variables on the dependent variable. The sign with beta value shows the direction of the impact. The structure model also provides t-value and p-value. These values are used to measure the significance of the relationship. For a significant relationship, t-value should be greater ± 1.96 or p-value needs to be less than 0.05. Sign with t-value also shows the direction of the relationship, just like a sign with beta value.

The results of the structure model also include the value of R2, which shows the strength of the relationship. These values have importance when we want to predict the future on the basis of the study result (74).

In current research, out of main six direct relationships, only 2 hypotheses were not supported. For instance, CSRS has significant impact on FSP ($p<0.05$, $\beta=0.220$, t-value=8.718) and the hypothesis H1 is accepted. Meanwhile, CSRS has no influence on SP ($p>0.05$, $\beta=0.039$, t-value=1.739) and not endorsed the H1a. CSRC also has no influence on FSP ($p>0.05$, $\beta=0.058$, t-value=1.108) and not supported the H2. However, CSRC has a positive impact on SP ($p<0.05$, $\beta=0.554$, t-value=10.376) and accepted the hypothesis H2a. Furthermore, the CSRE has a positive effect on FSP ($p<0.05$, $\beta=0.133$, t-value=2.616) and supported the hypothesis H3. CSRE also has a positive impact on SP ($p<0.05$, $\beta=0.144$, t-value=3.656) and supported the hypothesis H3a. Moreover, GM has a positive impact on FSP ($p<0.05$, $\beta=0.532$, t-value=10.582) and accepted the seventh hypothesis H4. GM also has a positive impact on SP ($p<0.05$, $\beta=0.253$, t-value=6.599) and strengthen the hypothesis H4a. In addition, GI has a positive impact on FSP ($p<0.05$, $\beta=0.122$, t-value=3.240) and the hypothesis H5 is supported. However, GI has no influence on SP ($p>0.05$, $\beta=0.045$, t-value=1.296) and not endorsed the H5a. Meanwhile, SP has a positive impact on FSP ($p<0.05$, $\beta=0.174$, t-value=3.299) and supported the H6.

**Table 6:** Direct and Indirect Relationship

| Hypotheses | Paths | Original Sample | Sample Mean | Standard Deviation | T Statistics | P Values |
|---|---|---|---|---|---|---|
| H1 | CSRS ->FSP | 0.220 | 0.221 | 0.025 | 8.718 | 0.000 |
| H1a | CSRS -> SP | 0.039 | 0.040 | 0.022 | 1.739 | 0.082 |
| H2 | CSRC ->FSP | 0.058 | 0.057 | 0.052 | 1.108 | 0.268 |
| H2a | CSRC -> SP | 0.554 | 0.552 | 0.053 | 10.376 | 0.000 |
| H3 | CSRE ->FSP | 0.133 | 0.130 | 0.051 | 2.616 | 0.009 |
| H3a | CSRE -> SP | 0.144 | 0.143 | 0.039 | 3.656 | 0.000 |
| H4 | GM ->FSP | 0.532 | 0.530 | 0.050 | 10.582 | 0.000 |
| H4a | GM -> SP | 0.253 | 0.255 | 0.038 | 6.599 | 0.000 |
| H5 | GI ->FSP | 0.122 | 0.123 | 0.038 | 3.240 | 0.001 |
| H5a | GI -> SP | 0.045 | 0.047 | 0.035 | 1.296 | 0.195 |
| H6 | SP ->FSP | 0.174 | 0.178 | 0.053 | 3.299 | 0.001 |
| H1b | CSRS -> SP ->FSP | 0.007 | 0.007 | 0.004 | 1.518 | 0.129 |
| H2b | CSRC -> SP ->FSP | 0.097 | 0.098 | 0.029 | 3.284 | 0.001 |
| H3b | CSRE -> SP ->FSP | 0.025 | 0.026 | 0.011 | 2.199 | 0.028 |
| H4b | GM -> SP ->FSP | 0.044 | 0.045 | 0.015 | 2.874 | 0.004 |
| H5b | GI -> SP ->FSP | 0.008 | 0.009 | 0.007 | 1.094 | 0.274 |

*4.2 Mediation Testing*

According to the proposed model of this study, the strategic planning used as a mediating variable. Whether this mediation impact strengthens or weakens the relationship between the dependent and independent variables, to see its influence, we can refer to the results of indirect effects of the model and compare these results to the direct effects. According to the results show in Table 6, strategic planning plays a significant role in positively influence the relationship. SP plays a positive mediating role between CSRS, CSRC, CSRE, GM, GI, and FSP. In this study, there are five sub hypotheses, that have specific indirect relationships and out of five hypotheses only two hypotheses were not accepted. SP has no mediation influence in between the relationship of CSRS and FSP ($p>0.05$, $\beta=0.07$, t-value=1.518) and not supported the hypothesis H1b. However, SP has positive and significant mediation impact in relationship between CSRC and FSP ($p<0.05$, $\beta=0.097$, t-value=3.284) and H2b is supported and accepted. SP also positively and

significantly mediates the relationship between the CSRE and FSP ($p<0.05$, β=0.025, t-value=2.199) and confirms H3b. Similarly, SP significantly and positively plays the mediation role in relationship between GM and FSP ($p<0.05$, β=0.044, t-value=2.874) and supported H4b. Meanwhile, SP has no positive and significant mediation influence in between GI and FSP ($p>0.05$, β=0.008, t-value=1.094) and not supported H5b.

*4.3 The Predictive Relevance of Study Model*

In the present research, two factors are verified like R square and cross-validated redundancy for the model's predictive relevance. R square values mean that the endogenous variable is explained jointly by all exogenous variables. Following table 7 demonstrates that all independent variables describe 78.7% SP. Whereas 68.5% FSP is illustrated by all independent variables. The R square value in the range of 0.02 to 0.13 shows weak or small, the R square value in the array of 0.13 to 0.26 is moderate, and R square value greater than 0.26 indicates the highly efficient [68]. Following table 7, R square value for FSP and SP indicates high effect. The cross-validated redundancy is measured by running blindfolding in PLS tool. According to some prior researchers, the value of Q2 must be more than zero (75,76). Table 7 reveals that the Q2 value of FSP and SP fulfils the abovementioned required criteria.

**Table 7:** The predictive relevance of study model and Cross-validated redundancy

| Total | R Square | Q² (=1-SSE/SSO) |
|---|---|---|
| Firm Sustainable Performance | 0.685 | 0.446 |
| Strategic Planning | 0.787 | 0.482 |

*4.4 The Effect Size*

R-square shows the model strength of how well endogenous constructs have been explained by all exogenous constructs. There is a need to first eliminate one exogenous construct to measure the effect size (f2) and run a model to find R-square by removing the contribution of that construct, then add R-square excluded deduct from R-square and follow the below formula (69).

$$f^2 = \frac{R^2 \text{ included}-R^2 \text{ excluded}}{1-R^2 \text{ included}}.$$

The effect size (f2) is considered smaller when f2 = 0.02, moderated when f2 = 0.15, and high when f2 = 0.35 (77). Following Table 8 indicates all exogenous constructs have smaller effects while the CSR to employee and green management maintain the ultimate effect.

**Table 8:** Effect Size of Independent constructs on dependent construct

| Independent Variables | Strategic Planning | Firm Sustainable Performance |
|---|---|---|
| CSR to Society | 0.006 | 0.138 |
| CSR to Customer | 0.488 | 0.002 |
| CSR to Employee | 0.048 | 0.027 |
| Green Management | 0.141 | 0.370 |
| Green Infrastructure | 0.006 | 0.031 |
| Strategic Planning | | 0.021 |

*4.5 Model Fit*

The standardized root means squared residuals (SRMR) shows an approximate fit of the model. It captures the magnitude of how the model's implied correlation matrix is differed with the observed correlation matrix and provides an estimate of the average magnitude of these differences. The lower the value of SRMR, the better a model fit is. A model considered having a good fit if SRMR is less than or equal to 0.08 (69). Some researchers follow the softer point of SRMR value less than 0.10. The value of the SRMR of the

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model in this study is 0.065. This value confirms that the model is correctly specified and can be considered as acceptable. Therefore, the model meets the criteria of being fit in terms of its SRMR value.

## 4. Discussion

The present research seeks to examine the impact of total quality management practices on corporate green performance via organizational culture mediation. The data was collected from medium and large private hospitals situated in six major commercial cities in Pakistan, including Karachi, Lahore, Multan, Islamabad, Peshawar, and Faisalabad via personal visits. The data was congregated from management personnel at the lower, middle, and upper levels, providing detailed insights and information about firms' practices and policies. In addition, they are also the key people in their organizations who exchange data and enforce organizational policies. The researchers used SmartPLS software for data analysis. The findings have revealed that CSR practices have a significant impact on FSP. As per structure model, results also indicated that four out of five practices of CSR namely CSR to society, CSR to Employee, Green Management and Green Infrastructure have positive and significant impact on FSP through acceptable values of (β, t and P). Therefore, the hypotheses H1, H3, H4 and H5 stand supported (see Table. 7). These results are similar with the work of Makanyeza et al. (33) in which they found the positive and significant influence of CSR practices on firm performance in the context of service sector. Moreover, this study's outcomes are also consistent with the study by Gallardo-Vázquez & Sanchez-Hernandez (34) in which they concluded the positive and significant impact of CSR practices on competitive success of firms in European context.   However, these results reverse to Iqbal et al. (35) research which they conduct in Pakistani banking sector and found a negative link between CSR practices and firm performance. Based on the stakeholder theory, businesses typically follow socially responsible strategies to increase the performance of current goods and services with the goal of satisfying consumer and stakeholder demands. Given the findings of the current study, it can be said that the sampled firms are efficiently capitalizing on CSR, which helps them to increase their Sustainable Performance.

A number of related factors, such as top management engagement, infrastructure, organizational culture, technological know-how and capitalizing on the latest technologies, depend on the efficient implementation of CSR practices and achievement of FSP goals, which could be a major reason for the positive relationship between CSR and FSP. As per Abbas (14), the incorporation of the new technologies with CSR helps organizations to turn their conventional operations into green operations Companies develop the awareness and expertise of their staff on the effective use of resources in compliance with CSR standards. Employees are more empowered in such an environment to ensure that their goods not only contain superior quality, but also preserve the natural environment. The results of this study suggest that if a company can handle its CSR operations effectively, it will increase the skills, abilities and level of motivation of the employees to use the resources in efficient ways, resulting in improved FSP.

Corporate social responsibilities practices have also been shown to have a positive impact on SP with the positive values. Therefore, H2a, H3a and H4a are supported. These findings are related to Lam & Lim (78) as CSR practices strongly related to the strategic planning of shipping companies registered in Singapore. These results also consistent with the outcomes of Galbreath (37) that CSR practices and strategic planning are positively associated with each other. These significant results mean that if an organization can handle its CSR practices in effectively, it will strengthen its strategic decisions and competencies to participate and perform accordingly. Furthermore, a key outcome of the present research is that strategic planning is significantly related to FSP with ($p<0.001$, $β=0.174$, t-value=3.299,) thus, H6 is also stays supported. This relationship identification is similar to Vitolla et al. (79) results where SP significantly impact on the firm performance.

### 5.1 Practical and Theoretical Implications

The current research has several implications in terms of managerial and theoretical viewpoint. From the industrial view, the abovementioned results feature the CSR practices institutionalizing significance to attain FSP goals in the concerned hospital sector. These results also explain the vital role of strategic planning in accomplishing FSP goals and highlights that through assimilating CSR and SP practices how an organization can accomplish perfection in day-to-day operations leads them towards strategic and competitive advantage. The structural analysis values reveal that FSP objectives are directly linked to CSR and SP practices effective

implementation. Organizations which actively play a part in societal development programs and effectively are possible to outpace than the conventional practices followers. For this purpose, organizations should commit to effective CSR practices implementation in a true spirit if they want to attain FSP goals and objectives.

The results reported here argue that CSR practices are linked with supporting SP practices that are necessary for the enhancement of green performance in the health sector and introduce CSR practices as an antecedent for improved strategic level planning and FSP in such sectors. This also theorizes for the first time that CSR goals of reduced waste, defects, and enhanced resource consumption are closely paralleled with quality and environmentally friendly practices in the health sector. Furthermore, the positive impact of SP on FSP has not been explored previously in this context, which serves as another key contribution by enriching existing green performance literature in the context of developing countries. This also helps in answering the question "does it pay to be green?" posed by several researchers in FSP literature (80-82). The current study also validates arguments about achieving enhancements in private hospitals' FSP in an efficient manner by the implementation of CSR in the context of developing countries. In addition, this research supports the argument that SP mediation affects the relationship between CSR and FSP in the health sector. To the best of the authors' knowledge, this mediation effect has not been previously investigated in previous CSR and green performance studies performed in Pakistan, thus adding another key contribution to knowledge in CSR practices and green performance.

The current study also illustrates that CSR is as essential for both large as well as medium-sized hospitals, which means that if medium-sized businesses adopt CSR successfully, regardless of hospital size, it may encourage the attainment of FSP goals. Thus, this study gives the management of medium-sized businesses trust that they can gain the same advantages from CSR to large firms. The current study also indicates that the positive influence of CSR practices is not limited exclusively to businesses operating in developed countries. If organizations successfully apply CSR practices in developing or under-developed countries, parallel results can also be obtained.

From a theoretical point of view, current research enriches in various ways the available literature on CSR, SP and FSP. First, this research bridges the literature gaps in the CSR-FSP relationship, especially in Pakistani hospitals. This research also supports the CSR proponents' claims that successful CSR practices implementation can dramatically improve organizational efficiency. Secondly, this study validates the green theory and FSP model and explores the conceptual model' robustness via the Structure Model, that has hardly been carried out in prior studies. Lastly, this research shows SP's function, which positively mediates the relationship between CSR and FSP, which has also rarely been estimated before.

*5.2 Limitation and Future Direction*

The present study also has certain limitations similar to other studies. The researcher collected the data by requesting the respondents to conceptualize the questionnaire based on the firm's actual output; therefore, this caused bias in collected responses because it was purely based on respondents' perception. Though the reliability and validity have been thoroughly analyzed, it is impossible to rule out the impact of biases completely. Therefore, the firms' secondary data can also be beneficial in terms of extra evidence related to CSR, SP and FSP relationship. Moreover, due to Covid-19 spread, the researcher faced many constraints during the data collection phase in terms of accessibility and response rate. Secondly, the target market for data collection was based on only six cities' private hospital. The area of the study is suggested to be lengthened to include other big cities and countries. Likewise, the lower, middle and upper-level management has targeted for data collection and ignored the operational staff; nevertheless, their view can be more insightful. Hence, the researcher can take their perception in future while further study these factors.

## 5. Conclusion

Bearing in mind the environmental concern primarily triggered by the hospital sector, the significance of green growth has considerably increased concerning sustainability achievement. For developing countries, green growth has special significance, such as Pakistan where this phenomenon is at the introductory level and considers a developed countries approach. In recent years, the Pakistani government has made a significant investment in encouraging green business practices. The researcher examined the role of CSR

practices in FSP in the current study and explored how SP mediates the relationship between CSR practices and FSP. The researcher generated six main hypotheses based on green theory and built essential arguments established on current literature, which were tested through structure modelling. The findings demonstrate that CSR practices has a significant and positive impact on FSP and has a strong potential to enhance organization's green practices. In addition, SP mediates the relationship between CSR and FSP significantly. With the help of SP mediation, the constructive outcomes of CSR in FSP in Pakistani hospitals recommend that if companies effectively adopt CSR practices, it will enhance FSP even in developing countries. However, the government and top management dedication are imperative to achieve green business goals.

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