Does a greener supply chain lead to enhance organizational performance? Insights from the textile sector of Pakistan

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ABSTRACT – REZUMAT

Does a greener supply chain lead to enhance organizational performance? Insights from the textile sector of Pakistan

In the supply chain environment, the significance of the ecosystem in textile industries is getting popular in today's world. The adoption of greener supply chain practices can enhance the organizational performance of the industries. From this perspective, this study aims to examine the impact of four determinants of the greener supply chain practices on organizational performance in the scenario of Pakistani textile industries. The data was collected from the (n=200) experts of textile companies from different cities including Faisalabad, Lahore, Karachi and Multan. The greener practices were identified through literature review and evaluated by applying the four independent variables including customer involvement, supplier involvement, environmental involvement and financial involvement. By using descriptive statistics and multiple linear regression analysis, the results depict that except for supplier involvement, the rest of the three independent variables were found significant in predicting organizational performance. This study bridges the gap to understand the relationship between different dimensions of green supply chain management (GSCM) and organizational performance. The major contribution of this from the theoretical side is that supplier involvement has a negative impact on organizational performance. Finally, the findings of this research would be helpful for concerned managers and policymakers in making decisions to adopt greener practices in achieving business excellence.

Keywords: *customer involvement, supplier involvement, environmental involvement, financial involvement*

Un lanț de aprovizionare mai ecologic duce la îmbunătățirea performanței organizaționale? Perspective din sectorul textil din Pakistan

În lanțul de aprovizionare, importanța ecosistemului în industriile textile devine populară în lumea de astăzi. Adoptarea unor practici mai ecologice pentru lanțul de aprovizionare poate îmbunătăți performanța organizațională a industriilor. Din această perspectivă, acest studiu își propune să examineze impactul a patru determinanți ai practicilor mai ecologice ale lanțului de aprovizionare asupra performanței organizaționale în scenariul industriilor textile pakistaneze. Datele au fost colectate de la experții (n=200) companiilor textile din diferite orașe, inclusiv din Faisalabad, Lahore, Karachi și Multan. Practicile mai ecologice au fost identificate prin revizuirea literaturii și evaluate prin aplicarea celor patru variabile independente, inclusiv implicarea clienților, implicarea furnizorilor, implicarea mediului și implicarea financiară. Prin utilizarea statisticilor descriptive și a analizei de regresie liniară multiplă, rezultatele arată că, cu excepția implicării furnizorilor, cele trei variabile independente rămase au fost considerate semnificative în preconizarea performanței organizaționale. Acest studiu reduce decalajul pentru a înțelege relația dintre diferitele dimensiuni ale managementului lanțului de aprovizionare ecologic (GSCM) și performanța organizațională. Contribuția majoră a acestui aspect din partea teoretică este că implicarea furnizorilor are un impact negativ asupra performanței organizaționale. În cele din urmă, concluziile acestei cercetări ar fi utile pentru managerii și factorii de decizie în cauză în luarea deciziilor de adoptare a practicilor mai ecologice în atingerea excelenței în afaceri.

Cuvinte-cheie*: implicarea clienților, implicarea furnizorilor, implicarea mediului, implicarea financiară*

INTRODUCTION

In Pakistan, the textile sector is the largest manufacturing sector and has achieved a strong position all over the world due to its remarkable contributions to providing sustainable products [1]. In the Asia Pacific region, Pakistan is considering the 8th largest exporter of textile commodities. This sector contributes 8.5% to the GDP of Pakistan and also employs about 45% of the total labour force in the country. In addition, this sector engages 38% of the manufacturing labours directly or indirectly in employment. Pakistan ranked as the 4th biggest manufacturer and exporter of textile-related products with the third largest spinning production capacity in the Asia Pacific region after China, Bangladesh and India and generates 5% of the global spinning capacity. According to the Pakistan economic survey (2019), the involvement of the textile sector in contributing to the nation's economy was worth the US $10042 million in the 2018–19 fiscal years. In the last two decades, supply chain management (SCM) grabs significant attention and the combination of end-to-end supply chain businesses

to meet the aggregate demands of final consumers [2, 3]. Buyers and suppliers are getting conscious of ecological and worldwide warming issues and are very alert about products exchanged. In the textile sector, companies are initiating different methods to get better the accomplishment of GSCM, particularly at the phase of procurement, processing, selling & reuses [4].

Hervani [5] defined a GSCM as the idea that includes green outsourcing, cleaner production, eco-friendly orientation, reverse logistics and recycling of resources. Sarkis [6] stated it as a combination of the deeds that includes invention strategy, all phases of industrial, circulation and all features of contrary logistic and indicated the closing's prominence. The combination of environmental activities and organizational performance has received cumulative consideration over current spans. The motivation behind this study is that the GSCM is comparatively innovative in Pakistan so applications are partial. In previous research, the effect of GSCM on organizational performance was investigated in-depth, whereas in textile perspectives, was not mentioned much [7].

A big gap exists in emerging economies because studies on the relationship between GSCM and organizational performance are mostly carried out in developed nations. Based on the aforementioned shortcomings, in this study, researchers identified four GSCM dimensions (customer involvement (external factor), supplier involvement (external factor), environmental involvement (internal factor) and financial involvement (internal factor) and aimed to examine the impact of these dimensions on organizational performance [8]. The result of these proportions was calculated on the organization's performance in the context of GSCM internal and external factors within the textile industry of Pakistan. Pakistan is of the rising countries so for the economic expansion of the country industrialization is a considerable issue.

Greener practices are being applied by all businesses across the globe to draw attention to the problems of ecological indignity and corporate culture. In Pakistan, there is a gap in a study on GSCM in a textile supply chain. In the emerging supply chain environment, the awareness of environmental conduct is grabbing attention in the minds of consumers. Textile companies across the world specifically in Pakistan are facing heavy pressure from buyers to reduce hazardous chemicals and implement greener practices throughout the supply chain. Based on our knowledge, it is assumed to be the first empirical study in this discipline from the context of the Pakistani textile sector. This study is an effort towards providing a better overview of the relationship between greener practices and organizational performance. In a developing country context, the idea is novel and meets the present need of the manufacturer of the textile sector. This research contributes to the theory by introducing the four variables i.e., customer involvement, supplier involvement, environmental involvement, and financial involvement. This study is an effort toward providing a better picture of the relationship between greener supply chain practices and checking the impact of variables on organizational performance using descriptive statistics and multiple linear regression analysis. The results outcomes of this research would be helpful for concerned stakeholders in making decisions to adopt greener practices in achieving business excellence. This problematic scenario raises the following research questions:

(1) What are the factors of greener supply chain practices affecting organizational performance in the context of the textile sector of Pakistan?

(2) How can supply chain/managers evaluate greener practices and check their impact on organizational performance?

(3) Do the outcomes become helpful for policymakers, stakeholders and supply chain managers to design business strategies?

To deal with the above-mentioned research questions, the objectives of this study are: 1) to explore the greener practices in the textile sector of Pakistan; 2) to analyse the impact of greener practices on organizational performance; 3) to recommend managerial and global implications for the concerned stakeholders.

LITERATURE REVIEW

The concept of greener practices in the supply chain is based on triple bottom lines including socio-economic and ecological parameters [9]. The greener supply chain practices come under the umbrella of sustainability. The literature regarding sustainability perspectives is to some extent well-developed but it still needs attention from researchers and academicians to fill the gap in the field of green supply chain [10]. Seuring [11] defined GSCM as the coordination of information, raw material flows and money through the holistic supply chain in meeting the demand of customers considering the production of environment-friendly products and services. GSCM is the way to integrate ecological conducts into firm supply chain processes. Firms can build competitive priorities in operations and productions for implementing greener concepts/practices. Similarly, the initiation of greener practices in the supply chain environment enables firms not only to offer competitive priorities through capacities differentiation and cost leadership that would not be easy for their competitor to imitate but also to find out new market opportunities. Tsoulfas and Pappis [12] believed that the adoption of greener concepts in managing supply chain systems and designing green product approaches can reduce wastage. GSCM by the combination of supply chain management strategies in addition to dealings made in reaction to hesitations linked to the casual environment concerning the strategy, manufacture, dissemination use and re-use of the company's

merchandise. GSCM shields the entire stages of the goods existence sequences of designing towards circulation including distribution and all other required stages to the usage of the product by consumers and at last, its removal by the side of the conclusion of the goods existence sequence. GSCM is the addition of an 0ecological" element on the way to SCM involving all stages such as ecological design, ecological production, ecological planning and ecological operations [13]. A professional method that pursues to reduce a product to reduce a manufactured good's ecological in addition to societal influences is called GSCM. In this context, the activities are considered a threat to the environment. In developing countries just like Pakistan application of GSCM is still in its starting phase. Liu [14]concluded research based on high-order theory and green supply chain management theory, this research took 251 manufacturing enterprises from China, the United States and Vietnam as samples to gain data. Khan and Qianli [15] examined the effect of five determinants of the green supply chain practices on organizational performance from the perspective of Pakistani manufacturing companies. The textile industry played a very significant role in the financial system of the country particularly India, as India has been a developing country. The literature relevant to greener practices in the textile supply chain is in the initial phases of development, with related empirical studies and theoretical evidence (figure 1).

THEORETICAL MODEL

The theoretical model and hypothesis influencing organizational performance have been shown in figure 2. The four constructs have been identified using extensive reviews of literature and inputs from supply chain professionals of different firms. In addition, the description of the constructs selected in the proposed model is given in table 1.

HYPOTHESIS DEVELOPMENT

Customer involvement and organizational performance

In the competitive markets, customers are considering the main stakeholders in the green supply chain and can pressurize the organizations to minimize the toxicity of their processes [16]. Generally, customers are called kings because they can influence organizations to adopt greener practices. In simple words, customers' involvement plays a significant role in implementing greener practices in managing the supply chains [17, 18]. Stronger customer involvement moves the firms to enhance marketing and financial

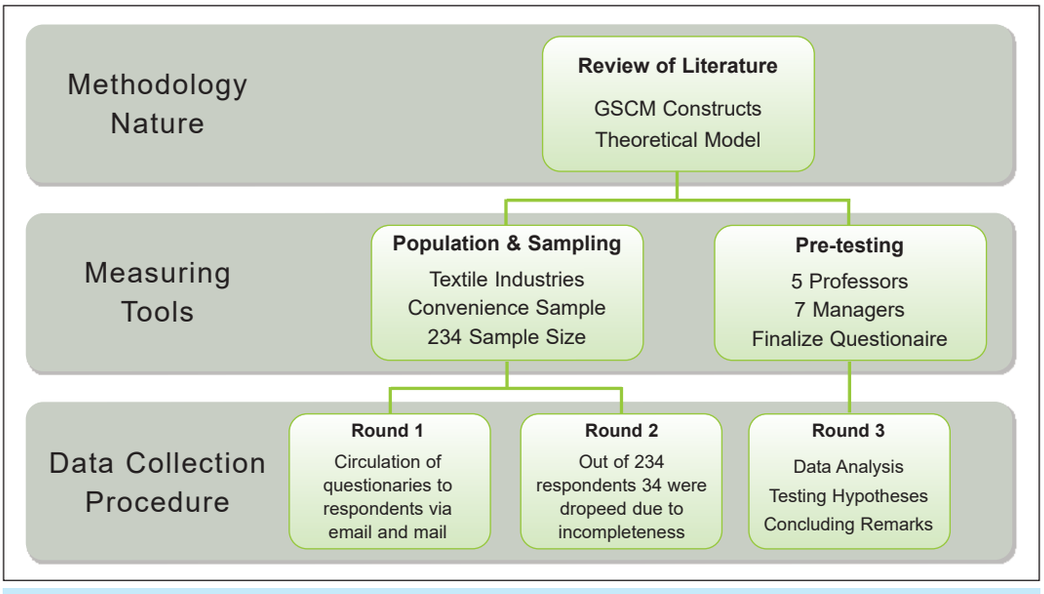

Fig. 1. Proposed research plan

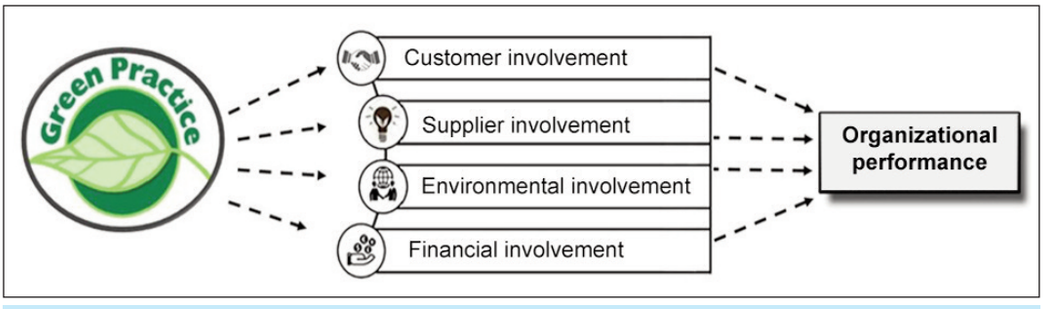

Fig. 2. Research model and hypothesis influencing organizational performance

Table 1

FACTORS OF GREENER PRACTICES AND DESCRIPTIONS		
Dimensions	**Variables**	**Descriptions**
Customer Involvement	CI_1	Cooperation with customers to achieve environmentally-friendly goals
	CI_2	Integration with customers to use green packing
	CI_3	Cooperation with customers to develop cleaner production.
	CI_4	Eco-friendly practices followed for the satisfaction of customers
	CI_5	For customers' satisfaction, avoiding the usage of hazardous products
	CI_6	Recycling the wastage is highly appreciated by our customers
Supplier Involvement	SI_1	Cooperation with suppliers to achieve environmental objectives
	SI_2	Providing decision specifications to suppliers to follow eco-practices
	SI_3	Environmental audit for vendors' internal supply chain system
	SI_4	Supplier adoption of greener initiatives to meet customers' demand
	SI_5	Suppliers focus to reduce the consumption of toxic/harmful materials
	SI_6	Compliance with ISO 14000 standards.
Environmental Involvement	EI_1	Greener practices took measures to lower the consumption of water, electricity and gas during the production or disposal processes
	EI_2	Greener practices help in recycling, reusing and remanufacturing materials or parts.
	EI_3	Greener practices redesigned production and operational processes to improve environmental efficiency.
	EI_4	Cooperation with customers for eco-design?
	EI_5	Greener practices decreased the consumption of hazardous/harmful/toxic materials.
	EI_6	Greener practices also in applying religious environmental regulations.
	EI_7	Reduce the frequency of environmental accidents
	EI_8	ISO 14000 certification
	EI_9	Applying green packing of products and design of products for reduced consumption of materials/energy
	EI_{10}	Use of chemicals to avoid hazardous products
Financial Involvement	FI_1	Greener practices decreased the cost of purchasing materials.
	FI_2	Greener practices decreased fees for wastes treatments
	FI_3	Greener practices decreased the cost of production and consumption
	FI_4	Greener practices improved/increased the overall efficiency of our firm
	FI_5	Greener practices decreased fines for environmental violation
	FI_6	Greener practices have increased the quality of products by reducing overall costing
	FI_7	Greener practices improved the supply chain responsiveness
	FI_8	Greener practices help in decreased the level of inventory

performance. Vaccaro and Echeverri [19] suggested that creating corporate transparency by the organization can encourage customers to actively participate in eco-friendly practices and further collaborate with the enterprises. In the supply chain system, manufacturers solely cannot recognize the environment-friendly requisites of their customers without understanding their needs, but also their positive inputs in terms of coordination and cooperation.

Hypothesis 1_a: Customer involvement has not significantly influenced organizational performance in the textile sector.

Hypothesis 1_b: Customer involvement has significantly influenced organizational performance in the textile sector.

Supplier involvement and organizational performance

Green purchasing is a proactive approach to focusing on collaborating with suppliers to produce environmentally friendly products [20]. Supplier involvement/cooperation can improve the product quality and reduces waste minimization. Suppliers are the key actors in the supply chain and organizational performance based on their responsiveness as well as commitments towards order fulfilment. Manufacturers of textile firms solely can't establish an ecosystem without collaboration with suppliers. Undeniably, a strong manufacturer-supplier relationship leads to enhance social, economic and environmental performance [21].

Hypothesis 2_a: Supplier involvement has not significantly influenced organizational performance in the textile sector.
Hypothesis 2_b: Supplier involvement has significantly influenced organizational performance in the textile sector.

Environmental involvement and organizational performance

Environmental involvement is a firm's development of its environmental protection policies and targets to ensure the protection of the environment [22]. Environment management serves two basic purposes within the organization. The first is to formulate the compliance policies by following ISO 14000 standards and, the second is to change the personnel behaviour in order to establish a sustainable relationship with the environment. Kleindorfer et al. [23] elaborated that a competitive edge is where enterprises introduce eco-design uniqueness in item development and improve value addition in developing inimitable production capacities, and acquire royalties for licensing greener technology which will lead the firms towards achieving sustainable competitive priorities.
Hypothesis 3_a: Environmental involvement has not significantly influenced organizational performance in the textile sector.
Hypothesis 3_b: Environmental involvement has significantly influenced organizational performance in the textile sector.

Financial involvement and organizational performance

The present studies depict that there is a contradictory viewpoint among some researchers regarding the improvement of financial gains using greener practices [24]. Rao and Holt [25] believe that the GSCM practices enhance organizational performance within an enterprise. Few researchers have suggested that GSCM practices have no significant impact on the financial performance of an enterprise, especially in short time periods [26]. It has been noticed by a few researchers that the lack of vigorous relationship between the adoption of GSCM practice and financial involvement is treated as a key hindrance [27]. These were contradictory views about how GSCM practices affect organizational performance postulates. The organizational performance of a company can be enhanced if its costs of production are minimized.
Hypothesis 4_a: Economic performance has not significantly influenced organizational performance in the textile sector.
Hypothesis 4_b: Economic performance has significantly influenced organizational performance in the textile sector.

MATERIALS AND METHODS

Scenario under study

This research study targeted the textile sector of Pakistan to investigate how greener practices affect organizational performance. Due to the increase in toxic waste, presently the country has encountered a big change in the climate. Therefore, greener practices are considered an integral part of strategic management within textile industries. This study considered four variables of green supply chain practices, i.e. (i) customer involvement, (ii) supplier involvement, (iii) environmental involvement and (iv) financial involvement. The research sample was taken from textile industries which are adopting greener practices. Several textile industries were considered to distribute questionnaires only among managers who had direct involvement with the supply chain process. This included supply chain managers, production managers, marketing managers, finance managers, logistics managers and industrial engineers.

Questionnaire development

The well-structured questionnaire was formulated to take the data from respondents in the textile industry. Due to a lack of awareness regarding implementing GSCM practices in the textile sector of Pakistan, a direct response data collection approach was given preference over sending the questionnaires through social media. While seeking inputs from the respondents, the data collection teams facilitate the respondents in a situation if they confronted any complexity regarding the questions' understanding. The questionnaire used in this study includes four GSCM practices and these practices are further divided into thirty-nine items. The data collection took three months and fifteen days [28].

Sample design and measurement tools

The research data was analysed through appropriate statistical techniques and then interpret the final results. The study response has been considered as the frequency of responses in terms of interviews conducted in a study. The total sample size was (n=200) but data was collected from approximately 234 respondents of which the authentic was only 200 (table 2).
Analysis was made on the 200 authentic that also meet to sample size of the research. Descriptive statistics are describing the economic features of sampled data. The descriptive statistics method was providing summaries of sample measures and samples. Multiple linear regression analysis is performed to test the suggested hypothesis. In addition, it is used for finding the percentages and average frequencies through graphic analysis by the following formula.

$$\overline{X} = \sum X/N \quad (1)$$

where $\overline{X}$ is airthmetic mean, $\sum X$ = sum of all variables, N – total observations number.
The percentage was calculated through the following formula:

$$P = F/N * 100 \quad (2)$$

where P is percentage, F – frequency of the variables, N – total number of observations. Standard

Table 2

DEMOGRAPHICS ANALYSIS OF RESPONDENTS		
Demographics	**Frequency**	**Percent**
Type of textiles		
Spinning	8	4
Weaving	4	2
Dyeing	15	8
Stitching	169	84
Printing	4	2
Departments		
Supply Chain	30	15
Production	87	44
Marketing	43	21
Finance	9	5
Logistics	15	7
Engineering	16	8
Age group		
18–24	3	2
25–29	15	7
30–34	28	14
35–39	36	18
40–44	58	29
Above 44	60	30
Job Experience		
3–5 years	14	7
6–8 years	32	16
9–11	34	17
12–14	46	23
Above 14	74	37
No. of Employees		
100–500	8	4
301–500	18	9
501–700	9	5
701–1000	38	19
More than 1000	127	63

deviation expressed a quantity value of variations or distribution set of data how much the group value is different from its mean. The lowest standard deviation value explained that the value of the data set is closer to the mean value while the high value of standard deviation indicates that the data value spread away from the mean value.

$$S = \sqrt{\frac{1}{N-1}\sum_{i=1}^{N}(X_i - \overline{X})^2} \quad (3)$$

where S is standard deviation, N – total number of observations, X_i represents each value of data, $\overline{X}$ represents mean of X_i.

RESULTS ANALYSIS

The results analysis is based on the reliability test, Pearson's correlation technique, exploratory factor analysis, and multiple linear regression method. The exploratory factor was conducted to check the impact of the underlying structure for the 39 questionnaire items on organizational performance. Regression analysis was employed for find the association among reliant and self-governing (dependent & independent) parameters for implementing line regression pattern using hypothesized equation. The relationship among reliant and self-governing parameters is given as:

$$OP = \beta_0 + \beta_1 CI_1 + \beta_2 SI_2 + \beta_3 EI_3 + \beta_4 FI_4 + e \quad (4)$$

where OP, CI_1, SI_2, EI_3 and FI_4 denote organizational performance, customer involvement, supplier involvement, environmental involvement and financial involvement respectively. In this equation, β_0 represents constants and e depicts error term in the model, whereas β_0 is slop and β_1, β_2, β_3 and β_4 are the coefficient. Organizational performance is a reliant i-e dependent parameter. Definite self-governing i-e independent parameters data were collected through a five-point Likert scale starting from (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). Furthermore, the authors also computed Cronbach's alpha values of each variable used in the questionnaire. The overall reliability value of the scale was 0.886 of 39 loaded items to enhance clarity. Tables 3 and 4 show the items and variables used for reliability analysis.

In table 5, the researchers discussed the summary of hypothesis testing using multiple linear regression analysis for measuring organizational performance.

Table 3

RELIABILITY ANALYSES OF ALL VARIABLES		
Variables	**No of items**	**Cronbach's Alpha**
Organizational Performance	9	0.906
Customer Involvement	6	0.881
Supplier Involvement	6	0.703
Environmental Involvement	10	0.746
Financial Involvement	8	0.759
Total	39	0.886

Table 4

MEANS, STANDARD DEVIATION, STANDARD ERROR AND INTER-CORRELATIONS FOR ORGANIZATIONAL PERFORMANCE AND INDEPENDENT VARIABLES (N = 200)								
Variables	**Mean**	**SD**	**SE**	**OP**	**CI**	**CA**	**EI**	**EP**
OP	3.81	0.739	0.052	1				
CI	3.79	0.461	0.032	0.322**	1			
CA	3.80	0.484	0.034	0.283**	0.496**	1		
EI	4.04	0.483	0.034	0.426**	0.282**	0.258**	1	
EP	3.85	0.498	0.035	0.304**	0.351**	0.259**	0.266**	1

Note: *Significant p<0.05 (2-tailed); **highly significant p<0.01 (2-tailed).

Table 5

MODEL SUMMARIES USING MULTIPLE LINEAR REGRESSION ANALYSIS				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	0.423[a]	0.179	0.162	0.6768

Note: a – Predictors: (Constant), CI Customer Involvement SI Supplier Involvement, EI Environmental Involvement, FI Financial Involvement; b – Dependent Variable: OP Organizational Performance.

This table indicates that the R square value of this model is 17.9% which shows the fitness of the model. All the variables included in this study are influencing a 17.9% change in the dependent variable. Here the remaining change is due to other variables that were not included. The selected variable combinations were predicted by almost 17.9% of the total variance in predicting organizational performance F = 10.648, p<0.001, with given independent factors that statistically significantly predicted organizational performance except for supplier involvement in the given model. Hence, the coefficient of parameter estimates proposes that β "customer involvement" (0.375, p<0.05), β "environmental involvement" (0.175, p<0.05), and "financial involvement" β (0.239, p<0.05) affect the statistically significant impact on the dependent variable.

Furthermore, their three respective hypotheses (H1, H3, and H4) were supported, respectively. Whereas, supplier involvement (−0.104, p>0.05) has demonstrated a statistically insignificant effect on organizational performance. Hence, H2 was not supported. The second step in regression is "ANOVA" table 6 which includes "RSS (the regression sum of squares), residual sum of squares and TSS (total sum of squares along) with their D "(degree of freedoms)". Here in this ANOVA F=10.648 with a significance value of P = 0.000 shows that the model's overall fitness is very good. The (β) standardized coefficient of regression model explained the values of outcomes that create the in variable per unit change in values. This estimation allowed the other researchers to estimate the contribution of other outcomes (table 7).

In this research, multiple regression analysis was applied to conclude the research results. Where, OP, CI, SI, EI, and FI denote organizational performance, customer involvement, supplier involvement, environmental involvement and financial involvement respectively. The research finding indicated the adjusted R square that is a determinant of organizational performance (after GSCM implementation) with CI (customer involvement), CI (supplier involvement), EI (environmental involvement) and FI (financial involvement). The adjusted "R^2" is 17.9 percent of the total variation in OP (GSCM) can be described by CI, SI, EI, FI and 82.1 remaining due to other factors that are ignored in this research as this was done recently in the research of Liu [14] as he calculated the R^2 value nearly to the value found in this research. Furthermore, the model describes the overall significant and positive relationship between customer involvement, economic performance and environmental involvement at P = 0.000. The model indicates that customer involvement has a significant impact on organizational performance adoption as indicated by 0.003 significant value is less than 0.1 which is positively correlated with organizational performance. Per unit increase in customer involvement and increase in organizational performance by 0.375 units the effect of the independent variable remains constant.

Table 6

ANOVA					
Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig. *p* value**
Regression	19.490	4	4.872	10.648	0.000[b]
Residual	89.312	195	0.458		
Total	108.802	199			

Table 7

HYPOTHESIS UNDER CONSIDERATION FOR ORGANIZATIONAL PERFORMANCE						
Hyp.	**Predictors**	**B**	**Std. Error**	**T-Value**	**Sig. P Value**	**Remarks**
	(Constant)	0.366	0.545	0.672	0.000	-
H1	Customer Involvement	0.375	0.124	3.032	0.003	Supported
H2	Supplier Involvement	–0.104	0.116	0.895	0.372	Not Supported
H3	Environmental Involvement	0.175	0.112	1.564	0.019	Supported
H4	Financial Involvement	0.239	0.110	2.175	0.031	Supported

In total, hypotheses for customer involvement, environmental involvement and financial involvement are supported except for supplier involvement. The following equation highlights how to predict organizational performance using multiple linear regression analysis. M = 0.366 + 0.375 (CI) + 0.175 (EI) + + 0.239 (FI) – 0.104 (SI). This paper evaluates the impact of greener practices on organizational performance in the Pakistani textile context. Four dimensions of greener practices were examined including customer involvement, supplier involvement, environmental involvement, and financial involvement. Lastly, the outcome of the results indicates that except for supplier involvement, the rest of the three dimensions of greener practices have a significant and positive relationship with organizational performance, and these results have been validated by previous research including [28–30]. Furthermore, supplier involvement has a negative effect on organizational performance as greener materials are comparatively expensive than non-greener materials. In order to promote greener initiatives, textile organizations recently received no financial assistance from governmental authorities and regulatory bodies in the perspective of Pakistan.

DISCUSSIONS AND IMPLICATIONS

The results depict that customer involvement was found to be a key variable of organizational performance. Sezen and Cankaya [31] suggested that the involvement of customers reflected positively on the organizational performance of a textile supply chain. Undeniably, organizational objectives related to performance can be accomplished through successfully identifying the customer needs regarding greener concepts. Roy and Khastagir [32] mentioned that firms can gain monetary incentives through higher ecological performance due to truly involvement and perseverance of the strategic management in the adoption of greener practices in the supply chain. Customer involvement facilitates the concept of demand sustainability because organizations which forecast external customer demand can easily procure and manufacture the products. Furthermore, customers' involvement in the development of eco-friendly products not only facilitates environmental sustainability and organizations' environmental performance but also improves organizational performance in the long run. The Government bodies need to encourage eco-friendly products, support custom policies and try to reduce barriers regarding pollutant products. Textile firms in Pakistan are facing severe issues in the procurement of raw materials and resistance from suppliers as they are not implementing green practices. Due to awareness of eco-design products in the competitive markets, buyers are well-known for the hazardous effects and pollution generated by textiles industries in Pakistan. The policy-makers and authorized bodies in Government, as well as private sectors, have not been paying any reasonable compensation for green industries such as in terms of tax rebates or exemptions. Moreover, during the adoption of greener practices, industries dealing in green products are much more concerned about their customers because they are the key monetary source for their survival. Nowadays, most firms are conducting surveys to seek information about their customers' valuable input. The existing research studies also support the results of this study and ratify that the independent variable customer involvement or cooperation has a significantly positive impact on organizational performance. The results also show that environmental involvement has a significant impact on organizational performance. Industries cannot adopt environmental practices without adopting ISO 14000 standards and greening all manufacturing processes by eliminating the waste from their production processes. Textile firms should develop better buyer-supplier relations through collaborations and commitments in the area of the green supply chain. These kinds of collaborations might be strengthening the relations as well as satisfy the customer orders timely. Textile firms' managers need to enhance basic knowledge and skills relevant to green supply chain management. For this purpose, they must focus on the job and job capacity building programs in order to enhance firms' performance. In this study, the proposed developed model is expected to be applicable to any country to improve the organizational performance of organizations' end to end supply chain. The proposed model can be taken in a global context by following these steps: 1) a deeper investigation of GSCM literature and multiple linear regression analysis can help to check the impact of variables; 2) using the Cronbach alpha, the reliability of the variables can be checked for the analysis of factors of GSCM practices; 3) the results would be helpful to formulate the business strategy. It is suggested that the applicability of the model in the context of a different country, will generate a different result because every country has different economic, social, political, technical and environmental aspects. Furthermore, based on the findings, the results of this study would be helpful for the practitioners and industrialists in the establishment of an effective governance system that promotes the adoption of greener practices in improving the entire organizational performance. The green supply chain policies must support the business strategies and organizational capacities. The Government and regulatory bodies need to provide financial incentives to those textile firms which are applying the environmental standards. For this purpose, the government must encourage SMEs and provide capital subsidies on energy-efficient equipment. Finally, the social impact of this research is to improve the occupational health of workers [33–35].

CONCLUDING REMARKS

The results findings suggested necessary guidelines for practitioners to distinguish the impact of greener practices including external and internal factors on

organizational performance. In developing countries such as Pakistan, the basic aim of most textile industries is to enhance their production capacities, improve financial conditions, and reduce economic risk. Environmental sustainability has become a vital aspect to consider due to the current marketing needs of customers toward organic products. Therefore, organizations are much concerned to apply greener practices in their supply chain to ensure organizational progress. The greener practices considered in this research are customer involvement, supplier involvement, environmental involvement and financial involvement affecting organizational performance. This work deals with the impact of greener practices which can help textile exporters to enhance their organizational performance. This study supports experts by briefing the interrelationships between greener practices and organizational performance. Furthermore, the results of this research perceive that by adopting greener practices, the producers can reduce their operational costs and eventually will improve their organizational performance. The findings of this research would be a helping tool for the textile industries to implement greener practices. In this research, the authors included only four independent variables (customer involvement, supplier involvement, environmental involvement and financial involvement). The data was collected from the (n=200) experts of textile companies from different cities including Faisalabad, Lahore, Karachi and Multan in Pakistan. In future, more variables may be included like green physical distribution, investment recovery, and green logistics in the proposed model to evaluate the robustness among variables and further check the relationship with organizational performance.

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