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Influence of Responsible Supply Chain Management Behaviours and Economic Performance among Pharmaceutical Companies in China

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ABSTRACT

Most organizations exist in order to make a profit or economic gains. Thus economic performance of an enterprise is the ultimate of all the numerous activities that are undertaken. It is the bottom line of the value chain and the lifeblood of every business. Pharmaceutical companies in China also exist in order to make a profit, but profitability is not the only economic element that is of interest to pharmaceutical organizations. According to Schaltegger et al. (2014), economic performance relates to the manufacturing plant's ability to reduce costs associated with energy consumption, purchased materials, waste treatment, waste disposal, waste discharge, and fines or penalties for environmental accidents (Zhu et al., 2008a; Schaltegger et al., 2014). It also relates to the distributors and retailers' resilience in minimizing cost while at the same time maximizing the profit potential of their operations. In this chapter, the objective is to explore the extent to which a responsible supply chain management behavior potentially influences an organization's ability to make steady economic gains. Based on the configuration of Green et al (2010), we model the degree to which responsible supply chain attributes significantly influences economic performance indicators such improvement in market share, improvement in profit, reducing environmental damage caused by accident, improvement in return on assets, improvement in return on sales and improvement in return on investment.

Keywords : RSCM, SCI, ANOVA, Analysis of Variance

I. INTRODUCTION

This chapter is interested in whether supply chain integration that has been determined to moderate the relationship between responsible supply chain and environmental performance also has an intermediary role in the relationship between the same responsible supply chain and economic performance. Again it is also of interest to establish the veracity in the claim that if pharmaceutical companies invest in new technology embodied in equipment and machinery, new software for supply-chain management, new software for designing products, and training of staff to offer new services to customers (Salerno et al., 2015), it can mediate either directly or indirectly mediate achievement of higher economic performance. Thus it is postulated that;

- H2a: There is a direct relationship between RSCM behaviors and firms' economic performance
- H2b: Process innovation significantly mediates the relationship between RSCM and economic performance
- H2c: Supply Chain Integration significantly moderates the relationship between RSCM behaviors and economic performance.

Figure 1 shows the diagrammatic representation of the framework for this section of the analysis of data.

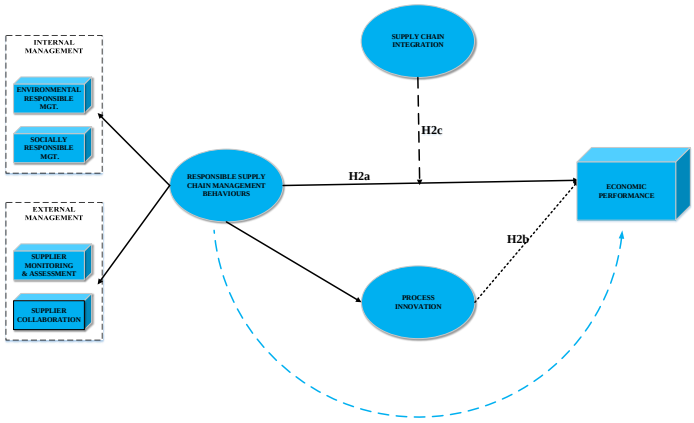

Figure 1 : Effect of RSCM, Process Innovation, SCI on Economic Performance

II. METHODS AND MATERIAL

As in the case of the analysis of the effect of responsible supply chain management on environmental performance, the data was procured by administering the questionnaires to 287 companies in the pharmaceutical value chain. The companies were involved in the manufacturing, distribution, and retail of pharmaceutical products. Of the 123 questionnaires that were duly returned by the respondents, 2 did not fill in any information regarding economic performance; hence were eliminated from the final count of the questionnaires used in estimating the relationship between responsible supply chain and economic performance. The difference in the data was primarily related to the calibration of the economic performance attributes. Since main items were used to estimate the performance, and the composite value was used as a proxy for the overall score of the economic performance indicator. The first attribute relates to whether companies experience improvement in market share and improvement in profit. The next relates to whether companies experience a reduction in environmental damage caused by accident, improvement in return on assets, improvement in return on sales, and improvement in return on investment. Again, in this case, the pharmaceutical companies were mainly from Shanghai, Shenzhen, Guangdong, Zhejiang, and Jiangsu provinces. The questionnaire was designed with a five-point Likert scale attributes to enable respondents to grade their responses. "Strongly Agree" was designated with the value of 5, whereas "Strongly Disagree" was designated with the value of 1. The analytical process followed a strict structural equation model; however, the descriptive statistics were first computed in order to understand the trends in the data. Specifically, a posthoc multiple comparison test was used to determine differences in the responses relating to different groups of institutions. The detailed results of the study are presented in the next chapter

III. RESULTS AND DISCUSSION

3.1 Descriptive Statistics

Table 1 presents the descriptive statistics of the analysis after reducing the number of qualified questionnaires due to omission. The analysis indicates that in the case of environmentally responsible management construct, the score ranged from a minimum of 3 to a maximum of 5. The mean response value in this category was 4.07, with a standard deviation of 0.1, and the data is not normally distributed but negatively skewed. Regarding the socially responsible management construct, the score ranged from a minimum of 1 to a maximum of 5. The mean response value in this category was 2.18, with a standard deviation of 1.1, and the data is not normally distributed but positively skewed. On the other hand, the descriptive analysis of the information collected about supplier monitoring and assessment construct shows a score that ranged from a minimum of 4 to a maximum of 5. The mean response value in this category was 4.75, with a standard deviation of .433, and the data is not normally distributed but negatively skewed. The table further indicates that in the case of supplier collaboration construct, the score ranged from a minimum of 3 to a maximum of 5. The mean

response value in this category was 4.713, with a standard deviation of .45, and the data is not normally distributed but negatively skewed. Regarding supply chain integration, the score ranged from a minimum of 3 to a maximum of 5. The mean response value in this category was 4.3, with a standard deviation of 0.61, and the data is not normally distributed but negatively skewed. Process innovation is the next item that is described in the table. The score ranged from a minimum of 2 to a maximum of 5. The mean response value in this category was 3.7500, with a standard deviation of 1.09, and the data is not normally distributed but negatively skewed. The last indicates economic performance, and the analyzed information shows that descriptively, the score ranged from a minimum of 2 to a maximum of 5. The mean response value in this category was 4.3, with a standard deviation of 0.75, and the data is not normally distributed but negatively skewed.

Table 1 : Summary of Construct Descriptive

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Environmental Responsible Management	121	3.00	5.00	4.0714	.70388	-0.101	.082
Socially Responsible Management	121	1.00	5.00	2.1786	1.13621	1.111	.082
Supplier Monitoring and Assessment	121	4.00	5.00	4.7500	.43325	-1.157	.082
Supplier Collaboration	121	4.00	5.00	4.7143	.45201	-.950	.082
Supply Chain Integration	121	3.00	5.00	4.3929	.61790	-.499	.082
Process Innovation	121	2.00	5.00	3.7500	1.09033	-.653	.082
Economic Performance	121	2.00	5.00	4.3214	.75888	-1.104	.082
Valid N (listwise)	121						

3.2 Analysis of Variance

Table 2 : Analysis of Variance

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Environmental Responsible Management	Between Groups	5.225	2	2.613	5.324	.005
	Within Groups	438.203	119	.491		
	Total	443.429	121			
Socially Responsible Management	Between Groups	11.429	2	5.714	4.461	.012
	Within Groups	1144.000	119	1.281		
	Total	1155.429	121			

Supplier Monitoring and Assessment	Between Groups	6.349	2	3.175	17.537	.000
	Within Groups	161.651	119	.181		
	Total	168.000	121			
Supplier Collaboration	Between Groups	23.511	2	11.756	65.880	.000
	Within Groups	159.346	119	.178		
	Total	182.857	121			
Supply Chain Integration	Between Groups	19.759	2	9.879	27.402	.000
	Within Groups	321.956	119	.361		
	Total	341.714	121			
Process Innovation	Between Groups	122.997	2	61.498	58.361	.000
	Within Groups	941.003	119	1.054		
	Total	1064.000	121			
Economic Performance	Between Groups	4.114	2	2.057	3.593	.028
	Within Groups	511.314	119	.573		
	Total	515.429	121			

Table 2 presents the analysis of variance in the descriptive statistics between the three sectors that were analyzed. This is important as it helps to understand the different weights that are placed on the environmentally responsible management, socially responsible management, supplier monitoring and assessment, supplier collaboration, supply chain integration, process innovation, and economic performance. The significant level of the difference in mean response value is as follows; environmental responsible management (.005), socially responsible management (.012), supplier monitoring and assessment (.000), supplier collaboration (.000), supply chain integration (.000), process innovation (.000) and economic performance (.028). The next analysis examines the degree of the differences among the different categories of respondents in the posthoc multiple comparison test.

Table 3 : Posthoc Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Industry Type	(J) Industry Type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Environmental Responsible Management	Manufacturing	Distribution	.19722*	.06461	.007	.0455	.3489
		Retail	.07937	.08826	.641	-.1278	.2866
	Distribution	Manufacturing	-.19722*	.06461	.007	-.3489	-.0455
		Retail	-.11786	.07175	.228	-.2863	.0506
	Retail	Manufacturing	-.07937	.08826	.641	-.2866	.1278

		Distribution	.11786	.07175	.228	-.0506	.2863
Socially Responsible Management	Manufacturing	Distribution	-.25000*	.10439	.044	-.4951	-.0049
		Retail	.00000	.14260	1.000	-.3348	.3348
	Distribution	Manufacturing	.25000*	.10439	.044	.0049	.4951
		Retail	.25000	.11593	.079	-.0222	.5222
	Retail	Manufacturing	.00000	.14260	1.000	-.3348	.3348
		Distribution	-.25000	.11593	.079	-.5222	.0222
Supplier Monitoring and Assessment	Manufacturing	Distribution	.13889*	.03924	.001	.0468	.2310
		Retail	.31746*	.05360	.000	.1916	.4433
	Distribution	Manufacturing	-.13889*	.03924	.001	-.2310	-.0468
		Retail	.17857*	.04358	.000	.0763	.2809
	Retail	Manufacturing	-.31746*	.05360	.000	-.4433	-.1916
		Distribution	-.17857*	.04358	.000	-.2809	-.0763
Supplier Collaboration	Manufacturing	Distribution	.00278	.03121	.997	-.0887	.0942
		Retail	.49206*	.05322	.000	.3671	.6170
	Distribution	Manufacturing	-.00278	.03121	.997	-.0942	.0887
		Retail	.48929*	.04327	.000	.3877	.5909
	Retail	Manufacturing	-.49206*	.05322	.000	-.6170	-.3671
		Distribution	-.48929*	.04327	.000	-.5909	-.3877
Supply Chain Integration	Manufacturing	Distribution	-.00556	.05538	.994	-.1356	.1245
		Retail	.44444*	.07565	.000	.2668	.6220
	Distribution	Manufacturing	.00556	.05538	.994	-.1245	.1356
		Retail	.45000*	.06150	.000	.3056	.5944
	Retail	Manufacturing	-.44444*	.07565	.000	-.6220	-.2668
		Distribution	-.45000*	.06150	.000	-.5944	-.3056
Process Innovation	Manufacturing	Distribution	.42222*	.09468	.000	.2000	.6445
		Retail	1.36508*	.12933	.000	1.0615	1.6687
	Distribution	Manufacturing	-.42222*	.09468	.000	-.6445	-.2000
		Retail	.94286*	.10514	.000	.6960	1.1897
	Retail	Manufacturing	-1.36508*	.12933	.000	-1.6687	-1.0615
		Distribution	-.94286*	.10514	.000	-1.1897	-.6960
Economic Performance	Manufacturing	Distribution	-.01667	.06979	.969	-.1805	.1472
		Retail	.19048	.09533	.113	-.0333	.4143
	Distribution	Manufacturing	.01667	.06979	.969	-.1472	.1805
		Retail	.20714*	.07750	.021	.0252	.3891
	Retail	Manufacturing	-.19048	.09533	.113	-.4143	.0333
		Distribution	-.20714*	.07750	.021	-.3891	-.0252

*. The mean difference is significant at the 0.05 level.

The posthoc multiple comparison test outlines the response differences that were observed in the six-factor model regarding the means response value. The table shows that the mean difference between respondents in the manufacturing sector and those in the distribution sector is not significant at a 95% confidence interval. In the same way, the responses between those in the retail sector and those in the distribution sector are not equally significant at a 95% confidence interval. The best significant value is 0.7, which is statistically significant at a 90% confidence interval. The mean difference between respondents in the manufacturing sector and those in the distribution sector regarding socially responsible management is significant at 95% confidence interval (p = 0.44).

However, the responses between those in the retail sector and those in the distribution sector is not significant at a 95% confidence interval (p= 079). The best significant value is 0.7, which is statistically significant at a 90% confidence interval. Regarding supplier monitoring and assessment, the mean difference between respondents in the manufacturing sector and those in the distribution sector is significant at 95% confidence interval (p = 0.01). Similarly, the responses between those in the retail sector and those in the distribution sector are also significant at a 95% confidence interval (p= 000). On the other hand, supply chain integration had a significant mean difference between respondents in the manufacturing sector and those in the distribution sector at a 95% confidence interval (p = 0.00). Similarly, the responses between those in the retail sector and those in the distribution sector are also significant at a 95% confidence interval (p= 000). The other results followed similar trends.

3.3 Internal Consistency

Table 4 : Internal Consistency

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Environmental Responsible Management	24.1071	8.748	.013	.975
Socially Responsible Management	26.0000	6.650	.232	.953
Supplier Monitoring and Assessment	23.4286	8.826	.111	.837
Supplier Collaboration	23.4643	7.543	.625	.744
Supply Chain Integration	23.7857	6.533	.755	.776
Process Innovation	24.4286	5.823	.435	.854
Economic Performance	23.8571	6.701	.515	.829

The test of internal consistency was examined using the Cronbach's alpha correlation coefficient, as recommended by Stebbin (2002). The values for each of the extracted variables are presented in Table 6.4, along with their specifications, and this supports highly internally consistent variables. Each of the alphas is in excess of 0.07 threshold. The minimum Cronbach's alpha correlation coefficient is 0.744 snd most of them are above 0.8, denoting high internal consistency. Except for economic performance, the remaining factors, namely; environmental responsible management, socially responsible management, supplier monitoring and assessment, supplier collaboration, supply chain integration, process innovation, are reflective or independent and are largely interchangeable(Jarvis, MacKenzie, & Podsakoff, 2003). Again this model, the factors demonstrated sufficient convergent validity, as their loadings were all above the recommended minimum threshold of 0.350 for a sample size of 300(Hair, Ringle, & Sarstedt, 2011). The factors also demonstrate sufficient discriminant validity, as the correlation matrix shows no correlations above 0.700, and there are no problematic cross-loadings. This six-factor model had a total variance explained of 60%, with all extracted factors having eigenvalues above 1.0 except one, which was close at 0.989.

3.4 EFA, Reliability and Validity Index

Table 5 : Factor Loadings and Goodness of Fit

VARIABLE	α	CR	AVE	LOADING
RESPONSIBLE SUPPLY CHAIN	**0.893**	**0.673**	**0.910**	
Environmental Responsible Management	**0.770**	**0.902**	**0.731**	0.915
ERM1				0.874
ERM2				0.905
ERM3				0.765
Socially Responsible Management	**0.898**	**0.923**	**0.714**	0.923
SRM1				0.748
SRM2				0.844
SRM3				0.864
Supplier Monitoring & Assessment	**0.889**	**0.920**	**0.706**	0.944
SMA1				0.835
SMA2				0.827
SMA3				0.854
SMA4				0.786
SMA5				0.728
Supplier Collaboration	**0.905**	**0.964**	**0.736**	0.967
SC1				0.795
SC2				0.846
SC3				0.837

SC4				0.825
SC5				0.816
Supply Chain Integration	**0.771**	**0.886**	**0.744**	
SCI1				0.768
SCI2				0.883
SCI3				0.905
Process Innovation	**0.893**	**0.910**	**0.673**	
PI1				0.748
PI2				0.864
PI3				0.834
Economic Performance	**.762**	**0.831**	**0.570**	
EcP1				0.749
EcP2				0.765
EcP3				0.837
EcP4				0.825
EcP5				0.719
EcP6				0.758

Table 5 provides the results of the goodness of fit for our measurement model is sufficient. The results also show that the various parameters are within acceptable range for inferential analysis

3.5 Sampling Adequacy

Next, a sampling adequacy test was conducted using the Kaiser-Meyer-Olkin (KMO) test of sampling adequacy and Bartlett's test of sphericity. The KMO test results were significantly high whiles the minimum value of the communalities was above 0.300 (most of them were above 0.600). This indicates that the chosen variables are adequately correlated for factor analysis. Also, the reproduced matrix had only 2% non-redundant residuals greater than 0.05, further confirming the adequacy of the variables and the 6-factor model.

3.6 Multicollinearity

Table 6, on the other hand, presents the correlation coefficients of the relationship between the variables. This is the first test of multicolinearity among the variables. According to Saunders et al. (2006), the reflective variables must be truly independent of each other. The variance inflation factor and the correlation matrix values are the best indicators in this circumstance. Using the Pearson product moment correlation coefficient, the results show that none of the Pearson's product moment correlation coefficient (r) among the reflective variables is above 0.5threshold as recommended by Saunders at el (2006).

Table 6 : Multicollinearity

		Environmental Responsible Management	Socially Responsible Management	Supplier Monitoring and Assessment	Supplier Collaboration	Supply Chain Integration	Process Innovation	Economic Performance
Environmental Responsible Management	Pearson Correlation	1	-.150**	.176**	.289**	.346**	-.303**	.158**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	121	121	121	121	121	121	121
Socially Responsible Management	Pearson Correlation	-.150**	1	.018	.239**	.256**	.296**	.141**
	Sig. (2-tailed)	.000		.587	.000	.000	.000	.000
	N	121	121	121	121	121	121	121
Supplier Monitoring and Assessment	Pearson Correlation	.176**	.018	1	.365**	.234**	-.057	-.082*
	Sig. (2-tailed)	.000	.587		.000	.000	.089	.015
	N	121	121	121	121	121	121	121
Supplier Collaboration	Pearson Correlation	.289**	.239**	.365**	1	.658**	.435**	.268**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	121	121	121	121	121	121	121
Supply Chain Integration	Pearson Correlation	.346**	.256**	.234**	.158**	1	.317**	.069**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	121	121	121	121	121	121	121
Process Innovation	Pearson Correlation	-.303**	.296**	-.057	.435**	.317**	1	.373**
	Sig. (2-tailed)	.000	.000	.089	.000	.000		.000
	N	121	121	121	121	121	121	121
Economic Performance	Pearson Correlation	.158**	.141**	-.082*	.268**	.569**	.573**	1
	Sig. (2-tailed)	.000	.000	.015	.000	.000	.000	
	N	121	121	121	121	121	121	121

3.7 Confirmatory Factor Analysis (CFA)

The influential nature of Confirmatory factor analysis (CFA) as a statistical tool for probing the nature of and relationships among latent constructs is highly regarded among researchers. This is because, according to (Brown, 2014), it helps to measure the construct validity, identify method effects, and helps in evaluating the factor invariance through time and groups. The use of Confirmatory Factor Analysis

(CFA) continues to gain ground in the psychological literature as a result of the belief researchers have in Structural Equation Model as a robust model specifically. Given the critical impact CFA makes in the measure development and due to the understanding that having a tool that manages the measurement of variables effectively, it can be presumed to be paramount quantitatively only because its role is crucial to the results a researcher reports. We sought to find out the relationship between the latent variables using Warp PLS. We removed one composite attribute of environmental responsible management, zero attribute of socially responsible management, four attributes of supplier monitoring and assessment, three attributes of supplier collaboration, zero attributes of supply chain integration, and none of the attributes of process innovation due to poor loading. The researcher consulted modification indices to determine if there was an opportunity to improve the model. Accordingly, the error terms were co-varied between some of the attributes. Figure 6.2 shows the second-order confirmatory analysis of the factors

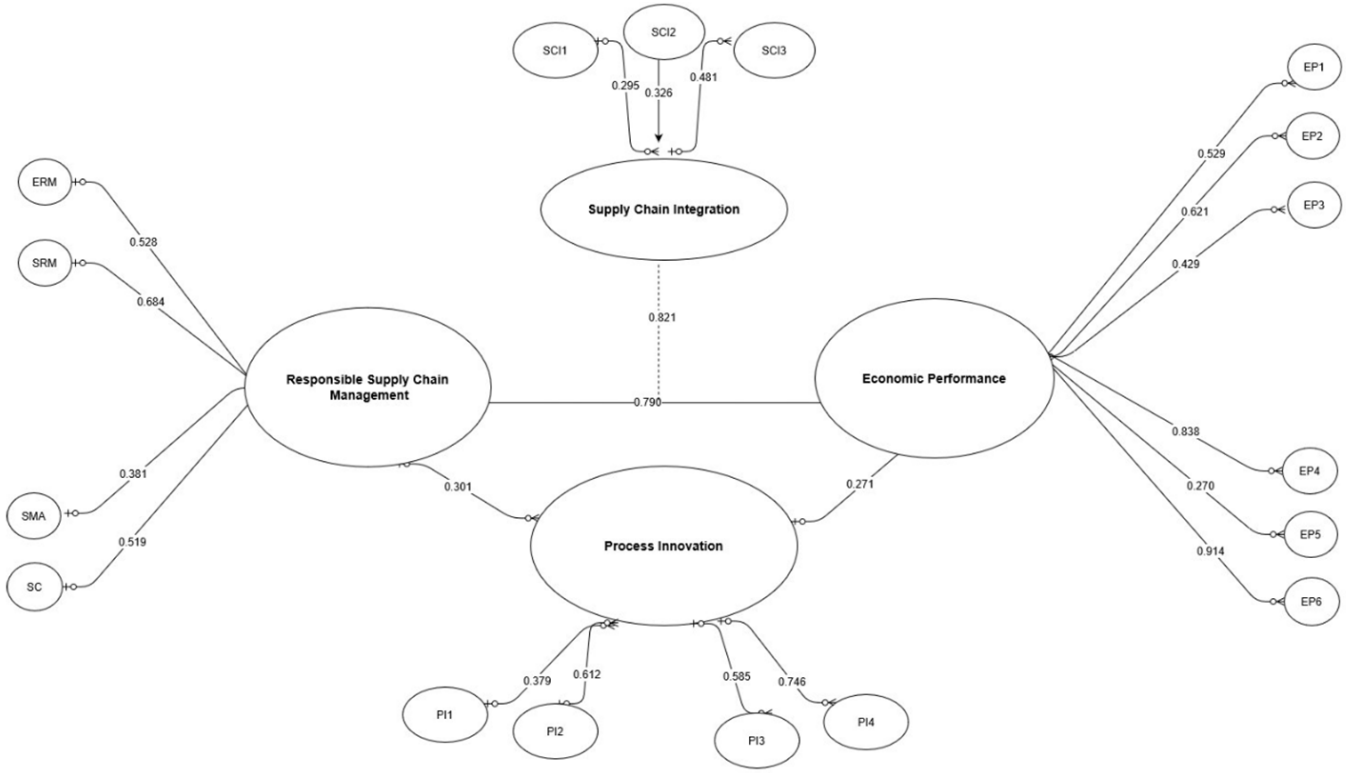

Figure 2 : Path Diagram of the Relationship among the Variables

Table 7 : Goodness of Fit Indexes

Measure	Estimate	Threshold	Interpretation
CMIN	413.13	--	--
DF	302	--	--
CMIN/DF	1.403	Between 1 and 3	Excellent
CFI	0.582	>0.05	Excellent
SRMR	0.081	<0.08	Excellent
RMSEA	0.026	<0.06	Excellent
PClose	0.763	>0.05	Excellent

Cutoff Criteria*

Measure	Terrible	Acceptable	Excellent
CMIN/DF	> 5	> 3	> 1
CFI	<0.90	<0.55	>0.92
SRMR	>0.10	>0.07	<0.06
RMSEA	>0.08	>0.06	<0.04
PClose	<0.01	<0.05	>0.03

Model Fit Indexes in Covariance Structure Analysis

Table 8 : Model of Fit Measures

	CR	AVE	MSV	1	2	3	4	5	6
Environmental Responsible Management	0.821	0.642	0.002	0.785					
Socially Responsible Management	0.855	0.486	0.483	0.042	0.683				
Supplier Monitoring and Assessment	0.874	0.689	0.168	0.041	-0.051	0.813			
Supplier Collaboration	0.836	0.609	0.168	-0.034	0.004	0.401	0.764		
Supply Chain Integration	0.792	0.466	0.179	0.023	0.415	-0.036	0.017	0.668	
Process Innovation	0.729	0.496	0.483	-0.001	0.681	-0.077	0.040	0.389	0.729

The results show that the composite reliability of all the concepts was in excess of 0.7 thresholds for all the constructs. This further confirms the high level of internal consistency among the reflective latent variables. For this reason, a lower indicator reliability of CR is acceptable. Similarly, the convergent reliability is also accepted since the factor loading exceeds the threshold of 0.60. The AVE for all the factors was in excess of 0.50 except in the case of supply chain integration (0.475) and socially responsible management (0.496). This notwithstanding as the factor has minimal correlation with other factors in the model and also because the reliability value (0.823) is in excess of 0.700, it was deemed admissible (i.e., while it is not especially strong internally, it is, at least, a reliable and distinct construct within our model). According to Fornell and Larcker (1981) suggest that if this value is greater than other related values in the potential variable, the AVE square root in each potential variable can be used to establish differentiated validity. The square root of the extracted average variance (A0) is shown diagonally and in bold in Table 6.8. The table shows that discriminant validity has been well established.

Table 9 : Path Analysis

Parameter			Coefficient	Lower	Upper	P
RSCM	<---	ERM	0.925	5.116	36.343	0.024
RSCM	<---	SRM	0.415	4.322	31.780	0.035
RSCM	<---	SMA	0.677	4.892	35.013	0.018
RSCM	<---	SC	0.922	0.922	0.922	0.008
EcP	<---	RSCM	0.050	0.048	0.069	0.013
PI	<---	RSCM	0.105	0.082	0.045	0.034
EP <---	PI <---	RSCM	0.035	0.082	0.045	0.024
EP <---	SCI <---	PSYJI	0.058	0.158	0.025	0.068

The information in table 6.9 represents the output of the statistical analysis of the effect of the independent variables on the dependent variables. The first relationship examines the influence of environmentally responsible management, socially responsible management, supplier monitoring and assessment, and supplier collaboration on responsible supply chain management. The coefficient of regressions indicates a strong positive statistical relationship between the independent variables and the responsible supply chain. Again the significant values are less than 0.05, which indicates a strong statistical significant at a 95% confidence interval. The influence of responsible supply chain on process innovation returned a coefficient value of 0.105, which is statistically significant at a 95% confidence interval (p-value <0.05).

Regarding the intermediary role of process innovation in the relationship between responsible supply chain and process and economic performance (EcP), the results show that process innovation intervenes indirectly as it changes the direct effect from 0.050 to 0.035. Similarly, the analysis also supports the moderating effect of supply chain integration in stimulating the relationship between responsible supply chain and economic performance. The coefficient of regression of 0.058 and the significant value of 0.025 testifies to the importance of this relationship.

IV.CONCLUSION

The objective of this chapter was to highlight the influential role that responsible supply chain has on economic performance. Particularly studies have asserted the unequivocal relationship between the environmentally responsible supply chain practices among firms. In particular, it has been suggested that firms that when an organization voluntarily commit to take into account social and environmental considerations in the management of their relationships with stakeholders, it can influence their cost performance and profitability (Weng et al.,2015). The results of this research confirm the earlier held view that the management of environmental, social, and economic impacts and the encouragement of good governance practices, throughout the lifecycles of goods and services. The first hypothesis was to test the direct relationship between RSCM behaviors and firms' economic performance. This has been established to be statistically significant. The results show a positive coefficient of regression indicating that an increase in voluntary commitment to responsible supply chain can inure to the economic benefit of pharmaceutical firms in China. The second research hypothesis was interested in exploring the mediating effect of process innovation. In this context also, the hypothesis has been accepted at a significant level of 95%. The results imply that investments in new technology embodied in equipment and machinery, new software for supply-chain management, new software for designing products, and training of staff to offer new services to customers (Salerno et al., 2015) is critical in ensuring that responsible supply chain has an impact on economic performance of firms. However, this relationship is indirect. This question as to whether supply chain integration is a necessity in the relationship between responsible supply chain and economic performance is also answered in this chapter. Clearly, the results show that a in the supply chain integration has the potential to speed up or slow down the pace at which responsible supply chain management behaviors affect the economic performance of firms. When a firm has a very high supply chain integration, there is a higher likelihood of having a robust economic performance. Conversely, where the supply chain integration is low, the likely impact of responsible supply chain on economic performance is attenuated.

Cite this article as :