

# Effect of Green Supply Chain Management on Environmental Performance and Export Performance: A Case Study of Textile Industries in Pakistan

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**Abstract:** -This study investigated the GSCM effect on the performance of export by also seeing its mediating influence on the environmental performance of the textile sector of Pakistan. The data has been gathered by means of the questionnaire with a five point's Likert scale from which a total of 350 responses are collected from the textile sector of Pakistan. Data were analysed using structural equation modelling. The Findings showed that there is a significant relation among the GSCM, export performance and environmental performance. Hence, green practices can essentially help to enhance the environmental and export performance of textile industry Moreover, export performance can also be increased if companies focus on environmentally friendly measures. The findings of the study are essentially contributing to explaining the role of GSC practices on export and environmental performance in the textile industry. By applying these practices, the textile industry of Pakistan can place significant changes in increasing its export performance and revenues.

**Keywords:** green supply chain, environmental performance, textile industries, export performance

## 1. Introduction

### Background of the study

From the past thirty years, environment protection has been a theme present in our societies. It was only some rare NGO's and activists at the start, but now it progressively has become a major theme in the social, economic and political debate. Now the corporations are predominantly concerned about their activities that impact the environment and it's considerable. Developing a GSC has become a trend which is gained vast popularity now; those industries that are into textile are majorly focusing on enhancing their SC efficiency, visibility, and costs. Creating of pollution, threatening the existence of life on earth is due to a flawed supply chain. With the passage of time the increasing awareness towards issues concerning global warming and environmental, have made the shoppers more concerned about the product of what they are buying.

GSCM is used to eradicate the environmental influence on products and services. Today,

Companies according to Testa & Iraldo (2010) have initiated with incorporating GSCM initiatives by responding to the demands of the customer. Hasan (2013) also noted that companies are now moving towards implementing SCM practices to reduce the influence of the environment. In the textile industry, the expansion of a GSC has attained vast reputation and businesses they are more concentrating on refining their SC efficiency, prominence, and lessening costs. Now, the firm's makes tactics to lessen their manufacturing cost through reducing wastes, as they are mature enough and it is the simple way out to strive in the market. It's the key motivational idea for firms to move towards GSCM practices to boost their performance (Jabbour et al., 2014).

### 1.2 Problem Statement

It has been noted that the textile industry in Pakistan has been serving exceptionally to empower the economy of the country and it has been increasing the gross domestic product to 25%. The textile

industry or sector has created major links with different sectors including insurance, trades, transportation and other industries that have been influencing directly and indirectly to the economy or GDP of the country. Moreover, the sector of textile has been among the largest sectors that have been encouraging major opportunities for employees and healthy investment in the industry could be beneficial. Despite the fact that the industry has been making prominent contributions in Pakistan, the textile industry has been facing severe challenges in both manners internally and externally. The challenges have become major obstructions in the company performance and have been minimizing the competitive advantage. The Arab countries have been seen to be on the rise and have been emerging which has been raising the production cost and creating difficulty in accessing to financials that has created an influence on the income and taxes of Textile industry. This has minimized the exports of the companies in Pakistan by 4.5% in the year 2017.

There have been some major changes in the export performance of Pakistan. Particularly in the textile industry, there have been certain initiatives taken by the companies to improve their export performance. Moreover, there are some laws and regulations that have bounded the usage of dangerous substances and it has become mandatory for the company to take healthy environmental steps to encourage the suppliers and the customers. The green supply chain management must be promoted to amalgamate environment-related problems and it has been becoming prominent by the company's day by day. At this point, where the government has made important for the firms to incorporate less hazardous practices, the green supply chain has gained major attention. Given this importance, adapting GSCM has got essential for the companies to prevent environmental issues and maintain a responsible image. The following study aims to look at the green side of the supply chain. This study will play an essential role in exploring the important part of green practices by implementing them in the textile industries of Pakistan. Moreover, the study will enable the textile industries to explore that in what

way they can improve the export issues by adopting green practices.

### **1.3 Gap Analysis**

The purpose of GSCM is to lessen the ecological influence of products and give less possible harm to the environment. In boosting the economy of the Pakistan textile industry plays a vigorous role. As there are a lot of researches (e.g. Lee et al., 2012; Green, 2006) that has been done on cement industry, manufacturing industry, automobile industry in Pakistan but when it comes to textile industry specifically about Green supply chain it has not been given a central focus. While analyzing the literature on GSCM, the most prominent focal point by the researchers is the implementation of the green supply chain in the textile service industry. The primary objective of the paper has been mentioned to encourage the discussion related to the influence of GSCM on export performance and environmental performance in the Textile industry of Pakistan.

Though different studies have been carried out that has depicted the clear impact of the green supply chain on various dimensions thus different directions include operational activity, social, financial and monetary activities (Lee et al., 2012; Mitra & Datta, 2014; Diab et al., 2015). Furthermore, there are no such studies that have explored an area of mediating effects of economic performance and their association with the green supply chain management in Pakistan. There is a lack of research papers related to the green supply chain management and especially with respect to Pakistan. The study has been majorly contributing to the present knowledge by exploring the impact of economic performance and significant association between green supply chain and export performance in Pakistan. The central focus has been provided to the textile industry of Pakistan which has not been explored much in the past studies.

### **1.4 Research Objectives**

- To examine the effect of GSCM on EP in Pakistan textile industry
- To examine the effect of GSCM on Export Performance in Pakistan textile industry

- To examine the effect of EP on Export Performance in Pakistan textile industry
- To examine the mediating effect of EP on the relationship between GSCM and export performance.
- To examine the association between EP and export performance
- To assess the role of GSCM in enhancing environmental performance in Pakistan.

### **1.5 Research Questions**

- What is the effect of GSCM on EP in Pakistan textile industry?
- What is the effect of GSCM on export performance in Pakistan textile industry?
- What is the effect of EP on export performance in Pakistan textile industry?
- What is the mediating effect of EP on the relationship between GSCM and export performance?

### **1.6 Significance of the Study**

This study will significantly help in assessing the role of GSCM on environment and export performance. It will help the textile industries in understanding the importance of the green supply chain practice, and its role to enhance the environmental and export performance. With the rise in the knowledge and awareness of the consumers towards the environmental concerns and global warming, people have got more conscious especially at buying things. At this point, supply chain initiatives are designed to get the desired sustainable environment for all the parties involved. This study will help the textile companies to address the concerns of consumers and adopt green initiatives to respond to consumer needs effectively. Apart from this, there are many social and political anxieties subjected to the environmental issues that have motivated all the firms to make their supply chain green. The motive of introducing the importance of green supply chain is that it will help to incorporate the system that will turn the operations into more energetic ones by without giving any harm to the environment.

The study is adding significantly to the literature by assessing the green practices and their role in enhancing the export side of the textile industry. The study is also adding value by serving to the present literature gap by focusing the textile industry of Pakistan which was not explored before.

### **1.7 Scope of the Study**

In our study, we have covered literature that relates to the green supply chain, export performance and environmental performance role in the textile industry. Other variables of SC will not be cover.

### **1.8 Limitations**

Some limitations were also noted such as convenience sampling and limited time that can be fulfilled by the researchers in future studies. Therefore, it is recommended to expand the study by taking other factors like reverse logistics for future research.

### **1.9 Operational Definitions**

1.9.1 Green Supply Chain Management: GSCM can be explained as assimilating environmental thinking into SCM that includes the designing of product and incorporating eco-friendly activities until the making of end-product (Srivastava, 2007).

1.9.2 Environmental Performance: Environmental performance is defined as the measurable outcome of the organization's capability to attain the environmental objectives and set forth the company plan by being environmentally responsible to the society and environment (Carneiro et al., 2012).

1.9.3 Export Performance: It is referred to as the success or failure of the firm affect to sell goods in other countries (Shoham, 1998).

## **2. Literature Review**

### **Green Supply Chain Management**

Croxton et al (2001) explored the GSCM practices incorporated by Textile manufacturing industries in Dhaka. Data was gathered from 200 employees, then it was analysed by SEM technique. Results revealed that the textile companies have incorporated a restyled SC system to cut carbon footprint, smooth transportation procedures to lessen carbon footprint, reduce and consecutively repurpose production

waste, and upsurge use of renewable energy sources as well as lessened poisonous materials. In another study Zhu et al (2010) done in China to examine the mediating relations in-between the practices of internal and external GSCM conferring to economic, ecological, and (OP) operational performance. Data was gathered from 396 manufacturing companies then it was analyzed on Smart PLS.

### **Environmental Performance**

Dubey et al (2015) explore the relationship of SRM and TQM on the (EP). Data was collected from Indian manufacturing firms from the procurement department from 176 respondents. Results showed that a positive relation between SRM and EP which may benefit the company's, to attain their goals and to achieve environmental performance (EP). However, it was also found that TQM has a negative impact on EP. Wong et al (2011) explored whether internal and external GSCM practices have the same market and burdens. A total response of 207 questionnaires was gathered from the respondents working in various Pakistan manufacturing industries. Results proved that in both internal-external Green SC practices, normative type pressures were founded the most important, whereas internal and external GSCM practices were positively affected by mimetic and coercive pressures. Internal GSCM practices can improve (EP), and it also had a large impact on the outside Green SC practices whereas in external GSCM practices it was found that a positive significant impact on (EP) economic performance, however, environmental performance has also played role in

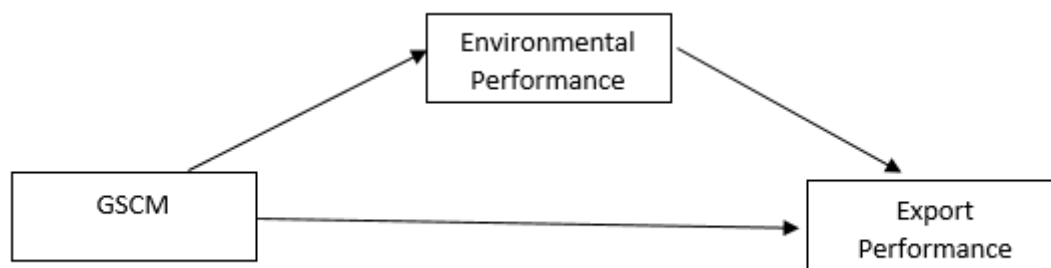
improving the economic performance. In the Malaysian health care industry green supply chain practices are also been applied.

### **Export Performance**

Zhu & Sarkis (2004) explored the impact of firm's determinants on the export performance (EP) in the province of Ardabil (Iran) exporters. Results revealed that firm size, firm experience, and firm export commitment has a positive effect on export performance whereas, the greatest impact was found on export performance of export commitment. Similarly, Haddoud et al (2017) explored the network promotion role of export promotion programs which drives small and medium enterprises export performance. Data was gathered from 160 respondents working in small and medium UK exporter's companies. The findings showed that both the experiential and informational export promotion programs have enhanced all types of SMEs' relationships. The relationships with the buyers situated in foreign were found a positive impact on EP whereas, on export performance (EP), experiential forms had an indirect effect. Azar et al (2017) focused on dissimilar types of innovation for the company's export performance (EP). Data was collected from 218 Swedish export enterprises. Results displayed that firm innovation augments EP directly and indirectly through sustained high-tech innovation.

### **Methodology**

#### **Conceptual Framework**



### **Hypothesis**

**Ha1:** There is a significant relationship between GSCM and export performance

**Ha2:** There is a significant relationship between GSCM and environmental performance

**Ha3:** There is a significant relationship between environmental performance and export performance.



### **Type and nature of the study**

The qualitative technique was used in this study of the data. The survey population was selected from the textile manufacturing companies in Pakistan. In order to fill out the questionnaires, they were sent to textile-related employees working in purchase department, logistics, import/export officers, packaging staff such people were considered to have appropriate knowledge of company's approaches and they were considered suitable respondents to provide us the relevant and required information.

### **4.2 Sampling Technique**

The convenient sampling technique was used in this study. Data was gathered from the participants who willingly shared the information. Within the survey form, we explained our purpose of the research, in which we provided the guidelines for the complete and assured that all the info that will be received would use exclusively for the purpose of our academic research. The data has been gathered from workers working in purchase department, logistics, import/export officers, packaging staff of textile industries of Pakistan. Various textile companies of Pakistan neglected to be a part of this survey maybe they vacillated to give the data that relates to the EP and practice or maybe because of their company rules.

### **4.3 Instrumentation**

In order to reach the purpose of our study, an assessment questionnaire was ready. From the existing literature, the questions for the study were taken. A scale was used to evaluate the effect of GSCM on environmental performance and export performance five-point Likert scale, For GSCM questions the observers were asked to show 1= for strongly disagree and 5= for strongly agree with the statements provided. For Environmental performance and EP variables, participants were requested to appraise the firm's performance as in comparison to the competitor's performance through the past three years, also using a Likert scale of five. The questionnaire has been adapted from the study done by Al-Ghwayeen & Abdallah (2018). Five points Likert scale has been used to examine the

study and the questions are derived from the dependent and independent variables of the study.

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#### **4.4 Sample design**

350 sample sizes was collected from the Managerial, non-managerial staff, effective level managers, purchase department staff, packaging staff was our targeted audience for the study of GSCM practices and its effect on export and environmental performance. On the basis of willingness and convenience of the participated audience, the sample was selected.

#### **4.5 Data Collection**

A major instrument in collecting the primary data was the questionnaire survey in this study. It was sent online via email. For the collection of data, we took permission from some textile industries in Pakistan. An online questionnaire was distributed, and via direct electronic data entry was being used for the recording of responses as it was the web-based survey. To potential members, the link of the survey form was sent via e-mail so that it could be distributed to the other colleagues in the textile manufacturing industries of Pakistan.

#### **4.6 Statistical Technique for Data Analysis**

The data will be analyzing PLS software and the statistical technique which is used in our study was Structural Equation Modelling. The relation between several variables can be displayed by using this tool. Either the variables are a manifest or latent variable which means whether the variable is being observed directly or is hypothetical. This statistical technique combined the model measurement i.e. (affirmative factor analysis) and structural model i.e. (regression

path analysis) into a single statistical synchronic test. There are two methods that can be used to perform Structural Equation Modelling: (i) Covariance Method (ii) Partial Least Square.

#### **Data Analysis**

#### **Demographic Analysis**

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#### **Data Analysis**

#### **Demographic Analysis**

	Frequency	Percent
25 to 30	50	14.3
30 to 35	141	40.3
35 to 40	88	25.1
40 to 50	71	20.3
Total	350	100.0

The table showed that the respondents with the age range of 30 to 35 were in majority which is 40 percent among all. The least percent shows within the age range of 25-30 years old respondents.

	Frequency	Percent
Male	189	54.0
Female	161	46.0
Total	350	100.0

The gender table showed that among the respondents 54 percent were males and 46 percent were females. It implies that a major portion of respondents has been covered up by the male respondents.

	Mean	Std. Deviation
Gender	1.46	.499
Age	2.5143	.97156

The mean and SD value of gender and age showed that reliability has been higher and respondents have given polarized responses where there was no reliability issues encountered among the respondents while answering the question. Moreover, less deviation was seen among the respondent's data and the sample mean is less deviated from the population mean.

#### 4.8 Descriptive Statistics

	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Our firm cooperates with suppliers to meet environmental objectives	5.00	4.0057	.05765	1.07856
Our firm emphasizes purchasing eco-friendly materials	5.00	3.9314	.06004	1.12328
Our firm cooperates with suppliers who have environmental certifications	5.00	3.9514	.06071	1.13574
Our firm has partnerships with suppliers that aim to environmental solutions and/or development of environmentally friendly products.	5.00	3.8943	.06157	1.15191
Ratio of exported products has increased during last three years during the last three years compared to competitors.	5.00	3.9429	.06102	1.14163
Our export market share has increased during the last three years compared to competitors	5.00	3.8971	.06152	1.15093
The number of countries that we export to has increased during last three years compared to competitors	5.00	3.9514	.06057	1.13321
Our firm has achieved a high percentage of profits from exported products during the last three years compared to competitors	5.00	3.9514	.05823	1.08938
Our firm has achieved its export objectives during the last three years compared to competitors	5.00	3.9829	.05946	1.11244

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Our firm has reduced consumption of hazardous/toxic material during the last three years compared to competitors.	5.00	3.9314	.05908	1.10528
Our firm has reduced air emissions during the last three years compared to competitors.	5.00	4.0057	.05765	1.07856
Our firm has reduced effluent wastes during the last three years compared to competitors.	5.00	3.9314	.06004	1.12328
Our firm has sought to improve its environmental image /position during the last three years compared to competitors.	5.00	3.9829	.05849	1.09426
Our firm has reduced energy consumption during the last three years compared to competitors.	5.00	3.9486	.05927	1.10880
Our firm has reduced solid wastes during the last three years compared to competitors.	5.00	3.9629	.06033	1.12858
Our firm emphasizes design of products for reduced consumption of material energy	5.00	3.8943	.06157	1.15191
Our firm emphasizes design of products that can be reused, recycled, and recovery of component parts.	5.00	3.9429	.06102	1.14163
Our firm emphasizes design of products to reduce use of harmful/toxic material	5.00	3.8971	.06152	1.15093
Our firm emphasizes optimization of design process to reduce air emission and noise	5.00	3.9514	.06057	1.13321
Our firm emphasizes optimization of design process to reduce solid and liquid waste	5.00	3.9514	.05823	1.08938
Our firm cooperates with customers to produce eco designs	5.00	3.9600	.06025	1.12721
Our firm cooperates with customers to design cleaner production processes	5.00	3.9486	.05829	1.09056
Our firm cooperates with customers for green packaging	5.00	3.9743	.05993	1.12126
Our firm has information sharing structure with customers	5.00	3.8771	.06227	1.16506
Our firm cooperates with customers for using less energy during products Transportation	5.00	3.9743	.05883	1.10062
	5.00	3.9514	.05921	1.10764

**Table 3: Reliability Scores (N=)**

	<b>Cronbach alpha</b>
Green Supply Chain Management	0.900
Export performance	0.781
Environmental performance	0.827

<b>Variables</b>	<b>No of Items</b>	<b>Number of respondents</b>	<b>Cronbach's Alpha</b>
Green Supply Chain Management	15	350	0.900
Export performance	5	350	0.781
Environmental performance	6	350	0.827

**Table 3. Reliability Statistic**



**Reliability Statistics**

Cronbach's Alpha	N of Items
.908	26

To measure the data significance, reliability test has been done. The table shows the Cronbach alpha of .908 which depicts higher consistency of the data. The value is higher than the standard value of reliability which is 0.70. The reliability score of all the variables is higher or equal to the standard value of reliability. Among all the three variables, green supply chain management shows higher reliability. Therefore, it shows that the data is consistent

enough and is significantly followed by reflecting reliable answers from the respondent's side.

**5.2 Confirmatory Factor Analysis**

Factor analysis was employed to reduce a large number of variables to extract most underlying variables called factor. Confirmatory factor analysis is a useful method to examine the variability among observed variables and excerpt variability from items and load them into a common factor.

Construct	Item	Loadings
Green supply chain practice	cooperation with customer1	0.697
	cooperation with customer2	0.710
	cooperation with customer3	0.652
	cooperation with customer4	0.771
	cooperation with customer4	0.709
	GSCM 1	0.640
	GSCM 3	0.805
	GSCM 4	0.724
	GSCM 5	0.705
	eco design1	0.764
	eco design 4	0.607
Environment performance	ENV1	0.736
	ENV3	0.804
	ENV4	0.864
	ENV5	0.761
	ENV6	0.672
Export performance	EXP1	0.641
	EXP2	0.814
	EXP3	0.799
	EXP4	0.711
	EXP5	0.680

**Structural Equation Modeling**

**Measurement of Outer Model**

In the result segment investigation of data has shown. The two criteria were utilized to approve and dependability of information of an external model that contains convergent validity and content validity.

While analyzing the literature through multi-variate method, when the items of variables reflect high loadings for their variables which are higher than other variables of the model, their content validity needs to be required (Hair, 2010). When the items are being loaded on other constructs with the low value they need to be removed.

**Content validity:**

Construct	Item	Loadings	t-value	p-value
Green supply chain practice	Cooperation with customer1	0.697	21.075	0.000
	cooperation with customer2	0.710	20.404	0.000
	cooperation with customer3	0.652	17.042	0.000
	cooperation with customer4	0.771	34.104	0.000
	cooperation with customer4	0.709	21.467	0.000
	GSCM 1	0.640	17.416	0.000
	GSCM 3	0.805	33.251	0.000
	GSCM 4	0.724	26.888	0.000
	GSCM 5	0.705	22.955	0.000
	eco design1	0.764	27.903	0.000
eco design 4	0.607	13.724	0.000	
Environment performance	ENV1	0.736	21.414	0.000
	ENV3	0.804	31.306	0.000
	ENV4	0.864	50.733	0.000
	ENV5	0.761	28.594	0.000
	ENV6	0.672	19.660	0.000
Export performance	EXP1	0.641	15.253	0.000
	EXP2	0.814	40.720	0.000
	EXP3	0.799	35.842	0.000
	EXP4	0.711	21.364	0.000
	EXP5	0.680	20.320	0.000

**Convergent Validity**

With respect to the CR, that is composite reliability, it is a measure that could help in evaluating overall reliability and validity of the collection of all the similar factors that are heterogeneous.

In addition, it has been used in this study to assess the internal consistency of the measurement. In the above table, it has been noted in the above table that environmental performance has CR of 0.879 which shows the acceptance of threshold while composite reliability of export performance is 0.851 and green supply chain management is 0.917 which shows high reliability and acceptance of threshold. The researcher has assured that all the factors are homogenous and there is a better estimation of all the composite reliability.

With respect to AVE or average variance extracted, it has been noted that those AVE values that are less than 0.5 do not usually convey sufficient variance in the variables thus this refers that the mean items have been less than effective and there are much more errors in the variance. If the AVE is more than 0.5 than it considers that all the loadings are good but less than 0.50 refers it to be less perfect.

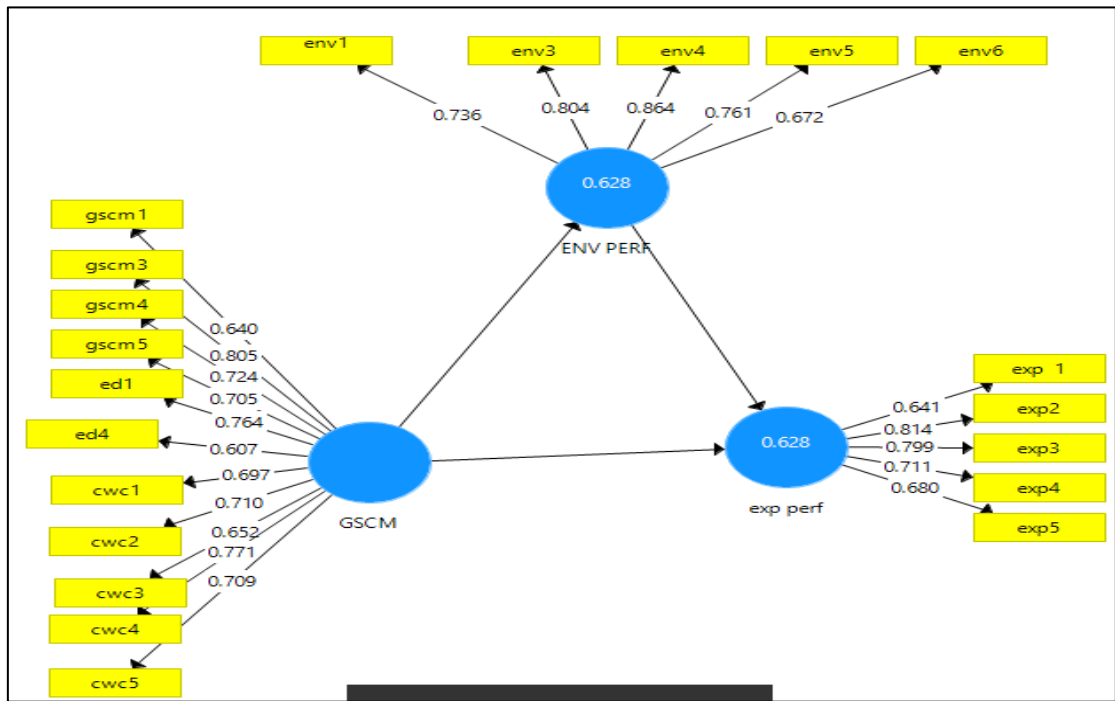
When measuring the convergent validity, it comprises of three phases. At first, the constructs load has to be of more value than 0.7 as it's a requirement within the model i.e. greater than 0.7, then comes the second which is average variance extracted (AVE) for this, its value should be more than 0.5 (Fornell & Larcker, 1981) and a third phase we need to calculate is the composite reliability (CR) its value should lie above 0.7 or at the same. The table under, displays all these assumptions.

Variables	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Green supply chain	0.900	0.917	0.504
Environment performance	0.827	0.879	0.593
Export performance	0.781	0.851	0.536

**5.3.2 Final Path Model:**

This is the final path model, after deleting out the insignificant factors. Those having factor loadings

value less than 0.5 by using Smart Pls.2.0 software this model was analyzed.



**Correlation of Discriminant validity**

The test adapted by Fornell & Larcker (1981) is discriminant validity that has been done on the basis of correlation by taking pairs and comparing it with

the extracted variance by estimating the constructs making up every probable pair. The discriminant validity has been established as the AVE in the table shown below is more than 0.5 and the diagonals are greater than the off-diagonal.

	Environment performance	GSCM	Export performance
Environment performance	0.770		
GSCM	0.792	0.710	
Export performance	0.681	0.787	0.732

**4. Discussion**

The study depends on the investigation of the impact of GSCM on environmental and export performance. The empirical observation and the statistical validation of the data gathered showed that there is a significant impact of green supply chain management on the environment and export performance of Pakistan textile industry. As per the statistical findings, the null hypotheses of the proposed study have been rejected by accepting the alternative one and showing that an essential relation exists between the dependent and independent variables. The findings are consistent with the qualitative analysis which implies that GSCM plays an essential role in enhancing environmental and export performance.

The research aims at focusing on the effect of green supply chain practices on environmental and export performance level however, the primary gap that has been identified in the study is interrelated to the

textile sector. It has been noted that the textile industry has been playing major role in creating opportunities for the country economy. The study concludes that there has been a positive and significant impact of green supply chain management on export performance level hence, the findings reveals that the study has been showing clear understanding of the implication of green supply chain on two major dimensions including export performance and environment performance level. The primary limitation in this study is that it has been following convenient sampling and has been seen to be biased hence; future implication on this study could neglect this limitation. In a nut shell, it is clear that if the textile industry will start following the use of proper legislations regarding green supply chain management then the companies could gain high competitive advantage in the global markets. Moreover, the implication of green supply chain management could help the companies to meet

environmental standards including green guard and carbon trust standards that could affect export performance level. In addition, initiation of the green supply chain management practices could be entailed by making short term investments and has been considered to be significant for long term.

The results have shown that there is a direct and optimistic effect on export performance which specifies that by implementing the GSCM practices, the textile industries of Pakistan will be able to improve their exports by meeting the international eco-standards that would serve to increase the export performance of the textile industries of Pakistan. The finding is aligned with the study of Singh et al. (2016) that explored that the incorporation of GSCM practices will allow raising the competitiveness of the worldwide market. The results are somehow different from the study of Jordan study as the Jordanian study is focusing on the manufacturing factor for which the variables are different than that of textile industry which is the focus of the present research.

As the results proved that there is a significant impact of GSCM on export performance and the environment if the companies aim at successfully adopting and implementing green supply chain practices than they could be able to improve the capability and it could increase their export level. The best primary example is of Jordanian manufacturers (Diab et al., 2015) who have adopted green supply chain practices and successfully contributed to the high export performance level. Clear arguments provide a view that the adoption of green supply chain management could improve the level of competition of the company in the global and international market and it has a significant and positive impact on export performance level. Moreover, it has been also indicated that the implication of green supply chain management practices could minimize the negative effects of the operation on the environment and could encourage environmental sustainability.

## **5. Conclusion**

The study, therefore, concludes that GSCM has served as the significant enabler for the EP in the

Pakistan textile industry. The results have shown that there is a significant and positive effect of GSCM on export and environmental performance. The study has essentially served to get deeper insights about the enhanced export and environmental performance. The findings have explored that EP mediates the export performance relation in the positive and essential manner. In short, the study has given the better insight about the impact of GSCM on the two main underlying performance magnitudes and has offered the new understanding by turning it into the academic and practical implication in the textile sector of Pakistan. The companies need to realize that the adoption of the green supply chain management could not only help the companies to cope up with the external pressures but could also help in empowering the performance level. It is important for the companies to regard GSCM as the most influential strategic tool that could improve the criteria to export the products to the global and international markets and could also improve the eco-design. The discussion also reveals that the social impact has been also highlighted by major a study which reflects that it could be helpful for the consumers and they could obtain safe internal environment, minimize the pollution level and control the energy and resource consumption.

## **7.1 Research Implication**

The following study offers the theoretical contributions by contributing to the existing literature in examining that in what way GSCM affect the Environmental and export performance and expanding it by assessing the mediating role environment on the relation between GSCM and export. Moreover, the study has also served to the present literature by generating research that sees to attempt the systematic understanding of GSCM and its effect on the textile industry

## **7.2 Future Recommendation**

The present study has the limitation that it is focusing on the convenience sampling method. Though this approach is used in the business literature it might result in offering the biased results due to which it is suggested to the future scholars to



go for unbiased sampling. The present study has the time limitation and it is recommended to the future researchers to prefer a detailed study in the same industry by taking a larger sample size. Lastly, the study is limited to focus on the single sector only which suggest the future scholars to expand the study by considering another sector such as food sector of Pakistan and also expanding the study by taking other factors like reverse logistics.

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