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## Identifying Relationship between Supply Chain Management Practices and Supply Chain Performance: An Empirical Evidence from Pakistan Textile Industry

#### **RIMSHA SIDDIQUI**

Research Scholar, Karachi University Business School University of Karachi, Pakistan DR MUHAMMAD ASIM Associate Professor and Chairman Karachi University Business School, University of Karachi, Pakistan

#### Abstract

The aim of this study is to examine and theorize the influence of supply chain management practices that affects organization performance in textile industry of Pakistan. These practices include strategic supplier partnership, level of information sharing, quality of information sharing, customer service management, internal lean practices and total quality management. Data was collected through a self-administered survey and the research modal was tested empirically by using a sample of 297 questionnaires, collected from supply chain professionals. Correlation was applied to find out the relationship among variables and regression was applied to find out the impact of strategic supplier partnership, level of information sharing, quality of information sharing, customer service management, internal lean practices and total quality management on supply chain performance. It is identified that the key factor that influence supply chain performance is long term supplier relationship, followed by quality of information, total quality management, customer relationship management and lean practices. All the independent variables strategic supplier partnership, level of information sharing, quality of information sharing, customer service management, internal

lean practices and total quality management have statistically significant impact on organization performance. The findings of this research will supply chain managers in improving organization performance of textile sector in Pakistan.

**Keywords**: Strategic supplier relationship, information quality, textile industry, level of information, total quality management.

#### **1. INTRODUCTION**

#### 1.1 Back ground of the study

Globalization has taken place everywhere and business environment become very competitive, in this era it has become a challenge for companies to bring products and services to the cost as low as they can. Further conveyance of the merchandise at the precise dwelling and on the schedule is critical for today. In order to do so it is very important for companies to not only change the internal process and effectiveness of operations but rather also focus on overall value chain competitiveness. In this race of challenging and competitive business environment knowledge and function of supply chain management has developed an important component and requirement for survival in the market and earn handsome profit. Administration of logistics assembly of explain management of supply chain as the process of effective and systematic administration of commercial happenings or functions all way along the company's operations with in a firm and along overall management of supply chain aimed at the reason of enhancing tactical routine of a distinct organization and overall all value chain (Abylaev, 2014). Exclusively in SCM the level of management of suppliers or associates it based on the aim of two kind; increase and enhance the performance of whole company process and recover the overall value chain. It has become essential for companies to build flow of information system which should be integrated enough to share information for timely decision making but also can be strong enough to use as a destroyer for competitors. Not only information flow but the raw material flow should also be effective across the supply chain (Chan, 2016). Sub-contracting internal function has increasing say by day and are now making organization global companies as these allow acquiring more

opportunities beyond the local market and reaching the international markets. An example of it would be that when company take design of website from America and build webpage from India software engineers, meaning using global market for selling product in global industry (Aradhana Vikas Gandhi, 2017). The outsource strategy is extremely important in term of cost of labor as when and desired by management some operations of manufacturing can be outsourced in states where its cost low or material also available. In context of Pakistan in textile sector there is no planning arrangement for inventory and production in spit of up to date software of manufacturing machines is existing. In addition to this in terms of human resource because of management cost saving mind, not as much of educated or illiterate individuals are on the position of managers and they manufacturing planning is conducted by them. Despite availability of institution who provide education regarding the textile industry there is low oriented or even no emphasis on supply chain related issues faced by industry in real life situation. The current studies or research on supply chain only focuses on solitary to down and up stream side of value chain and on limited topics or issues of SCM, whereas topics like supplier involvement and selection, performance of manufacturing, supplier relationship affect on organization, success in long term relationship with suppliers, orientation towards supplier supervision, vender performance, role in improving responsiveness and relationships and the outcome and result of vender and company relationship have been researched a lot, there are also some studies focusing on down side of supply chain which is manufacturers and retailer's relationship and management. Recently researchers have worked on both side of supply chain management upstream and down stream together at the same time (Yinan Qi, 2017), in addition to these researcher a research examine association among supplier supervision strategies, customer relationship management and firm performance. Therefore, this study aims to examine and test association among different strategies or management practices of supply chain and organization performance, these applies includes activities or strategies implemented to increase supply chain effectiveness and efficiency.

#### **1.2 Problem Statement**

Organizations todav are giving considerable prominence on management of supply chain and its importance due to that fact that it allows them to stay competitive and profitable (Li et al, 2006). Therefore, academic researchers and executives are taking wide interest in SCM related phenomenon because of its cruciality. Nowadays business ecosystem has change completely as there are high-tech information system, intensive worldwide competition and at the most important thing, globalization of business market for all especially manufacturing companies. In the start industrialist focus on waste management, implementing lean system in production in order to increase productivity and efficiency by removing un important or waste task in response to increasing competition in the market. Productivity improved once after waste was eliminated from many places of regular operations. This to much focus on lean strategy which focus on waste only now made productivity improved enough that massive work has been done on it and now very limited left even the work has been completed. Furthermore, there are other several issues in supply chain that need to be focus or have massive potential of improvement and which contribute in poor performance. This includes vender performance, volatility in demands of customer and unforeseen business environment. Individual organizations get huge benefit of unified value chain system which also contribute towards competitiveness, meanwhile later on organization supply chain is start competition with started to take place concluded the originality level struggle, however this type of competition may not took place in under developed countries (Koh, 2007). Mainly it is because whatever company sold is what they produce and this allow them to purchase input from others meaning suppliers, therefore the cost of goods sold include the cost of purchase so in order to be competitive the input cost should be remove or reduce which is the work of procurement and supplier relationship management that is by supply chain policies plays a vital role in SCM (Degraeve, 2006). SCM practices includes different strategies among them lean has great importance are part of improvement of organization internal process and in just in time supply also (Burgess, 2006). The crux management of supply chain and the main idea is the connection of internal process among the organizations and supplier and customers. Integration in

nowadays supply chain world is now become easier due to the fact of web based and internet connected or enable organization to connect with customers and suppliers for claim, register, patron and supplier administration which includes forecasting and management of them (Frohlich, 2002). The subject of supply chain management practices is still an un completed and rich area of literature related to which limited number of researches and scholarly paper published, the contribution to this area still have gap, (Cigolini, 2004) and (Li et al, 2006) stated. The researcher have define it a multidimensional nature of SCM and also the evolutionary nature of SCM this has created a confusion in its understanding. Studies related to management practices in manufacturing firms which allow them to be competitive vehicle in the developing economic environment are limited and need of further research to be done in order to deepen understanding related to what strategies to be undertaken (Abylaev, 2014). CPEC projects in Pakistan and the political and geographical characteristics as well as itscurrent state of expanding manufacturing sector, and potential gateway to world through Gwadar and Karachi port, makes the supply chains of its manufacturing sector crucial and important to research against all those previously studied topics. Hence as per the discussion above, the research is going to study the influence supply chain management practices on supply chain performance in textile industry of Pakistan.

#### **1.3 Research Questions**

How do SCMPs used in this study influence the performance of supply chain in the textile industry of Pakistan?

#### 2. LITERATURE REVIEW

The study done by (Qrunfleh, 2016) in Malaysia in which researcher explored the effects of diverse extent of management practices of supplying chain (SCMP) on performance chain of suppliers (SCP) in the electronics manufacturing. The management chain practices of suppliers includes seven dimensions i.e. strategic partnership among partnership, sharing information with subordinate and suppliers, precise and good quality of information and performance should be shared and levels of shared information. The study used quantitative methodology with sampling method of convenience sampling was used

and a survey questionnaire which was self-administrated, was shared with one hundred and twenty five manufacturing industries of Malaysia. Variance-based prototypical was used to assist the learning framework, for this the fractional slightest squares (PLS) process were employed. The fallouts of fractional slightest squares specify that out of 7 aspects, six of management chain practices of suppliers (SCMPs) have a significant and optimistic effect on performance chain of suppliers (SCP). In addition, compare to additional extents of SCMP, approved goals and hallucination have a greater influence on performance chain of suppliers (SCP). To examine empirically the relation among 2 vital features, the practices of management chain of suppliers and performance of supply chain. The learning employed a framework which was once more industrialized grounded on prevailing hypothetical urgings. Perhaps the study was main for the initial to define the influence of management practices of supply chain which embraces on comprehensive blend of performs and tactic against the performance of the supply chain overall. The study obtains a fine concentration exclusively on the constructive business of electronics, thee taster size of the respondent was really matter. The facts and figures was also solitary poised as of solo defendants in an industry. Though, the learning outline the pathway for future research in a way because after this research which on the administrative chain practices of the suppliers and performance chain of suppliers.

A study was conducted in pharmaceutical manufacturing firms in Pakistan on diverse mechanisms of management chain of suppliers (SCM) and its influence on the recital of suppliers practices. The purpose of existing learning is to inspect the fauna of the relation among strategic partnership among partnership, sharing information with subordinate and suppliers, precise and good quality of evidence and performance must remain collective and levels of shared evidence of the firm. Three independent variables i.e. QOI, LOI and, SSP were examined to check their impact on the presentation of pharmacological corporations. For this purpose, the pharmaceutical industry was chosen as it's growing rapidly in Pakistan, yet its facing a lot of issues and challenges. In Pakistan's big cities such as; Karachi, Lahore, Islamabad etc. were participated for the collection of facts and figures, among thirty five pharmaceutical companies were

contributed. The questionnaire were asked to fil by the relatable knowledge managers and the questions were founded on self-reported structure. The conclusion of the learning specified that strategic partnership among suppliers, sharing information with subordinates and suppliers, precise and good quality of information and performance should be shared, levels of shared information in the pharmaceutical manufacturing industries. This study is targeted the authorities of the management o supply chain in organizations and give the wider perspective to implement the founded concepts of SCM within the organization boundaries. A inconstant in this learning who forecast the performance of the firms is independent variable. Partnership strategies among suppliers and shared quality based information have optimistic influence on the performance of pharmacological corporations whereas, levels of shared information shown negative influence on the performance. The finding of this research ropes the preceding fiction. As far as conclusions of this survey is accommodating to the strategy fabricators and the managing authorities to participate the notions within organization premises to enhance the performance of the industry and compete with the competitors (Siddigui, 2018).

The study conducted by Aradhana Vikas Gandhi (2017) also discussed about the administrative applies of supplying chain and their influence on the performance chain of suppliers and overall organiztion presentation. In India, the paper investigated the acceptance and execution of management chain practices of suppliers (SCMPs) on performance chain of supplier (SCP) and presentation of firm (FP) in the structured manufacturing business. The SC practices include managing relation with customers, managing relation with suppliers, penalty area resemblance and shared valuable information. On the other side steady presentation is unrushed over homecoming on investment, revenues and profit. Supply chain performance was measured using subjective or perceptual concept like, most of the periods our estimating and substantial accuracy of arrangement is high?, capabilities of delivering on time provided our firms ?, our crucial providers confirm sending, reliability and steadiness?. The study uses quantitative tactic to empirically learning the relation among the caption variables. Collection of data is conducted form the well-known manufacturing firms of India in which, heads of the

departments were participated. The sample size of the study consists of 125 plaintiffs. A model was developed screening relation among functional performance, administrative chain performs of supplier and performance of supply chain. The hypotheses developed were confirmed by means of mediating numerous regression analysis. The outcomes of the exploration recommended that management practices of supply chain having significantly connected with the performance of supply chain and function performance. Relationship among customers and suppliers are the most imperative for management practices of supply chain which influence functional performance in Indian market. Also, recommendation for the future researcher is that they should also enlightened the parameters of actual performance such as sales growth and profit margins to enhance and quantify the advantages of management practices of supply chain.

A study of (Chan, 2016) identified that supply chain resilience significantly impact on financial presentation of the firm. The construct of resilience of supplier chain includes preparedness, alertness and agility. In a stormy situation, elasticity is mandatory in the practices of chain suppliers. In order to predict the changes in the economical circumstances flexibility is prepare the organization for latent changes, perceive changes and re-join to genuine changes, thus so long as higher cost. The research used quantitative approach where data was collected from member organization of connotation for operation in the city of United states Of America. In these organizations available top supply chain executives were contacted for responding to our research questions. After collecting data the research hypotheses was tested, through regression analysis. The research outcome reliance on the supply chain dimension and they are; agility, attractiveness and alertness. These three dimensions of supply chain having significant impact on the organizational financial performance. It has been founded that attractiveness capability have a huge impact on the firm's financial presentation, it is simply like that if an organization is financially stable so that organization will able to their potential suppliers and invest maximum amount in their business. Similarly alertness also has influential impact on the organization performance it means that if organization is capable enough to detect their competitors so that organization will easily survive in the market. It is also suggested in this learning that

organization should pay more attentions on the implementation of the supply chain scopes.

A research on strategies of supply chain and performance of supply chain in which they shared with us the models of management practices of supply chain as harmonizing and material organizations aptitude for dexterity. They scrutinize arbitrating impacts happening the applies of management chain of suppliers while having relation among dexterity of supplying chain and performance of supply chain while evaluating diminishing outcome of evidence arrangements aptitude for dexterity relationship. According to them, agile supply chain strategy has three main objectives that are to supply those products that may be produced with various features, size, options and color, product whose supply may be changed quickly with response to sudden change in demand and products which have the capability to accept the changes in technology or product cycle. In other words these three features are flexibility, responsiveness and respectively. They hypothesized adaptability that customer relationship, Tactical business suppliers, rescheduling and wiry applies, facilitate other business factor and dimensions. American's manufacturing logistics, and supply chain firms were participated in data collection. Using questionnaire around three thousand one hundred and twenty nine professionality were participated by their consents. AMOS software were used for data analysis. The ability of focal company to regulate its construction and production rest on on the facility of the management chain of the supplier to change crucial characteristics, which included transfer measures and schedules, quickly. Understanding how agility of the management of the supply chain influence presentation of an organization and it is therefore an imperative intangible involvement in survey. Furthermore, this survey also gave the perception about the reusing of the raw material through recycling process. (Qrunfleh, 2016).

Another study examining the links among the process of business administration, teamwork of supply chain, collective advantage and organizational presentation conducted on the topic Business process administration chain of suppliers collaboration which highlighted the person of outer and inner practices of an organization, and undoubtedly explained collective protagonist and stimulus of Business administrative development and performance of

organization and collaborative advantage respectively. This learning was conducted to shelter the foremost study theories. Twenty five companies were surveyed by the Pilot for entry refining and pleased corroboration was carried out and the final survey instrument was further improved, partially least and structure equation modelling technique was employed which then realized that this model is limited to small sample size. The result concluded that (a) there is a optimistic relation among BPM and organizational presentation (b) management of business having optimistic impact on organizational performance (c) The collective advantage and organizational presentation partially mediates the impact of BPM on organizational performance (d) Companies working with supply chain colleagues are improved situated to bring about a collective lead (e) Part of the collective advantage and organizational presentation influence on organizational performance. They also uncovered that management of business process extents provide a inclusive overview of internal organizational expansion that leads to cooperation with supply chain allies. This verdict helps in identifying that management of business process is a necessity for internal organization events in SCC(Jiraporn Pradabwong, 2017).

In Malaysia, management chain practices of suppliers in the electronics industry, another applicable research conducted with the purpose to explore the inspiration on of the presentation chain of the suppliers who associates the separate dimensions in Malaysia. The study used the quantitative method of sampling and self administered survey questionnaires as per convenience for 125 electronics companies in Malaysia. According to the research there are seven dimensions of SCMP namely strategic partnership among suppliers, sharing information with subordinate and suppliers, provide precise and good quality of information and performance should be shared, and levels of shared information. These are independent variables which influence supply chain performance. The research employed questionnaire which consisted of three main sections, covering company's background and history, inspiration and operation of SCMP. As far as entirely, actual SCMP take significant inferences for SCP. It provides an impeccable formula for SCM managers to evaluate the efficiency of the new SCMP combination. The analysis also shows that SCMP could have a direct consequence

on SCP. The result that six dimensions having optimum influence. Customer relationship has indirect outcome on presentation of supply chain. Additionally, arranged hallucination and areas expressions a superior effect than extra extents of SCMP (Veera Pandiyan Kaliani Sundram A. R., 2011).

Another study conducted on the effect of procedures strategical chain of suppler on incorporation and presentation to introduce the detailed structure about the facilities and operation strategies having deep understanding and relation, strategical chain of suppliers, mixing of supply chain ing, and overall presentation of the firm. Research comprised the determination of the effect of operation strategies having deep understanding and relation, on strategical chain of suppler, the outcome of strategies of supply chain on integration chain of suppliers and the influence of supply chain on integration on financial performance. Six hundred and four Chinese industries were participated in to the firm and the survey was shared among them through mail. Consequences concluded that operational strategies including cost strategy, quality strategy and delivery strategy are optimistic to lean supply chain strategies. While litheness strategy is expressively related to strategies of supply chain. Successful company should mature a pure and fitting OS in accordance with order qualifiers and customer winners. However, managers must progress wiry management of supply chain in order to realize the operational objectives chain of suppliers in context to accomplish the neutral of plasticity (Yinan Qi, 2017). According to the (Deepak Mathivathanana, 2017) an automotive products offer mobility and create jobs for millions, but this initiative is threat for the surroundings. Pressure on consumers, government regulatory programs, and the anxieties of stakeholders for a competitive edge and it is having social and environmental impacts. This pressure has controlled several companies in who maintain very collectively existing environment for the supply chain automotive business. Specific performs in the traditional chain of suppliers, which help the industry to emphasis on the management practices chain of suppliers. The aim of the existing learning is to provide a clear vision and having effectiveness between SSCM applies in the automotive sector.

## 3. Research Methodology

#### 3.1 Hypothesis

 $H_{a1}$ : There is a significant relationship between strategic supplier partnership and supply chain performance in textile manufacturing industry

 $H_{a2}$ : There is a significant relationship between customer relationship management and supply chain performance in textile manufacturing industry

 $H_{a3}$ : There is a significant relationship between information sharing and supply chain performance in textile manufacturing industry

 $H_{a4}$ : There is a significant relationship between internal lean practices and supply chain performance in textile manufacturing industry

 $H_{a5}$ : There is a significant relationship between total quality management and supply chain performance in textile manufacturing industry

 $H_{a6}$ : There is a significant impact Strategic supplier partnership, Customer relationship management, information sharing, internal lean practices and total quality management on supply chain performance in textile manufacturing industry

## 3.2 Sampling Design

In this survey random sampling method is undertaken, which is a form sampling technique of non-probability (Sauders, 2009). The population of present study is the total number of textile manufacturing firms in Pakistan and according to All Pakistan textile association there are approx. 400 textile mills. The size of sample of this research is approximately 10% of total population which is 350; due to the issue of trustworthiness, convenience and also population is unknown, no statistical technique or formulae can be used for the determination of the sample size.

#### 3.3 Instrumentation

The study adopted instrument developed by (Moh'd Anwer Radwan Al-Shboul, 2017), the instrument was adopted from previous researches to quantity the special constructs of the management chain practices of suppliers. The instrument is comprises of questions related to each independent variables. The responses to the questions were coded on 5 argument Likert scale 1 = strongly disagree, 2 = Disagree, 3 = neither agree nor disagree, 4 = Agree and 5 = strongly Agree for the all the variables.

## **3.4 Content Validity and Factor Analysis**

Validity is defined as the ability of a questionnaire to measure what it intend to measure. For instrument to be valid and consistence, the fallouts of Cronbach  $\alpha$  should standards in the assortment of 0.60– 0.87. By way of this survey is examining, 0.50–0.60 is considered sufficient. Data reduction method is used for the analysis in which large number of factors is decrease (Coakes, 2005). The study used exploratory factor analysis based on principal component method to identify reasons from dissimilar objects of each paradigm i.e. Independent and dependent variables under study. Each item loads in to a main factor based on the factors loading which have also been identified.

#### **3.5 Statistical Analysis**

To measure the relationship between two different variables correlation analysis is used. The strength of relationship between two variables can be easily identified from the coefficient of correlation. Coefficient value can take any value between  $\pm$  0.01 to  $\pm$  1.00. A relationship can be of two nature; positive and negative. Positive coefficient shows a positive relationship that as increase in values of one variable increases the value of other variable. By contract a negative coefficient represent a negative relationship, as increase in value of one variable decreases the value of other variable (Sauders, 2009). Multiple Regression analysis is used to predict dependent variable value through several independent variables. It also explained the change in dependent variable can be occurring due to independent variables. The co-efficient of determination  $(\mathbb{R}^2)$  shows the degree of prediction which your regression equation can find. The co-efficient of determination can take any value between  $\pm 0.01$  to  $\pm$ 1.00 (Sauders, 2009).

#### 4. Result

## 4.1 Descriptive Analysis

The data gathered in the research is first analyzed using descriptive analysis to understand elementary characteristics of the data. After the investigation of the demographic characteristics of the research data are illustrated in Table 4.1.

Table 4.1

Particulars	Categories	No	%
	Less than 1 year	40	13.4%
	1-3 years	59	19.9%
	4-6 years	53	17.8%
Experience	7-9 years	50	16.8%
	10-12years	45	15.2%
	13-15 years	23	7.7%
	Over 15 years	27	9.2%

In the questionnaire respondents were also ask about the general information in which we ask about the experience they have in their field. The majority of the respondents have 1-3 year of experience (19.9%), followed by person having 4-6 year of experience (17.8%), 7-9-year experience person (16.8%), 10-12-year experience holder (15.2%), less than 1-year experience holders (13.4%), over 15 year of experience (9.2%) and lastly (7.7%) have 13-15-year experience in their field or industry.

	20-25 years	70	23.6%
	26-30 years	81	27.3%
Age	31-35 year	57	19.2%
	36-40 years	31	10.4%
	41-45 years	27	9.1%
	Over 50 years	31	10.4%

In the questionnaire respondents were also ask about their age, so conferring to the age distribution, the leading age group was personnel between 26 and 30 years (27.3%), followed by between the ages of 20 and 25 years (23.6%), 31 and 35 years (19.2%), 36 and 40 years (10.4%) and the rest. These four age groups are combined contribute 81% in the total age distribution of the respondents in the sample. The detail overview of the distribution frequency according to age can be seen in Table above.

	Metric	37	12.6%
	Intermediate	12	4.2%
Education	Bachelor	91	30.6%
	Master	100	33.7%
	MPhil	56	18.9%

Further the respondents were also asked about education they hold, and the findings from result indicate that most of the respondent are educated as there are three major academic holders dominate the research survey, these three accounts for 83.2% i.e. (N=247) which indicate high expertise. Breakup of these dominate education group indicates 30.6% share of bachelor, 33.7% share of master and 18.9% share of MPhil degree holders respectively. One most astonishing group among the education was metric under which, 12.6% i.e. 37 people were metric degree holder which is because that major companies in textile industry of Pakistan are run under seth culture which are cost cut oriented not quality oriented.

Manital Status	Married	157	52.9%
Marital Status	Un Married	140	47.1%

Moreover, during the survey the accused were also inquired about their marital position. Most of the respondents are married, as the 52.9% mark themselves married and 47.1% of them declared themselves single which means unmarried. Total no of the marital status is 157 and 140 respectively, which means a quiet balance or normal respondent profile. The overview of the respondents' structure according to the martial status is shown in table above.

Condon	Male	162	54.5%
Gender	Female	135	45.5%

In the last but not the least the respondents were asked about gender, from table we can identified that out of the total observations 297, 162 respondents 54.5% were male, and 45.5% female (N=135).

From the demographic analysis the key findings which will drive this research result and findings are that, most of respondents who participated in this survey belongs to male personnel fall under age category of 26-30 year, having education of master's level with

married marital status and they have 1-3 year of experience. The change in supply chain performance in textile industry will be accommodated by the challenges faced by these respondents who dominate the survey contribution and help in improving supply chain.

#### 4.2 Reliability statistics Table 4.2

Variables	No. of items	Cronbach's alpha	
Strategic supplier partnership	4	.733	
Quality of Information Sharing	3	.762	
Customer Relationship Management	4	.719	
Total Quality Management	4	.793	
Internal Lean Practices	4	.801	
Supply chain performance	6	.821	

The study used SPSS to check the validity of the questionnaire through reliability analysis. Table 4.2 illustrate the result of reliability test of the items related to each variable with Cronbach's alpha charge of each inconstant (dependent and independent variable) used in this research. Four items under strategic supplier partnership have Cronbach's Alpha value = .733 > 0.60, which indicate the result supports internally consistency of the items responses. Three items of information sharing (independent variable) have Cronbach's Alpha value = .762 > 0.60, showing that the response is also internally consistent. In the regards of total quality management and customer relationship management four items under each, have their Cronbach's Alpha values = .719> 0.60 & .793> 0.60 respectively. The four items of internal lean practices also fulfill the criteria of above 0.60 value of Cronbach's Alpha. Lastly the items of dependent variable which supply chain performance are consistent and passed the reliability criteria Cronbach's Alpha value = .821> 0.60.

#### 4.3 Factor Analysis

The questionnaire contains total twenty-five questions and the outcomes of factor investigation of these items are presented in table 4.3. Under the total twenty-five components as a whole, 4 items belong to strategic supplier partnership, while 3 of items are belongs to share the quality information, management of customer relationship consists of 4 items, and 4 items are belonging to total quality management. Internal lean practices comprise of 4 items and

finally in the last, supply chain performance construct is consisting of 6 items. All values are automatically above 0.40 which mean no cross leading were ignored because of the value less than 0.40 criteria. Overall, this result give satisfaction and fill the desired principles of construct validation.

Table 4.	3
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Rotated Component Matrix						
Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Our firm relies on a few dependable suppliers	.677					
Our firm considers quality factor one of main criterion in selecting our suppliers	.682					
Our firm provides any help to improve the quality of suppliers' products	.790					
Our suppliers dealing with us in an open and honest way	.713					
Information exchange between our firm and our partners is accurate		.715				
Information exchange between our firm and our partners is complete		.914				
Information exchange between our firm and our partners is reliable		.732				
Our firm frequently interacts with customers to be responsiveness, reliable, and other standards			.678			
Our firm frequently follow-up and monitor our customers for quality/service feedback			.801			
Our firm frequently measure and evaluate customer satisfaction			.575			
Our firm periodically assess the importance of our relationship with customers			.741			
Our firm has an accurate and efficient database that provides information on internal operations, costs, and finances				.625		
Top management in our firm is actively develops an integrated quality plan to meet business Objectives				.577		
our firm has a salary promotion and incentives for encouraging employees' participation in quality improvement				.401		
Our firm treats customer complaints based on quality criteria and with top priority				.879		
The firm policy looking for reducing set-up time					.514	
Our firm pushes and encourages suppliers for shorter lead-times					.879	
Our firm streamlines ordering, receiving, and other works from					.756	

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suppliers					
Time has been reduced for inspection of the incoming materials/components/products				.691	
Our supply chain is able to produce different features of products such as options, sizes, and colors.					.961
Our supply chain is able to introduce large numbers of product improvements					.741
Our supply chain is able to respond to the needs and wants of the firm's target market					.491
Information systems encompass all functions in our firm, which provide high level of integration					.739
Our suppliers provide us materials/components/products on time without delay					.865
Our suppliers provide our firm high quality of materials/components/products					.879
Extraction Method: Principal Compon Rotation Method: Varimax with Kaise	U U	on.			

## 4.4 Relationship among management practices of Supply chain and performance of supply chain in textile industry of Pakistan.

#### Table 4.4

Pearson Correla	ation					
		Strategic Supplier	Quality of information	Customer	TOM	Internal
		Partnership	Sharing	relationship management	тqм	lean practices
	Coefficient	.651**	.525**	.451**	.561**	.389**
Supply Chain Performance	Sig.(2- tailed)	.000	.000	.000	.000	.000
	N	297	297	297	297	297

\*\* Correlation is significant at 0.05 level (2 tailed)

## H1: There is a significant relationship between strategic supplier partnership and supply chain performance in textile manufacturing industry.

Correlation test result is showed in Table 4.4, from table it is observed that the value of coefficient indicating the strength of relation among strategic supplier partnership and supply chain performance 0.651. The value of coefficient is close to 1 which specify that there is moderately high connection among strategic supplier partnership and supply chain performance in textile business of Pakistan. In addition to this looking at the significance level of relationship we found that

the p value is equal to 0.000 at 0.05 confidence interval level (2-tail), this shows that the relationship is substantial and thus H1 is recognized which is: There is a significant relationship between strategic supplier partnership and supply chain performance in textile manufacturing industry. Further analyzing the test result it is identified that there is a constructive relation among strategic supplier partnership and supply chain performance, meaning the textile companies which have programs like supplier or vender long term relationship management and proper process of mutual planning and problem-solving program have better supply chain performance compare to those who don't. Strategic partnership with contractors permits corporations to achieve have level of operational and strategic efficiency not only the buying firm but the selling one also as the whole value chain improves.

# H2: There is a significant relationship between quality of information sharing and supply chain performance in textile manufacturing industry.

Table 4.4 demonstrates another correlation test result, it can be seen that the coefficient value for quality of information sharing and supply chain performance is 0.525, which indicate that there is a moderate connection or relationship among quality of information sharing and supply chain performance, in combination to coefficient value, the p value of this relationship is equal to 0.000 at 0.05 confidence interval level (2-tail) which specifies that the association of quality of information sharing and supply chain performance is significant, this result supports H2: There is a significant relation between quality of information sharing and supply chain performance in textile industry. This experiential result postulates that quality of information sharing and supply chain performance have positive relationship with each other which means improving quality of information in the value chain will improve supply chain performance. In other arguments we can say that grave and patented material communication between partners of chain supplying creates a vivacious role in overall performance of supply chain as timely and correct information availability to all stakeholders allow them to make correct and on time decisions which ultimately leads toward improved organization performance. Not only vender but also when

employees are provided with appropriate information, so it helps enhance decision making and in cost reduction but also in better organization performance.

## H3: There is a significant relationship between management of customer relationship and performance of supply chain in textile manufacturing industry.

This hypothesis correlation test result is exemplified in Table 4.4, from table it is observed that the coefficient value indicating the strength of relationship between customer relationship management and supply chain performance is 0.451. Closer the value of coefficient to 1 stronger the relationship, this value which indicate that there is moderate connection among quality of information sharing and supply chain performance. In addition to this the significance level of relationship measured using p value is equal to 0.000 at 0.05 confidence interval level (2-tail), this displays that the relationship is substantial and thus hypothesis H3 is accepted which is: There is a significant relationship between management of customer relationship and performance of supply chain in textile manufacturing industry. Meaning that textile companies which have proper process and system of customer complain resolution, not only the general customer but also the value chain associates perform better and their performance chain of suppliers improves.

## H4: There is a significant relationship between total quality management and supply chain performance in textile manufacturing industry.

Table 4.4 also demonstrates the result of relationship test for total quality management and supply chain performance. From the table it is rational that coefficient value for total quality management and supply chain performance is 0.561, which indicate that there is a moderate correlation among total quality management and supply chain performance, in combination to this the p value of this relationship is equal to 0.000 at 0.05 confidence interval level (2-tail) which specifies that the relation is substantial, this result supports H4 which is: There is a significant relationship between total quality management and supply chain performance in textile manufacturing industry. The empirical result stipulates that total quality

management and supply chain performance have positive relation which means improving total quality management process will not only improve organization performance but also the supply chain performance. In order words we can say that it is not that if the company has TQM implement in their value chain so they will perform better and which can contribute towards organization success.

## H5: There is a significant relationship between internal lean practices and supply chain performance in textile manufacturing industry.

Lastly correlation test result of hypothesis five is illustrated in Table 4.4. from table it is observed that the value of coefficient representative the strength of relationship between internal lean practices and supply chain performance is 0.389. The value of coefficient is not close to 1 which indicates that there is low correlation internal lean practices and supply chain performance in textile business of Pakistan. In addition to this the significance level of relationship that is found from the p value which is equal to 0.000 at 0.05 confidence interval level (2-tail), this illustrate that the relationship is substantial and thus hypothesis H5 is accepted which is: There is a significant relationship between internal lean practices and supply chain performance in textile manufacturing industry. Nevertheless, analyzing the test result it is further identified that there is a optimistic relation among internal lean practices and performance of supply chain, meaning the textile companies which have programs like reduction of waste, which can be reduction in waiting times of manufacturing, warehouse optimization, timing of shipping, inventories surplus, under or overproduction, and defects in products all of them are perform better and have competitive edge on other firm in industry.

Table 4.5

Regression Mo	del Summary				
Model	R	R Square	Adjusted R	F	Sig.
			Square		
1	.696ª	.659	.506	188.338	.000b
a. Predictors: (C	onstant)				

H6: Strategic supplier partnership, Customer relationship management, quality of information sharing, internal lean practices and total quality management have significant influence performance of supply chain in textile manufacturing industry.

The regression model summary is demonstrated in Table 4.5. The value of R2 is (0.659) which illustrate that only 65.9% of variation in performance of supply chain can be explained by SCMPs i.e. strategic suppliers, management of customer relationship, share quality of information, internal lean practices and management of quality in this model. The significant level of the model is indicated by the F statistics where p value is 0.000 and F value is 188, this indicate that combined effect is significant.

The result of regression coefficient and significance level of each construct of SCMPs is illustrated in table 4.6. For strategic management of Customer relationship, suppliers. quality of information, Internal lean practices and total quality management the table illustrate coefficient value (0.550), (0.546), (0.451), (0.476)and (0.389) respectively. In concurrence to this if we evaluate the significance values of strategic suppliers, management of customer relationship, quality of information, Internal lean practices and total quality management so we find out that all of them are significant as p=0.000 for all respectively. So, for every unit increase in strategic suppliers, management of Customer relationship, quality of information, Internal lean practices and TQM a (0.550), (0.546), (0.451), (0.476) and (0.389) unit growth in performance of supply chain in textile business of Pakistan.

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		
(Constant)	.521	.303		1.322	.050
Strategic Supplier Partnership	.550	.343	.480	2.722	.000
Quality of Information	.546	.342	.451	2.113	.000
Customer relationship management	.451	.331	.381	4.115	.000
Total quality management	.476	.412	.408	2.525	.000
Internal Lean practices	.389	.411	.415	2.821	.000

Table 4.6

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The result provide evidence that there is a substantial and optimistic influence of supplier partnership, information quality, relation among customers, TQM and lean practices on textile industry supply chain performance. Following is the regression equation of the research analysis model.

$$\begin{split} \text{SCP} = 0.521 + 0.550 (\text{SSP}) + 0.546 (\text{QOI}) + 0.451 (\text{CRM}) + 0.476 (\text{TQM}) \\ + 0.389 (\text{ILP}) \text{ e} \end{split}$$

In the above equation 0.521 is the value of constant, and from 0.550 to 0.389, they are the elasticizes of customer relationship, quality of information, Internal lean practices and TQM respectively. SCP refers to presentation of supply chain which is the dependent variable, whereas e is error term.

#### 4.5 Discussion

The present learning results are consistent with certain studies discussed in this section. A study of (Moh'd Anwer Radwan Al-Shboul, 2017) identified that management of supply chain i.e. buyer relations, share quality of info, Internal lean practices and TQM have positively effect supply chain performance which further affect manufacturing firm performance in Jordan. The also demonstrate the causal relation among management chain practices of supply and performance of supply chain relationship with manufacturing firm performance. The study argued that from head to foot side by side of management chain practices of supply can lead to boosted supply chain and firms' recital. Supply chain managers are provided comprehensive and multi-dimensional operational measure related to practices for assessing the performance. In with it, Siddiqui, (2018) research explore certain strategies of supply chain and its impact on performance of manufacturing firm in pharma sector of Pakistan. The finding of the study indicates that information guality and supplier long term partnership affect firm performance positively whereas information sharing negatively associated with firm performance. All three varaibles significantly correlated with presentation of trade companies in pharma sector.

The conclusions are also parallel with the study of Veera et al, (2011) which discover the inspiration of diverse strategies

management chain practices of supply on performance of supply chain in Malaysia's electronics industry. The research revealed that strategic supplier association, sharing of material, quality information, rescheduling, risk and recompence division, agreed vision and goal have substantial optimistic influence on performance of supply chain whereas as management of customer relationship has negative and significant relationship with SCP. Moreover agreed goal and vision has greater influence on SCP compare to other dimension of SCMPs.

#### 5. CONCLUSION

The understanding and practicing of supply chain management (SCM) has very optimistic and valuable factor among the globe. As far competition is increasing day by day and marketers need to put more efforts for the effectiveness of their business. The main tasks for managers is that lower the production cost and maximize the profit. If the supply chain division complete their tasks according the desired plane so thy will help the organization in profit maximization, the key question is, can certain practices of supply chain be used to enhance overall performance.

In order to enhance the performance of supply chain, the management may have to agree to take effective supply chain practices measures or strategies. Thus, the reason behind for the conduction of this survey is the inspection of performance of supply chain in textile part of Pakistan through supply chain management practices i.e. Strategic supplier partnership, Customer relationship management, quality of information sharing, internal lean practices and total quality management and their impact on supply chain performance. This survey delivers an empirical and theoretical knowledge regarding how different strategies of supply chain can be used effectively and boost the impact on supply chain performance. In order to realize this research unbiased, primary data has been gathered from the supply chain professionals who are working in textile sector through online questionnaire using google form. After data gathering the study, examine the impression management chain practices of supply components (independent variables) on supply chain concert in textile industry of Pakistan. An empirical estimation

equation is also established founded on the findings of the exploration, the data used in this study which is a combination of primary and first hand data.

However, the study findings indicate that all the management practices of supply chain which are five factors affecting supply chain performance including strategic supplier, management, total quality management of customer relationship, share quality information and internal lean practices and management of total quality practices have significant and positive association with performance of supply chain in textile business of Pakistan. Furthermore, it is identified that the key factor that influence supply chain performance is long term supplier relationship which is because of the highest value of coefficient in both correlation and regression test followed by quality of information, total quality management, customer relationship management and lean practices.

Concluding with the standing and substantial of the present study, supply chain is generally in its early stage in textile area of Pakistan. Further, textile remains the main sector of Pakistan's economy and its importance cannot be ignored. However, tremendous number of researches available on management practices of supply chain and organization performance but few are focus on textile sector and management practices of supply chain, the survey is benefit for organization which indicate that it is still an unexplored topic. From the synopsis of the existing literature, it is apparent that very little researches have been conducted on this topic worldwide and especially in Pakistan. The literature available does not answer the real question of this paper, i.e. the influence of strategic supplier partnership, total quality management, lean practice, quality of information and management of customer association on performance of supply chain of textile sector company. Most of it the importance and significance of SCMPs and its impact on SC performance. This survey fills the potential gap by undertaking an empirical research on the key factors of SCMPs that are influencing SC performance. These strategies have impacted in achieving better performance of supply chain in textile sector of Pakistan.

From research implementation point of view, this research will assist in decision making associated to supply chain strategy deployment, deciding which management practices of supply chain is

important and have significance on overall SCP, so that strategy should be used through detailed consideration of all strategies. Managing key factors long term supplier association, waste reduction, customer relationship, TQM and quality of information shared within the value chain and other things among these in supply chain is vital for managers to boost their confidence before forming or deploying a supply chain strategy. The study has great standing as its benefits supply chain managers, especially for those who are looking to improve supply chain performance.

#### 5.1 Future Recommendation and Limitation

This study is considerable definite in relation of finding the supply chain factors and their impact on performance of supply chain in textile sector of Pakistan, but in future for the sake of advancement, researcher may conduct research for finding supply chain practices impact on different industry or as a whole in general form and any other country. Moreover, this research present robust support that performance of supply chain in textile Industry can be determine by long term supplier association, waste reduction, customer relationship, TQM and quality of information shared. or any other sector companies.

In addition, this research present strong support that operational success and better operational performance in manufacturing industry can be to the great extent determine by management of total quality and maintenance of total production which shows that the research variables is limited in order to get the good result and avoid errors. But it is a good opportunity for the future researcher by having this as a sample and explore more variables.

Furthermore, the implication of this examination is restricted to the Karachi city but here is an opportunity for the upcoming researcher can work on the relevant topic that they can explore the textile industry in the other cities of Pakistan.

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