DOI: https://doi.org/10.52131/pjhss.2023.1102.0388



Pakistan Journal of Humanities and Social Sciences

Volume 11, Number 02, 2023, Pages 749-765 Journal Homepage:

https://journals.internationalrasd.org/index.php/pjhss



Do Green Practices and Pro-Environmental Behaviour Authenticate CSR Talk-Action to achieve Sustainability? Evidence from Pakistani Manufacturing Sector

Syed Akber Hussain Rizvi¹, Atif Aziz²

¹ Ph.D. Scholar, Karachi Institute of Economics and Technology, Pakistan. Email: rizvi.akber@gmail.com

ARTICLE INFO

Article History:

Received: March 18, 2023
Revised: April 17, 2023
Accepted: April 17, 2023
Available Online: April 29, 2023

Keywords:

Green Supply Chain Practices
CSR Motives
Organizational Commitment
Organizational Citizenship Behavior
Sustainable Performance

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

In the present environment, organizations are introducing the March 18, 2023 concept of sustainability through green supply chain practices. April 17, 2023 The reason is that green supply chain practices are viewed as the April 17, 2023 provenance of sustainable performance and ensure the CSR April 29, 2023 motives of the firm which they tend to share with internal and external stakeholders. However, the successful implementation of green practices requires organizational commitment and organizational citizenship behavior. Thereby, the study introduces a holistic framework that not only aims to scrutinize the relationship between CSR motives and sustainable performance but also highlights the essential role of green supply chain practices and organizational citizenship behavior as a mediator. Moreover, the study also introduces the moderating role of organizational commitment on the relationship between green supply chain and sustainable performance. Data, in this regard, was collected from manufacturing employees of Pakistan and PLS methodology was used to assess measurement and structural model. Empirical findings reveal that CSR motives have no significant impact on sustainable performance, while in the presence of a green supply chain as a mediator, the relationship becomes significant. Interestingly, results reveal that OCB does not mediate the relationship between green supply chain practices however, sustainable performance, organizational commitment as a potential moderator strengthens relationship of GSCP with sustainable performance. Contradictory findings open new avenues for researchers and also provide an empirical baseline to shape organizational policies in order to achieve sustainable performance.

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Corresponding Author's Email: rizvi.akber@gmail.com

1. Introduction

Prior to the concept of greening and sustainability, the negligence of firms and human beings has led to environmental issues which have now been increasing in recent times (Mtutu & Thondhlana, 2016). However, the concept of green practices has also been rising in recent years and caught the attention of firms in order to address environmental-related issues. It is firmly believed that green practices in business operations such as green supply chain management have the potential to enhance a firm's sustainable performance (Saeed, Jun, Nubuor, Priyankara, & Jayasuriya, 2018). By introducing the concept of green in business, the firms can integrate several functions of business operations such as green selection and recruitment, green rewards, green policies, green compensation, green training and development, green performance, green jobs, green motivation, green workforce, green marketing, green manufacturing, green management, green supply chain management, green material sourcing, green branding. Green distribution. Green design, organizational citizenship behavior towards the environment (Alt & Spitzeck, 2016; Eltayeb, Zailani, & Ramayah, 2011; Khan & Qianli, 2017; Luthra, Garg, & Haleem, 2016; Siyambalapitiya, Zhang, & Liu, 2018; Tang

749 eISSN: 2415-007X

² Professor, Karachi Institute of Economics and Technology, Pakistan. Email: atif.aziz@iqra.edu.pk

& Wei, 2018; Yuriev, Boiral, Francoeur, & Paillé, 2018). This indicates that scholars conclude to this point that green practices in firms are crucial to address environmental issues and cannot be neglected at any cost.

Corporate social responsibility (CSR) has also gained much attention from researchers, and it is commonly used on the market. In this era of social awareness, customers expect management should consider the needs of other relevant stakeholders, as well as the shareholders' interests as well as corporations' aspirations (Shah & Khan, 2020). The legal bounding of an organization to achieve its economic objectives by following the legal structure is known as legal responsibilities. The expectations of society from an organization to establish and follow moral standards and know ethical and discretionary responsibilities. CSR motives, therefore, play a major role in creating a sustainable workforce to attain a sustainable firm's performance. Similarly, Malik et al. (2020) argued that internal CSR particularly links to the employees and management activities, hence, it has a close association with GSCM. The reason is that it shifts the focus of management and employees towards green and environmentally friendly practices (Wang, Zhang, & Zhang, 2020).

When talk about firm's sustainable performance, manufacturing sector is viewed to be the major culprit as it causes several environmental problems such as huge wastages, air and water pollution, climate complexities and natural resource depletion. It is argued that manufacturing companies pollute the environmental and pose threat to human survival. Hence, environmental performance of manufacturing firm is of greater concern to address severe environmental issues. As stated, the share of manufacturing firms towards environmental degradation is comparatively high and this now concerns economies to adopt sustainable practices which meet economic, environmental, and social needs at the same time (Abdullah, Zailani, Iranmanesh, & Jayaraman, 2016; Diabat, Khodaverdi, & Olfat, 2013; Hussain, Rigoni, & Orij, 2018). In Pakistan's scenario, the manufacturing sector is the third (3) main segment of Pakistan after the agriculture & service sector. It plays a dynamic role in the economy of Pakistan; According to the Ministry of Finance in the economic survey of Pakistan, 2012, 18.7 percent GDP of Pakistan is contributed by the manufacturing sector. However, due to the modern powers of globalization, technical changes and changing customer demands an improved level of quality, this vital sector of Pakistan is now facing powerful rivalry. To continue in this stormy situation, companies have to be innovative and receptive to the shifting atmosphere. This resourcefulness cannot be established without the participation of personnel. Moreover, the experts of the manufacturing field explain that human capital is the backbone of the manufacturing industry and their experiences and skills contribute largely to the success of an organization. Hence, the sector needs a strong vision and green practices to be adopted in order to identify the critical green skills of a workforce which ultimately brings sustainability to organizational performance (Bhutto & Jamal, 2020).

This peculiar knotty situation of the Pakistani manufacturing sector somehow reflects the uncertain level of preparedness of the industry that hinders them to either adopt or implement green practices (Çankaya & Sezen, 2019). Thus, the framework where CSR and GSCM are tied together to be explored in this perplexing situation indeed offers an in-demand insight that would act as a bridge to fulfil the gap found in the existing literature. Lastly, either green organizational citizenship behavior bridges the relationship between green supply chain practices and sustainable performance along with the moderating role of organizational commitment also demands exploration as without the sincere involvement of internal stakeholders, it is quite difficult to implement green practices and achieve sustainable performance. The study, thereby, intends to fulfil following objectives:

- 1. To explore the direct association of CSR motives and sustainable performance of the firm.
- 2. To explore the mediating role of green supply chain practices on the relationship between CSR motives and sustainable performance of the firm.
- 3. To explore the mediating role of organizational citizenship behaviour for environment on the relationship between green supply chain practices and sustainable performance of the firm.
- 4. To explore the moderating impact of organizational commitment on the relationship between green supply chain practices and sustainable performance of the firm.

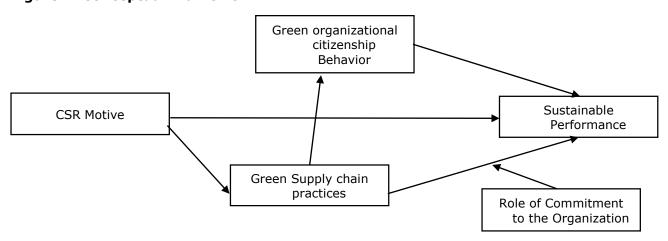
2. Literature Review

2.1. Theoretical Framework

Scholars echoed various theoretical aspects to the explorable connection of green supply chain practices without other variables. Tian (2023) such as dissected the liaison of stakeholders and probed the GSCP diffusion process by utilizing evolutionary game theory. Similarly, Foo, Lee, Tan, and Ooi (2018); Zaid, Jaaron, and Bon (2018), used the resource-based view theory in order to evaluate the influence of GSCP on sustainable performance. Regardless of the efforts, these studies made emphasis on sustaining the significant position of stakeholders towards GSCM (Adebanjo, Teh, & Ahmed, 2016; Foo et al., 2018; Wolf, 2014). Contrastingly, stakeholder theory postulates that organizations and stakeholders are bound together in a strong relationship where each party is satisfied (Bosse, Phillips, & Harrison, 2009). Because of this, firms are able to perform well and gain better performance outcomes as they highly and actively engage in the activities through which the relationship gets stronger with time (Hasan, Kobeissi, Liu, & Wang, 2018). From this lens, the stakeholder theory offers a justifiable and rational theoretical view to illustrate the astounding relationship of stakeholders which, explicitly in recent years, has built as the dominant paradigm in CSR (corporate social responsibility) literature(Hasan et al., 2018). However, it is imperative to build the argument that how GSCP occurs with the plausible outcomes in the Pakistani context from a stakeholder theory lens, otherwise, the unanswered questions regarding the argument may create obstacles while developing the understanding of GSCP with other chosen variables in the proposed framework.

Studies related to corporate social responsibility also viewed the notion from the perspective of organizational behavior (Gond, El-Akremi, Igalens, & Swaen, 2010). Ong, Mayer, Tost, and Wellman (2018) argued in the literature that CSR increases employees' motivation, morale, commitment, and loyalty. Thereby, we can say that the social involvement of firms assesses them to prepare the desired workforce and other capabilities under a suitable environment. It is stated that employees are counted as important stakeholders because they are the ones who create demand for CSR. For organizations, it is a perfect way to respond to these demands through a voluntary program specifically designed for the purpose. These programs encourage employees to participate in community services (Barakat, Isabella, Boaventura, & Mazzon, 2016). As The synthesized literature proclaims that organizational citizenship behavior has been explored in depth from the perspective of social exchange theory. However, the limitation is there as these studies did not explain the underlying reason why stakeholders especially employees develop organizational citizenship behavior. Furthermore, in many researches, there is this misconception that stakeholder commitment is associated with the monetary benefits they receive from entities. Thereby, it is imperative to build this theoretical perspective that extends the reason for OCB beyond these reasons (Closon, Leys, & Hellemans, 2015; Kunda, Ataman, & Kartaltepe Behram, 2019).

Figure: 1 Conceptual Framework



2.2. Hypothesis Development

2.2.1. Corporate Social responsibility motives and Sustainable Performance

Firms when operating through CSR, ensure to safeguard not only cultural and economic aspects but also social and environmental pillars of sustainability(Raimi, 2017). During the last few decades, corporate social responsibility has been gaining significant attention in business sectors (Hou & Xie, 2019). CSR initiatives can be determined through various factors such as 751

organizational behavior, assigned rules, and regulations, market competitiveness, etc. (Campbell, 2018). Consequently, CSR improves a firm's capabilities and increases the competitive edge of a firm which eventually helps it to gain sustainable growth (Gorski, 2017). Prior studies shielded the role of CSR in the achievement of sustainable development goals. For suppose, Malik et al. (2020) studied the role of CSR in economic performance and found that CSR increases the economic performance of a firm. Shahzad, Qu, Javed, Zafar, and Rehman (2020) also reported that CSR activities are positively associated with sustainable performance. Hence, providing shreds of evidence that socially responsible firms increase sustainable performance. The authors also acknowledge the fact that CSR has the potential to increase the financial performance of firms. Along with it, it can boost employees' morale, reduce cost and turnover rate and enhance job satisfaction which all together behaves as a powerful factor that could increase the social and environmental performance of organizations (Camilleri, 2017). According to these studies, it is not necessary that moral practices commitment led to desirable outcomes, hence contradicts with stakeholder theory (Du Plessis & Grobler, 2014; King & Lenox, 2000). Besides that, Morioka and de Carvalho (2016) also found that practicing social activities do not necessarily generate a desirable outcome. In addition, there are cases in which socially responsible activities negatively impact the value of stakeholders. Due to contrasting evidence, the present study hypothesizes that:

H₁: Corporate social responsibility motives have a relationship with sustainable performance.

2.2.2. CSR Motives, Green Supply Chain Practices, and Sustainable Performance

According to Faroog, Rupp, and Faroog (2017), corporate social responsibility is divided into two broader categories; internal CSR and external CSR. Internal CSR is linked to those affairs that show emphasis on management practices that are purely talked about employees as a beneficiary. Incorporating green practices in supply chain management can help organizations to reduce waste and enhance environmental efficiency in the whole supply chain process (Foo et al., 2018; Zaid et al., 2018). CSR is closely linked to green supply chain practices. Internal CSR encourages employees to direct positive attitudes toward the organization which helps firms further to optimize their business operations (Sen, Bhattacharya, & Korschun, 2006). Through this, successful implementation of GSCM can happen (Rajabion, Khorraminia, Andjomshoaa, Ghafouri-Azar, & Molavi, 2019). According to El Akremi, Gond, Swaen, De Roeck, and Igalens (2018), CSR initiatives bring positivity in employees that further bring change in existing supply chain practices. Resultantly, green supply chain practices are easy to be implemented. Moreover, CSR activities are also embedded with the culture of an organization, thereby, when firms focus on CSR initiatives, they might have a good chance of good corporate culture that helps an organization to involve in such activities that save energy, decrease emissions and improve overall efficiency (Tellis, Prabhu, & Chandy, 2009). According to Chu, Yang, Lee, and Park (2017), organizations when prioritizing CSR initiatives, fragment cognitive inertia and rebuild the existing business model. These cognitive factors are viewed as a significant pre-condition for the green supply chain management. Thus, CSR activities foster firms to swap their prior perception and execute green supply chain practices.

Jääskeläinen and Heikkilä (2019) argued that in recent years, organizations have been competing and offering value to customers based on their supply chain methods. Supply chain operations either directly or indirectly affect the environment which cannot be neglected. It affects directly when businesses utilize such practices or material that results in gigantic waste at various stages such as during storage, transportation, processing, and disposal. Manufacturing industries specifically embroil in various contagious chemicals and processes which not only deteriorate air quality but also pollute water. In an indirect case, the operations of upstream suppliers are to be blamed for causing harm to the masses. However, the implementation of green supply chain management upgrades the firm's ability to address these challenges from direct and indirect both perspectives. Thereby, it is not wrong to say that green supply chain practices are environmentally friendly indicators that enhance the greening impact in every stage of product life; from production to consumption (Jermsittiparsert, Namdej, & Somjai, 2019).

Organizations that are engulfing your supply chain process with practices that are causing less harm and fulfilling consumers' demands appear to be more successful in all performance areas due to close ties which upstream and downstream partners. Thereby, the supply chain objectives of responsible organizations establish the corporate image of firms that eventually

gives them an edge over other firms (Green, Zelbst, Meacham, & Bhadauria, 2012). Similarly, incorporating green agenda in SC processes allows businesses to opt for value-addition practices that are hard to imitate and novel in the market, hence, shaping the image of business (Hazen, Skipper, Ezell, & Boone, 2016; Narasimhan & Schoenherr, 2012; Rao, 2002). Several scholars provided their stance that addressing social issues in supply chain practices helps firms to enhance their social performance. Green supply chain practices provide opportunities to firms to create a positive image infront of society, stakeholders, government, etc by addressing the environmental challenges which, in recent times, is a prime concern of every individual and economy (Schoenherr, Narayanan, & Narasimhan, 2015). Conclusively, the environmental practices of organizations improve social performance which ultimately creates sustainability at all levels. Thus, we proposed that:

H₂: CSR has a positive and significant relationship with green supply chain practices.

H₃: GSCP has a positive and significant relationship with sustainable performance

H₄: GSCP mediates the relationship between CSR motives and sustainable performance

2.2.4. Organization Citizenship Behaviour, GSCP, and Sustainable Performance

Boiral (2009) was the first one who suggested the idea of environmental organizational citizenship behavior. Since then, it has grabbed the attention of various academics and scholars. According to the author, OCBE is a voluntary behavior that is not a part of the structured reward system of a company but still, it is strongly linked to sustainable performance. Alt and Spitzeck (2016) also observed that OCBE majorly contributes to a firm's sustainable performance, thus, it can be comprehended that OCBE translates green supply chain practices that lead to the enhancement of sustainable performance. As discussed, scholars have found various studies in which organizational citizenship behavior was viewed as a mediating variable. Nonetheless, few differences exist. Firstly, dependent variables in these studies are different such as some studies used employee performance as a dependent variable (Jiang, Zhao, & Ni, 2017; Maharani, Troena, & Noermijati, 2013), some used organizational performance or some used individual creativity and innovation as a dependent variable (Wefald, Hornung, & Burkhart, 2021).

Existing studies highlight the significance of perceived environmental behavior in corporate greening practices (Hart, 1995; Paillé & Meija-Morelos, 2019; RUIZ-QUINTANILLA & England, 1996). As discussed, perceived environmental behavior is a broader concept, thereby, covering various themes such as ecological behavior, green behavior, or environmental behavior in order to improve the business performance of a firm (Roy, Schoenherr, & Charan, 2018). However, the present study considers OCBE, which is a specific type of PEB and is viewed as a discretionary behavior. Tuan (2018) argued that OCBE makes environmental management programs effective and has the potential to align environmental policy with various workplace activities. In recent times, environmental protection is one of the crucial and urgent priorities of society. It is indeed necessary to protect the ecosystem and natural resources for future generations, thereby, it also becomes the priority of organizations and decision-makers as well (Chang, Chen, Luan, & Chen, 2019). It is also argued that OCBE creates a sense of sense of sustainability within and outside the firm which helps a firm to achieve green objectives. Thus, in the light of discussion, the study proposes an argument that OCBE mediates the relationship between green supply chain practices and sustainable performance.

H₅: GSCP has a positive and significant relationship with OCB

H₆: OCB has a positive and significant relationship with sustainable performance

H₇: OCB mediates the relationship between GSCP and sustainable performance

2.2.5. Organizational Commitment as a Moderator

According to Ridwan, Mulyani, and Ali (2020), organizational commitment can act as a moderator on the association of institutional pressures forced by external environmental and corporate environmental responsiveness that could be in the form of green practices such as pollution control, pollution presentation, and environmental protection. Although, literature claims that corporate environmental responsiveness and green supply chain management have a similar goal of sustainability but green supply chain practices in contrast are more operationally transformative. The reason is that these practices help in acquiring new resources and capabilities and redefining or restructuring existing ones (Yusliza et al., 2020). On the other hand, corporate environmental responsiveness handles environmental risks which are associated with the operating environment. As per the claims of study, the implications suggest that organizational

commitment has the potential to influence environmental response indirectly, through the incorporation of green supply chain practices. The implications are also validated by Mumtaz, Ali, Petrillo, and De Felice (2018) work. Hence, ensures that organizational commitment is a potential moderator. In the present study, we assert that the incorporation of green supply chain practices could only be plausible when support can be seen from top management. In other words, we propose that managerial commitment will moderate the relationship between green supply chain practices that firms adopt and sustainable performance of the firm. Thus, we propose that:

H₈: Organizational commitment moderates the relationship between GSCP and sustainable performance

The above discussion indicates that the existing CSR based deliberation indeed has been used extensively in public relations, corporate sustainability and other areas, however, criticisms have been raised and amongst all, the most common argument in CSR literature raises question on existing evidences as these are based on the perspective of external stakeholders. In addition, critics also argue that major stream of literature talks about CSR outcomes, hence, neglected procedures and internal audiences. Hence, there is a need to evaluate internal factors that are equally important to achieve sustainable performance, especially when motives are to be planned accordingly. Also, there is an influence of internal stakeholders on firm's resource, hence, there participative role creates dependency for green activities (Anser, Yousaf, Majid, & Yasir, 2020). Also, the extensive literature review enlightens the inconclusive results about CSR motives and firms' environmental performance due to presence of various other factors. Hence, recommendation are there to encourage the use of moderators or mediators which align the relationship of CSR motives and firm's environmental performance. Thereby, the present study add one moderator and two mediators in the proposed framework to evaluate the complex framework from the perspective of internal stakeholders (Kraus, Rehman, & García, 2020).

3. Methodology

3.1. Data & Materials

The section covers the data and materials part and highlights the adopted methodology and tools that are being used to assess the data. Since, the present study utilized a quantitative approach in order to evaluate pretesting theory, thereby, survey instrument has been borrowed from prior studies. Besides, the study being explanatory research used cross-sectional primary data and collected it from manufacturing sector employees. Since, the projected population of the current study is Pakistan's manufacturing sector, hence, management employees are being targeted for the study sample. The reason is that internal stakeholders indeed have greater knowledge regarding CSR motives and the green agenda of organization which is appropriate to measure the organization's sustainable performance. Further, the non-probability snowball sampling technique has been used to collect data from respondents.

3.2. Instrument Adaption

The study has a total of 6 variables; corporate social responsibility (CSR) motives, green supply chain practices (GSCP), organizational citizenship behavior, organizational commitment, and sustainable performance. As discussed, each of the measures was adopted from preceding literature, and all the items were based on a five-point Likert scale (strongly disagree=1 to strongly agree=5). Sustainable performance is the dependent variable of the study and CSR motives is the independent variable of the study. Whereas green supply chain practices and green organizational citizenship behavior are study mediators. It is to be noted that green supply chain practices are presumed to mediate the relationship of CSR motives with sustainable performance, however, green organizational citizenship behavior mediates the direct path of GSCP and sustainable performance. Moreover, organizational commitment acts as a study moderator to moderate the relationship between GSCP and sustainable performance.

CSR motives variable is adopted from the study of Bolton and Mattila (2015) and has a total of 4 items to measure the said variable. The green supply chain practices instrument was borrowed from the study of Ninlawan, Seksan, Tossapol, and Pilada (2010) and a total of six dimensions of GSCP were considered to measure the variable which are internal environment management, green purchasing, green manufacturing, green distribution & packaging, green marketing, and environmental education. The adopted instrument was based on a total of 29 items. Similarly, the green organizational citizenship behavior instrument was taken from the

study of Anwar et al. (2020) and has a total of 10 items. Organizational commitment was adopted from the study of Yousef (2003) and has a total of 15 items to measure the variable. Lastly, sustainable performance was measured through the adopted instrument borrowed from the study of Yong et al. (2020) and has 5 items in total.

3.3. Response Rate

The data used in the present study to test the relationship among corporate social responsibility (CSR) motives, green supply chain practices (GSCP), organizational citizenship behavior, organizational commitment, and sustainable performance, was gathered from the employees of the manufacturing sector. In order to connect to participants, references were used through which an electronic version of questionnaire was distributed among the sample population and made requested to fill out the form with honesty. Moreover, participants were ensured that their responses will be used for study purpose and will be kept confidential. Since the rough sample size was drawn which is about 377, thereby, a total of 400 questionnaires were sent to the participant and in return 378 responses were received out of which 353 were filled properly, hence, ensuring the validity. As the rest of the responses were incomplete or had some issues, thereby, 353 responses were finally considered usable responses and used to analyze the data. Table 4.1 illustrates the details responses with the frequency rate.

Table 1: Response Rate

Response	Freq/Rate	
No. of distributed questionnaires	400	
Returned and usable questionnaires	353	
Usable response rate %	88.25%	

3.4. PLS Methodology

The present study used the PLS-SEM model to assess the association among CSR motives, sustainable performance, green supply chain practices, organizational citizenship behavior, and organizational commitment. The PLS-SEM model is convenient to be used due to various reasons. First, it is the best fit for complex framework estimations and it also offers conservative hypothesis testing via path coefficient estimation. Moreover, it also greatly works for non-normal data. Therefore, via PLS-SEM method, the measurement model of the study is assessed to check model reliability and validity and then the structural model has been scrutinized to test proposed hypotheses. As mentioned earlier that the study measures are being adopted from preceding literature, hence, it is imperative to check the constructs' reliability and validity which is the first step of PLS methodology, once the measurement model gives a satisfactory outcome then the next step is to evaluate the structural model in order to identify the proposed relationship.

4. Results

4.1. Descriptive Statistics

Before assessing measurement and structural models, it is quite important to develop an understanding of the nature and properties of data. For that, descriptives were performed by using mean and standard deviation. Mean values tell average values whereas standard deviation tells how much data is scattered from its average point. As discussed, mean values are defined in Table 4.2. It can be seen that the average value of CSR is 2.0521 with a 0.8348 standard deviation. Similarly, GSCP mean value is 3.2743 with a 0.7410 standard deviation followed by OCB whose mean value is 3.2855 with 0.7748 SD. In the case of organizational commitment, its mean value is 3.5013 with 0.8580 SD which is followed by a sustainable performance with a mean value of 2.4719 and 0.9224 SD.

Table 2: Descriptive

Table 2. Descripti	v C			
Variable	N	Mean	Std. deviation	
CSR	353	2.0521	.8348	
GSCP	353	3.2743	.7410	
OCB	353	3.2855	.7748	
OC	353	3.5013	.8580	
SP	353	2.4719	.9224	

4.2. Measurement Model

4.2.1. Convergent Validity and Reliability

As discussed, measurement model evaluation is the first step of PLS methodology which verifies the measurement competency of each variable by scrutinizing each of the item loads that 755

are being borrowed from prior studies to measure specific variables. According to Ramayah, Lee, and In (2011), the measurement model is normally examined through two criteria; convergent validity and discriminant validity. The internal consistency of a model is analyzed with the help of composite reliability and Cronbach alpha. Whereas, validity is being analyzed through AVE. Discriminant validity which is the second criteria, to assess the measurement model, is being checked with the help of HTMT, Fornell-Larcker criterian, and sometimes through cross-loadings. Hair, Ringle, and Sarstedt (2013) stated that the value of composite reliability (CR) must lie between 0-1. In addition, the authors also argued that the benchmark set for CR reveals that the CR value is recommended either 0.6 or greater than 0.6. However, scholars also argued that if CR is above 0.7 or equal to 0.7 then it is better. Similarly, in the case of Cronbach, scholars argued that the value would call satisfactory or decent when it is equal to or above 0.7, however, it would be considered more adequate if it lies between 0.7 to 0.9 (Henseler, Ringle, & Sarstedt, 2012). Hence, in order to assess reliability measures, CR and Cronbach tests were performed and it is guite clear from Table 3 that each of the value of CR and Cronbach fulfills the criteria, thereby, making sure the model is reliable. Talking about validity, convergent validity specifically explains the degree of correlation among measures and according to scholars it can be assessed through AVE which should not be less than 0.5. As Table 3 depicts that each of the AVE is greater than 0.5, hence, ensuring the validity of the proposed model.

Table 3: Convergent Validity

Constructs	Cronbach's Alpha	CR	AVE	
CSR	0.959	0.930	0.601	
GSCP	0.963	0.829	0.523	
OC	0.910	0.905	0.578	
OCB	0.923	0.921	0.742	
SP	0.955	0.809	0.699	

4.2.2. Discriminant Validity

It has already been mentioned that discriminant validity was also evaluated in the present research as it talks about how much constructs differ from each other. Thus, it is not wrong to say that it deliberately tells that measures of constructs that are not linked to other constructs, in theory, are also different when it comes to practical assessment (Churchill Jr, 1979). The fornell-Larcker test to measure discriminant validity is normally viewed as the most appropriate method other than cross-loading. It is to be noted that discriminant validity has normally been established when the "AVE square root value of each variable is greater than the highest correlation of construct in comparison with other constructs" (Henseler, Ringle, & Sinkovics, 2009). Thus, the present study scrutinized discriminant validity by comparing the square root of AVE with other variables From Table 4 it is quite clear that AVE sq. root values which are in bold format are greater than the correlation of other constructs, hence, discriminant validity of a model is established.

Table 4: Fornell-Larcker

	CSR	GSCP	OC	ОСВ	SP	
CSR	0.943					
GSCP	0.330	0.928				
OC	0.132	0.334	0.834			
OCB	0.279	0.247	0.448	0.929		
SP	0.096	0.330	0.229	0.212	0.919	

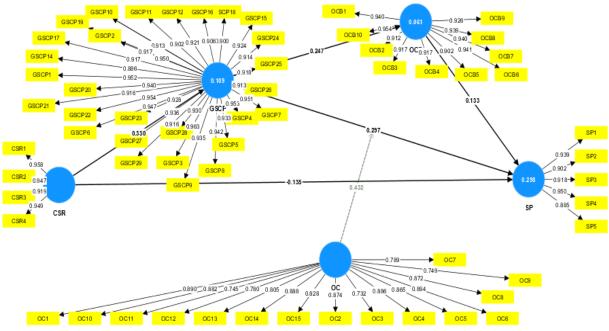
As discussed, discriminant validity has also been checked through the HTMT matrix and scholars argue that the value of HTMT must be less than 0.9. Table 4.5 clearly depicts that the correlation value of each construct that is in bold format is less than 0.9, hence, indicating that DV is established and the outer model is valid.

Table 5: HTMT Matrix

	CSR	GSCP	ОС	ОСВ	SP	
CSR	0.898					
GSCP	0.323	0.812				
OC	0.151	0.341	0.791			
OCB	0.285	0.236	0.458	0.643		
SP	0.115	0.316	0.182	0.202	0.429	

From the above tables, it is quite clear that the measurement model ensures the reliability and validity of items. Thereby, authors are allowed to proceed toward the next step which is structural model analysis. The following section talks about structural models which shed light on hypothesis testing.





4.3. Structural Model

The outer model known as the measurement model has been examined and provides satisfactory results, hence, structural model analysis begins to analyze the relationship among constructs.

4.3.1. Direct Relationship

Through systematic analysis of the structural model, the study tested hypotheses 1-8. First, the direct relationship of the independent variable with the dependent variable was analyzed. Bootstrapping in PLS-SEM was calculated with 5000 sub-samples. In the first stage, the direct effect of IV and DV was calculated by covering H1. After that GSCP was introduced as a mediator and its relation with IV and then with DV was evaluated which covers H2 and H3. Again, organizational citizenship behavior was introduced as a second mediator and its relation with GSCP and SP was analyzed which covers H5 and H6. The mediating path coefficient was observed in the third stage which is explained thoroughly in the next section by covering H4 and H7. Lastly, an organizational commitment was introduced as a moderator through which H8 was being tested.

Findings from Table 6 reveal that CSR motives do not significantly impact sustainable performance as the beta value is 0.135 and the p-value is 0.237, hence, do not support H1. In the case of the CSR and GSCP relationship, results reveal the significant and positive impact as the beta value is 0.33 and the p-value is 0.000, hence, supporting H2. Similarly, results also display that green supply chain practices positively and significantly impact sustainable performance as the beta value is positive and the p-value is 0.013, hence, supporting H3 as well. Lastly, it can also be seen that there is a positive and significant relationship between GSCP and OCB as the path coefficient value is 0.247 and the p-value is 0.007, Hence H5 is also supported by results.

Table 6: Direct Effect

	Beta coefficient	T-stats	p-values	Decision
CSR-> SP	0.135	1.184	0.237	Not Supported
CSR -> GSCP	0.33	3.725	0.000	Supported
GSCP -> SP	0.297	2.497	0.013	Supported
GSCP -> OCB	0.247	2.689	0.007	Supported
OCB -> SP	0.133	1.128	0.259	Not Supported

4.3.2. Mediation Effect

The study has also conducted mediation analysis in order to assess the indirect association of the independent variable with the dependent variable. Scholars argued that there are various meditation techniques that are being used to perform mediation analysis such as Baron and Kenny method, the Sobel method, product distribution method. However, the bootstrapping method is one of the most effective and popular methods which provides sample distribution of indirect effect (Preacher & Hayes, 2004). First and foremost, bootstrapping starts with the direct path estimation of IV with DV when there is no presence of a mediator. In the following stages, the mediation process begins by involving the presence of a mediator. This is the stage where the focus shift towards the relation of IV with mediator and mediator with DV, however, it is not enough to explain the whole mediation process. At the final stage, two significant path coefficient product is divided by standard deviation error which reveals the specific indirect path. With this argument, the present study analyzed two mediators; green supply chain practices and organizational citizenship behavior on the relationship of CSR with SP and GSCP with SP respectively. Table 7 clearly depicts that the green supply chain fully mediates the relationship between CSR and sustainable performance. It fully mediates because the direct effect is not significant. The value of the path coefficient explains that GSCP significantly mediates the relationship between CSR and SP having a 0.098 beta value and 0.038 p-values. However, in the case of OCB, it does not mediate the relationship of GSCP with SP as only the direct effect is also significant (see Table 6). Hence, it is guite clear that the results support H4, however, in the case of OCB, results do not support H7.

Table 7: Indirect Effect

	Path coefficient	T-stats	p-values	Decision
CSR -> GSCP -> SP	0.098	2.076	0.038	Supported
GSCP -> OCB -> SP	0.033	0.895	0.371	Not supported

4.3.3. Moderation effect

As per Vinzi, Trinchera, and Amato (2010), moderating effect can only be scrutinized when main effects between constructs have been evaluated. The moderating effect can be gauged by introducing the interaction term which is being derived when the predictor is multiplied by the specific moderator. This interacting term has to be significant as this is the case when the moderating effect can happen. By the following argument, the interacting term which is OC*GSCP is being tested on the relationship of GSCP and sustainable performance. Table 8 clearly depicts that when organizational commitment is introduced as a moderator, it strengthens the relationship of GSCP and SP as the beta value is positive and the p-value is 0.050. Thus, it can be said that the outcome supports H8 by implying that organizational commitment moderates the relationship between green supply chain practices and sustainable performance.

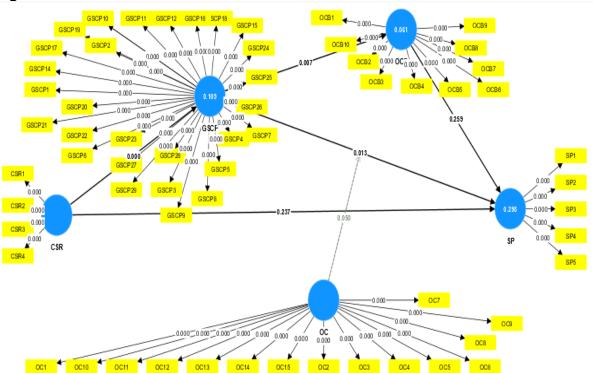
Table 8: Moderation Test

	Path coefficient	T-stats	p-values	Decision	
OC x GSCP -> SP	0.432	1.963	0.050	Supported	

5. Conclusion

The present study was specifically designed to examine whether corporate social responsibility motives are connected to sustainable performance in the presence of other various factors such as green supply chain practices, organizational citizenship behavior, and organizational commitment. The model of the study is being evaluated in the manufacturing sector of Pakistan with the theoretical support of stakeholder theory. The study also claims that green supply chain practices are the main bridge of the green agenda and holds all other factors in order to achieve overall sustainable performance. The findings of the study exposed that CSR motives do not significantly impact a firm's sustainable performance, hence, adding another empirical baseline in contradicting literature (Campbell, 2018; Gorski, 2017; Hou & Xie, 2019; Li, Kuo, Mir, & Omar, 2022; Shahzad et al., 2020). There could be various reasons of this insignificant relationship. One reason is that at times organizational motives and actions show dissimilarity which ultimately brings no change in the sustainable performance of a firm. Similarly, literature also shows support for these evidences as it is often discussed that it is not necessary that moral practices commitment led to desirable outcomes, hence contradicting with stakeholder theory(Du Plessis & Grobler, 2014; King & Lenox, 2000). Even in some cases such as the study of Morioka and de Carvalho (2016) found that practicing social and environmental activities do not necessarily generate a desirable outcome. In addition, there are cases in which socially responsible activities negatively impact the values of stakeholders. Interestingly, the findings are also similar with the study of Kraus et al. (2020), which claim that CSR motives do not impact environmental performance of a firm in a direct way, however, still it can not be neglected due to its significance which has been described by prior researchers repeatedly. The study also provided reason that CSR motives are pre-condition predictor, this means, it needs support in the shape of green-related activities to have successful execution and achieve desired environmental performance. Moreover, green practices implementation is also not possible when there is a lacking of sense of obligation and feelings towards green vision, thus, without commitment CSR motives alone can't be enough to increase environmental performance.





Similarly, the positive and significant relationship between CSR motives and green supply chain practices also appear to be consistent with the preceding literature (Faroog et al., 2017; Foo et al., 2018; Rajabion et al., 2019; Zaid et al., 2018). As per the claims, CSR is closely linked to green supply chain practice and internal CSR encourages employees to direct positive attitude toward the organization which helps the firm further to optimize their business operations. Moreover, CSR initiatives bring positivity in employees which further brings a change in existing supply chain practices. Resultantly, green supply chain practices are easy to be implemented. Also, CSR activities are also embedded with the culture of an organization, thereby, when firms focus on CSR initiatives, they might have a good chance of good corporate culture that helps an organization to involve in such activities that save energy, decrease emissions and improve overall efficiency. Literature also shows consistency with results that reveal to have a positive and significant association of GSCP with SP and OCB(Alt & Spitzeck, 2016; Boiral, 2009; Famiyeh, Kwarteng, Asante-Darko, & Dadzie, 2018; Jääskeläinen & Heikkilä, 2019). This can be justified because organizational citizenship behaviour particularly related to the environment revolves around eco-friendly activities and also empowers the employees to engage in activities that are beneficial for sustainability. This inculcates that employee environmental behaviour is a highly effective approach to have a successful implementation of green practices that ultimately helps in achieving sustainable goals (Paillé & Meija-Morelos, 2019). However, it does not always give a guarantee of a desirable outcome as certainly there are other factors involved which are more important to enhance a firm sustainable performance at a broader level.

Moreover, it is also confirmed from the findings that green supply chain practices significantly mediate the relationship between CSR motives and sustainable performance, hence, consistent with the literature. However, OCB failed to mediate the relationship of GSCP with SP, hence, opening an interesting debatable argument for scholars. Indeed OCB is essential partake

to achieve green goals, however, it is not necessarily a strong indicator to bridge green supply chain practices with sustainable performance. The findings, although in general show contradiction to prior literature, but one of the recent studies proclaims similar findings, hence, support the present findings (Azam et al., 2022). From the findings, it is also revealed that organizational commitment improves the relationship of green supply chain practices with sustainable performance, hence, showing consistency with literature which proclaims that organizational commitment can act as a powerful moderator on the association of institutional pressures forced by external environmental and corporate environmental responsiveness that could be in the form of green practices such as pollution control, pollution presentation, and environmental protection. From the findings, it can be deduced that manufacturing organizations need to be careful during supplier selection and consider only those who successfully meet their green agenda. This is necessary to do so because successful implementation of green practices can only be possible when internal as well as external stakeholders make a sincere effort to achieve the common goal. Moreover, from the findings, it can also be comprehended that designing green objectives for the firm not only attracts potential suppliers but also improves the firm's image among stakeholders and the general public. Also, the implementation of green practices helps firms in saving packaging and transportation costs, minimize ecological programs and save the environment and natural resources by achieving sustainable performance. However, in order to take green initiatives, a sound budget and capital is required which may cause a financial burden on a few manufacturing firms, however, in the long run, it will benefit the firm and society. Lastly, consumers of today's era show more concern towards environmentally friendly products and for that firms are recommended to have successful green practices implementation and encourage employees through the use of OCBE. In addition, the study also suggests manufacturing managers that they should do a cost-benefit analysis in order to ensure which green supply chain activity can be more helpful in a situation and green activity at the initial stage is more appropriate to have successful green practices implementation.

5.1. Limitations and Future Research

Although the study offers a plentiful contribution but there are certain limitations as well that are needed to be addressed in the future. First, the study examined the relationship among CSR motives, organizational commitment, GSCP, organizational citizenship behaviour, and sustainable performance in the manufacturing sector of Pakistan, there are other sectors as well that may produce different outcomes. Secondly, external stakeholders were not included in the study sample, hence, making the study less generalizable. Moreover, the adopted instrument was used to examine the framework, it would be great if qualitative insights are also included in the study to gauge the significance of the proposed framework more deeply. Besides, along with primary data, it is recommended to use secondary data as well in order to contrast meaningful insights, derived from both resources. Lastly, the study designed study sample through a non-probability sampling technique which may not provide accuracy in outcomes in contrast to the probability sampling technique, hence, it is suggested to use the probability sampling technique to have more concrete results.

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