
Strategic Supplier Partnership and Responsive Supply Chain in Covid-19: The Mediating Role of E-Procurement

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Abstract

Nowadays the covid-19 has created number of problem for effectiveness of global supply chain and in this situation only the strategic supplier partnership can help to address this global issue especially in context of developing country. In the present study primary data is collected through adopted questionnaire from previous studies. There are 200 respondents are considered from manufacturing companies of Sindh, Pakistan, who directly involve the supply chain management functions including procurement, operation and logistics management. Results of this study confirmed the partial mediation between strategic supplier partnership and responsive supply chain in the presence of e-procurement as a mediating variable. In previous studies research scholars find out the direct relationship between strategic supplier partnership and responsive supply chain. However, in this study mediating effect has been checked in presence of mediator e-procurement.

Keywords: Strategic Supply Partnership, E-procurement, Responsive Supply Chain

1. Introduction

Supply chain management is an approach used to attain the integration of numerous core business organizations through original suppliers to end consumers who provide goods, services and information that can deliver extra value to consumers (Sedyaningrum et al., 2019). SCM has been recent concept in Pakistan but many of multinationals have now implemented this strategy and have supply chain management departments in their organizations. Also many of Fast Moving Consumer Good (FMCG) businesses have to implement supply chain model to have competitive advantage in a “fast growing consumers market” like Pakistan. In Pakistan there is a great scope for Supply Chain Management (SCM) as Pakistan is agricultural country it is great for Agro Industries. SCP (supply chain partnership) can be understand as long term relationship for mutual benefits to each partner in various functions that including from product development to distribution. The core benefit of this partnership is that to reduce cost with maximum value (Agusa and Hassan 2008). Furthermore, the role of strategic supplier partnership cannot be ignored in terms of overall supply chain performance.

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2. Related Pervious Research Work

The customer demand can be addressed and satisfied through supply chain responsiveness that including operation to final delivery of end-product to consumers (Holweg, 2005 and Thatte 2007). There are many uncertainties do exist in business operations, for that responsive supply chain is the key solution of all related problems (Willis et al., 2016). Similar to these studies a study confirmed that supply chain responsiveness and strategic partnership have significant contribution towards better overall supply chain performance (Liu et al., 2018). The supply chain responsiveness is important for both service oriented as well as manufacturing oriented firms (Duclos et al., 2003). The logistic department play a key role for the in various activities such as transportation, warehousing system and distribution (Thatta 2007). Moreover, the responsive supply chain has significant impact on strategic partnership through better e-procurement (Qrunfleh and Tarafdar (2013). In long run perspective the SAP lead to acceptable supply chain responsiveness due to mutual and better relationship with suppliers. This is how they supply chain responsiveness can be achieved even in uncertain time period (Li et al., 2005). The e-procurement is a continuous process for better handing of consumers complain and resolving these complains on timely basis with end customer satisfaction (Croxtton et al., 2001 and, Thatte et al., 2013). For the reduced lead time it is very important response customer complain in real time (Thatte, 2007). The bottle neck of entire process can be addressed via better e-procurement and this would lead to better results for entire supply chain network (Lee, 2004).

3. Methodology

Data source for this study is primary data which is collected through instrument (questionnaire) and printed questionnaire distributed 250 manufacturing employees who deals with supply chain management functions including procurement, operation management and logistics management. However, out of 250 only 200 were found in terms of reliable data and all missing data printed questionnaire were excluded from the analysis. In present study convenience sampling strategy carried due to Covid-19 situation and instrument consisted of 5 likert scale has been developed with SD 1 to SA 5. The gathered data analyzed SPSS and AMOS. It is important to have best representative, in order to achieve objective of this study the sample size calculated with help of thumb of rule. Many past studies have recommended that the in case of survey method and multiple regression for better results minimum 10 cases to be considered for each research item. Lastly, in recommended thumb of rule the sample size calculated as $12 \times 10 =$ One hundred twenty respondents. However, in order to have more reliable results in this study 200 respondents were considered for testing proposed hypothesis.

4. Result

4.1 Instrument Test (Reliability and Validity)

Table 1: Reliability and Validity

Factor	Research item	FL	CAV	AVE
Strategic Supplier Partnership	SSR1	0.79	0.89	0.66
	SSR2	0.81		
	SSR3	0.84		

	SSR4	0.82		
Supply Chain Responsiveness	SR1	0.80	0.91	0.72
	SR2	0.85		
	SR3	0.87		
	SR4	0.88		
E-Procurement	EP1	0.81	0.90	0.69
	EP2	0.85		
	EP3	0.84		
	EP4	0.82		

Table 1 shows the instrument test for reliability and convergent validity that is taken from previous studies. The research scholars have suggested that reliability and validity should be checked before testing the proposed hypothesis. In this table you can notice the values including FA (factor loading), CAV (Cronbach's alpha value) and AVE (average variance extracted). In the present study both FA and CAV assessment is greater than recommended value 0.70 and also average variance extracted confirmed the convergent validity that is more than 0.50. For the present study in the light of these values the instrument quality, the reliability and convergent validity as well.

4.1 Hypothesis Testing

In the present study, mediation effect for the factor strategic supplier partnership verified in the existence of the mediating variable e-procurement. Table 2 indicates the three different paths including first (Total effect), second (Direct effect) and third (Indirect effect) for achieving the study objectives. First, the TE (Total effect) has confirmed positive and significant both variables strategic supplier partnership and e-procurement ($\beta = 0.45$) and (sig-value = 0.001). Second, DE (direct effect) effect in regard of between the variable strategic supplier partnership and responsiveness supply chain revealed the positive and significant impact ($\beta = 0.32$) and (sig-value = 0.000). Third, indirect effect mediating role of e-procurement also confirmed the positive ($\beta = 0.13$) and (sig-value = 0.002). Furthermore, in the present study authors concluded the partial mediation due coefficient (beta value 0.32 > 0.13). Lastly, the proposed hypothesis is accepted.

Table 2: Hypothesis Testing (Structural Equation Modeling)

Path	Direction of Structural Equation Modeling	Beta Value	Probability Value
First path (TE)	*SSR->RS	0.45	0.001
Second path (DE)	**SSR>RS	0.32	0.000
Third path (IE)	***SSR->EP->RS	0.13	0.002

5. Conclusion and Managerial Implications

The intention of this study was the mediating effect of e-procurement between strategic supplier partnership and responsive supply chain in Covid-19 in manufacturing companies of Sindh, Pakistan. In past studies various important variables are important for responsive

supply chain. However, most of these studies enforced the strategic supplier partnership as a significant impact on responsive supply chain. In current situation the Covid-19 has changed the entire global supply chain and responsive supply chain is needed to implement for better customer satisfaction. Findings, of present study will help studies firms for addressing the current challenges of Covid-19. In regard of academia, in the future the research scholars can verify these findings in context of service sector and comparative studies can be performed.

Reference

1. Agusa, A., and Hassan, Z. (2008). "The strategic supplier partnership in a supply chain management with quality and business performance". *International Journal of Business and Management Science*, 1(2), pp. 129–145.
2. Croxton, K., L., García-Dastugue, S., J., Lambert, D., M., and Rogers, D., S. (2001). "The Supply Chain Management Processes". *The International Journal of Logistics Management*, 12(2), pp. 13–36.
3. Duclos, L., K., Vokurka, R., J., and Lummus, R., R. (2003). "A conceptual model of supply chain flexibility". *Industrial Management and Data Systems*, 103(5–6), pp. 446–456.
4. Fawcett, S., E. (1992). "Strategic logistics in co-ordinated global manufacturing success". *International Journal of Production Research*, 30(5), pp. 1081–1099.
5. Holweg, M. (2005). "An investigation into supplier responsiveness: Empirical evidence from the automotive industry". *The International Journal of Logistics Management*, 16(1), pp. 96–119.
6. Lee, H. . (2004). "The Triple-A Supply Chain The 21st Century Supply Chain The Articles HBR Spotlight The Triple-A Supply Chain". *Harvard Business Review*, 82(10), pp. 1–12.
7. Li, S., Rao, S., S., Ragu-Nathan, T. S., and Ragu-Nathan, B. (2005). "Development and validation of a measurement instrument for studying supply chain management practices". *Journal of Operations Management*, 23(6), pp. 618–641.
8. Liu, Y., Blome, C., Sanderson, J., and Paulraj, A. (2018). "Supply chain integration capabilities, green design strategy and performance: a comparative study in the auto industry". *Supply Chain Management: An International Journal*, 23(5), pp. 431–443.
9. Qrunfleh, S., and Tarafdar, M. (2013). "Lean and agile supply chain strategies and supply chain responsiveness: The role of strategic supplier partnership and postponement". *Supply Chain Management: An International Journal*, 18(6), pp. 571–582.
10. Sedyaningrum, M., Prasetya, A., and Mawardi, M., K. (2019). "The Effect of Strategic Supplier Partnership on Supply Chain Integration, Supply Chain Performance and Farmers Performance". *Indonesina Journal of Social and Humnity Study* 22(1), pp. 33–41.
11. Thatte, A., A. (2007). "Competitive advantage of a firm through supply chain responsiveness and SCM". *The Art of War*, 6(3), pp 32–38.
12. Thatte, A., A., Rao, S. S., and Ragu-Nathan, T., S. (2013). "Competitive Advantage of A firm through Supply Chain Responsiveness and SCM Practices". *Journal of Applied Business Research*, 29(2), pp. 499–530.
13. Willis, G., Genchev, S., E., and Chen, H. (2016). "Supply chain learning, integration, and flexibility performance: an empirical study in India". *The International Journal of Logistics Management*, 27(3), pp. 755–769.