





INFLUENCE OF GREEN ENTREPRENEURIAL ORIENTATION AND SUPPLY CHAIN LEARNING ON GREEN INNOVATION IN PHARMACEUTICAL INDUSTRY OF THAILAND

Chayanan Kerdpitak ¹✉ , Witthaya Mekhum ² , Phutthiwat Waiyawuththan ³ , Napassorn Kerdpitak ⁴✉ , Pimploi Tirastittam ⁵

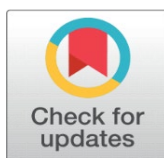
¹ Suan Sunandha Rajabhat University, Thailand

² Suan Sunandha Rajabhat University, Thailand

³ Suan Sunandha Rajabhat University, Thailand

⁴ Suan Sunandha Rajabhat University, Thailand

⁵ Suan Sunandha Rajabhat University, Thailand



Received 28 February 2024

Accepted 05 April 2024

Published 07 May 2024

Corresponding Author

Chayanan Kerdpitak,
chayanan.ke@ssru.ac.th

DOI

[10.29121/shodhkosh.v7.i1.2026.7869](https://doi.org/10.29121/shodhkosh.v7.i1.2026.7869)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2026 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



ABSTRACT

Practicing innovation as a combination with the concepts of environmental development, the concept of green innovation is great importance play a significant role in the sustainable development of the sector. The main purpose of this research paper is to examine the green product innovation practices through the use of green entrepreneurial orientation. This research paper takes social continuity learning as a mediating role to identify the impacts of green entrepreneurial orientation, both direct and indirect, on green product innovation and green radical innovation. Another main objective of this paper is to evaluate green incremental innovation through the role of green entrepreneurial orientation. This research paper develops a model for the green radical innovation, green incremental innovation, and green entrepreneurial orientation, and mainly uses experimental data and information 440 respondents that belong to different pharmaceutical firms of Thailand. The findings of this research paper indicate that the analysis of influence of green entrepreneurial orientation on green product innovation has been significant. Besides, the mediating role of social continuity learning also positively intervenes the association between green entrepreneurial orientation and green product innovation. The findings of this research have significant contributions to enhance the theory of entrepreneurial orientation and green innovation.

Keywords: GEO, Green Innovation, Green Radical Innovation, Green Product Innovation, Supply Chain Learning, Green Incremental Innovation

1. INTRODUCTION

Escalation of the global crisis related to the environment has raised concern among the community as well as in the organizations [Bouncken et al. \(2016\)](#), [Guo et al. \(2020\)](#). Therefore, a number of necessary actions have been taken to

deal with the environmental risks associated with the manufacturing processes that takes place at the manufacturing industries and the supply chain network. Green entrepreneurial orientation helps the organizations to cope up with the requirements of the environmental markets through the use of proper and effective strategic business opportunities [Chu \(2019\)](#), [Jiang et al. \(2018\)](#). Moreover, through the use of green orientation, the negative effects of the economic activities on the natural environment could be reduced. This is done with the use of innovation in the development of products, processes of the organizations and the change in the organizational structure and institutions that also include the improvements in the supply chain business [Chen et al. \(2017\)](#).

Although the use of supply chain learning for the enhancement of green entrepreneurial orientation has not been studied widely, there are still some studies that have provided the evidence of use of supply chain learning for introducing and increasing green entrepreneurial orientation [Chu \(2019\)](#), [Jiang et al. \(2018\)](#). Achieving green innovation is not easy for the organizations and especially if they work on it on their own. That is why, the companies need to have a learning network that is also inter-organizational and enable them to know about the changes that could be made in the organizational structure [Arshad \(2018\)](#). This can be achieved through learning the supply chain network which is known as supply chain learning [Bouncken et al. \(2016\)](#), [Guo et al. \(2020\)](#).

THE RESEARCH OBJECTIVES FOR THE STUDY

- 1) To determine the impact of green entrepreneurial orientation on the green radical innovation.
- 2) To determine the impact of green entrepreneurial orientation on the supply chain learning.
- 3) To determine the impact of green entrepreneurial orientation on the green incremental innovation.
- 4) To determine the impact of SCL supply chain learning on the green radical innovation.
- 5) To determine the impact of SCL supply chain learning on the green product innovation.
- 6) To determine the impact of SCL supply chain learning on the green incremental innovation.

The need to change the innovativeness in the industries has increased with the rising environmental concerns of the general public. That is why the firms need to work upon the change of its manufacturing processes and also on their innovation performance. They need to move towards a more sustainable and environment friendly approach. The focus of this study is to provide evidence to support the role of supply chain learning in bringing green innovativeness and green entrepreneurial orientation in the industrial sector.

2. REVIEW OF LITERATURE

2.1. THEORETICAL BACKGROUND

The theory of green entrepreneurial orientation helps in understanding the importance of green innovation in the business sector. According to the research studies [Habib and Bao \(2019\)](#), [Wang et al. \(2018\)](#), the green entrepreneurial orientation research started from the introduction of the green innovative theory. Research studies also show that having high green entrepreneurial orientation does not necessarily mean that the industry is having environmental protection [Bouncken et al. \(2016\)](#), [Jiang et al. \(2018\)](#). Therefore, it is why it is necessary for the industries to learn about the different means that can be used to improve the environmental protection in an organization which can be achieved through learning of the supply chain network.

2.2. THE IMPACT OF GREEN ENTREPRENEURIAL ORIENTATION ON THE GREEN RADICAL INNOVATION

According to the research studies [Bouncken et al. \(2016\)](#), [Jiang et al. \(2018\)](#), the enterprises that are entrepreneurially oriented, must have the capability of risk taking and bringing innovative initiatives [Chu \(2019\)](#). Through the entrepreneurial mindset, the organizations move towards new entry behavior and shows competitive aggressiveness. Taking initiatives regarding the environmental orientation and the green radical initiatives are included in this. Thus, the following hypothesis is being supported form the studies literature:

H1: There is a significant relationship between the green entrepreneurial orientations on the green radical innovation of the firms.

2.3. THE IMPACT OF GREEN ENTREPRENEURIAL ORIENTATION ON THE SUPPLY CHAIN LEARNING

Green orientation in the business sector is an important factor mechanism for the high levels of learning at the organizational level, by the researchers. According to the research studies [Habib and Bao \(2019\)](#), [Wang et al. \(2018\)](#), the organizational learning has been found to be positively related to the entrepreneurial orientation. As the entrepreneurial orientation encourages the learning behavior and atmosphere by providing effective directions for the corporate learning [Gosling et al. \(2016\)](#), [Wei et al. \(2018\)](#), [Wickramaratne et al. \(2017\)](#). Thus, the following hypothesis is being supported from the studies literature:

H2: There is a significant relationship between the green entrepreneurial orientations on the supply chain learning of the firms.

2.4. THE IMPACT OF GREEN ENTREPRENEURIAL ORIENTATION ON THE GREEN INCREMENTAL INNOVATION

According to the literature studies [Habib and Bao \(2019\)](#), [Wei et al. \(2018\)](#), [Wickramaratne et al. \(2017\)](#), the entrepreneurial orientation results in shortening the knowledge resources of the corporates and therefore, the need to seek external sources from the other organizations increases [Chu \(2019\)](#). Thus, to deal with the other organizations, the enterprise itself must be aware of the green entrepreneurial orientation of the others. This will enhance the innovative performance of the organizations that are interconnected with each other [Wang et al. \(2018\)](#). Thus, the following hypothesis is being supported from the studies literature:

H3: There is a significant relationship between the green entrepreneurial orientations on the green incremental innovation of the firms.

2.5. THE IMPACT OF SUPPLY CHAIN LEARNING ON THE GREEN RADICAL INNOVATION

According to the research studies [Gosling et al. \(2016\)](#), [Song et al. \(2017\)](#), [Trong Tuan \(2017\)](#), [Wach et al. \(2018\)](#), the supply chain learning enables the organizations to learn about the green resources of technology and master them. Therefore, through this mutual collaboration between the supply chain partners, the development of better knowledge system takes place [Habib and Bao \(2019\)](#), [Wei et al. \(2018\)](#), [Wickramaratne et al. \(2017\)](#) which encourages the generation of new innovative ideas and also green radical innovations. Thus, the following hypothesis is being supported from the studies literature:

H4: There is a significant relationship between the supply chain learning of the firms and their green radical innovation.

2.6. THE IMPACT OF SUPPLY CHAIN LEARNING ON THE GREEN PRODUCT INNOVATION

The supply chain learning enables the organizations to create collective knowledge pool and make the best use out of it [Mandal and Saravanan \(2019\)](#), [Wątróbski \(2019\)](#). Through the knowledge flow from the organizations and in between the interconnected organizations, the innovative performance of the enterprises also gets improved and their efficiency also increases [Gosling et al. \(2016\)](#), [Song et al. \(2017\)](#), [Trong Tuan \(2017\)](#), [Wach et al. \(2018\)](#). Thus, the following hypothesis is being supported from the studies literature:

H5: There is a significant relationship between the supply chain learning of the firms and their green product innovation.

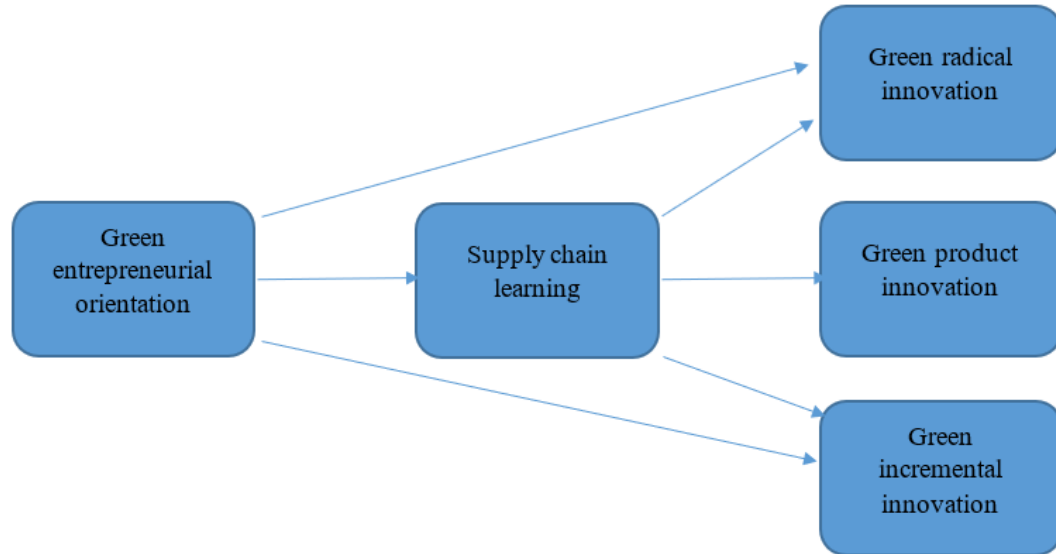
2.7. THE IMPACT OF SUPPLY CHAIN LEARNING ON THE GREEN INCREMENTAL INNOVATION

Literature studies [Song et al. \(2017\)](#), [Trong Tuan \(2017\)](#), [Wach et al. \(2018\)](#) shows that the diversity on the resources available for green technology increases the opportunities for the organizations to interact with each other. Therefore, the use of knowledge pool of the supply chain learning, the enterprises becomes able to positively influence the relationship innovation which then encourages the green incremental innovation practices in the organizations

Gosling et al. (2016), Wei et al. (2018), Wickramaratne et al. (2017). Thus, the following hypothesis is being supported from the studies literature:

H6: There is a significant relationship between the supply chain learning of the firms and their green incremental innovation.

2.8. THEORETICAL MODEL



3. METHODS

3.1. SAMPLE CHARACTERISTICS

The research utilized a questionnaire to fulfill the objectives of this study. Questionnaires were distributed among senior and middle level managers belonging to the pharmaceutical organizations of Thailand. A total of 440 questionnaires were distributed and self-administration was used to generate the data. The respondents were given a brief overview of the requirements and context of the study before they were asked to enter their responses. Out of the 440 distributed questionnaires 10 were excluded due to missing values and nine were misplaced, the remaining 421 were used for data analysis.

3.2. MEASURES

The construct items were selected after extensive literature review was conducted by the researcher. The directions of Brislin (1970) were followed to implement the forward and back translation method, the questionnaire designed for the study was in English and afterwards for the sake of people who were involved in the study, it was translated into Thai so that the respondents could clearly understand the questions and statements. Then it was again converted into English so that fellow non-Thai researchers could also benefit from the study. The questionnaire was pretested on MBA students and minor modifications were made according to their feedback. A five points Likert scale was used to record responses.

3.2.1. GREEN ENTREPRENEURIAL ORIENTATION

Five items were developed for measuring green entrepreneurial orientation. These items were adopted from the studies of Li et al. (2010), Jiang et al. (2018), and Zhao et al. (2011). These items were later modified to fit the requirements of the present study. A sample item is “Our firm has a tendency to be a market leader, always first in introducing green products, services, or technologies”.

3.2.2. SUPPLY CHAIN LEARNING

The five items for measuring supply chain learning were adapted from the studies of [Flint et al. \(2008\)](#). A sample item is that from the knowledge gained from the important supply chain partners will help the managers and employees of the firm to change their attitude towards the changing situation of the market (e.g., to be aware of the market potential of environmentally friendly packaging materials by gaining information from the suppliers”).

3.2.3. GREEN INCREMENTAL INNOVATION

The total items used for measuring green incremental innovation were four and were adapted from the study of [Dai et al. \(2015\)](#). A sample item is “the existing technologies are often exploited so that the processes could be made environmental friendly (e.g., to reduce pollutant emissions by using existing pollution control technologies or existing waste management technology)”).

3.2.4. GREEN RADICAL INNOVATION

The items for measuring green radical innovation were used from [Dai et al. \(2015\)](#), and [Li et al. \(2008\)](#). Four items were used to measure GRI. A sample item is “We often introduce radically new concept innovations to make products more environmentally friendly (e.g., introduce radically new environmental concepts in the process of product research and development”).

3.2.5. GREEN PRODUCT INNOVATION

GPI has been measured on the basis of the scale adapted from the studies of [Chiou et al. \(2011\)](#), and [Chen et al. \(2006\)](#). Four items were used to measure GPI, a sample item is “Improving and designing environmentally friendly packaging (e.g.: less paper and plastic material used) for existing and new products”.

4. RESULTS

4.1. DEMOGRAPHICS

The sample consists of 421 individuals who serve as the managerial staff in the pharmaceutical sector of Thailand. Out of these 55.5 percent are male and 44.5 are female respondents. The disparity in male and female employees is due to the presence of patriarchy in Thailand. 74 percent of the sample is aged between 20 and 35 and 74.3 percent has working experience ranging from 2 to 8 years. The managers and middle managers were the constituents of the sample therefore a maturity in age and experience is observed.

4.2. DESCRIPTIVE ANALYSIS

The descriptive analysis of the data has been demonstrated in [Table 1](#). The minimum and maximum values are observed in order to check the data for the presence of outliers. The minimum and maximum values follow the stream of the limits of the Likert scale (1-5), therefore outliers were found to be present in the data as the maximum values represent some altercation from 5. The data followed a normal distribution as skewness coefficients were less than -1. The mean values of all items are approaching 4, demonstrating that the respondents agreed with the statements of the scale items

Table 1

Table 1 Descriptive Statistics							
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
GreEntOri	421	1.00	5.00	3.2196	0.845	-.193	.116
SCLearn	421	1.00	5.00	3.3749	0.703	-.372	.116
GreRedInno	421	1.00	5.00	3.5230	0.769	-0.552	.116

GreProdInno	421	1.00	5.28	3.4380	0.725	-.506	.116
GreIncInno	421	1.00	5.00	3.5561	0.843	-.565	.116
Valid N (listwise)	421						

4.3. KMO

KMO test is used to determine whether or not the sample data is adequate and can be used for factor analysis. As the KMO and Bartlett's sphericity values are significant therefore the sample data can be used for further testing. [Table 2](#)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.927
Bartlett's Test of Sphericity	Approx. Chi-Square	8665.267
	df	231
	Sig.	.000

4.4. FACTOR ANALYSIS

The individual component loadings of all scale items are depicted in [Table 3](#). The loadings of each scale item represents its contribution in the overall variance of the construct. A loading greater than 0.7 showcases significant contribution. Thus all factors are significant as they are more than 0.7.

Table 3

	Component				
	1	2	3	4	5
GE1	.808				
GE2	.868				
GE3	.826				
GE4	.793				
GE5	.799				
SC1		.737			
SC2		.731			
SC3		.779			
SC4		.841			
SC5		.804			
GR1				.821	
GR2				.839	
GR3				.843	
GR4				.864	
GP1			.845		
GP2			.859		
GP3			.849		
GP4			.851		
GI1					.811
GI2					.833
GI3					.863
GI4					.854

4.5. CONVERGENT AND DISCRIMINANT VALIDITY

A CR value greater than 0.7 verifies the internal consistency, as demonstrated in Table 4 all of the CR values are greater than 0.7 and the AVE values of scale items are above the threshold value, ensuring the convergent validity of scale items. As Table 4 represents, all items have high self-correlation values and low MSV values therefore the overall construct has discriminant validity.

Table 4

Table 4 Convergent and Discriminant Validity								
	CR	AVE	MSV	GEO	GP	GI	GR	SC
GEO	0.933	0.737	0.360	0.858				
GP	0.940	0.796	0.331	0.472	0.892			
GI	0.927	0.761	0.305	0.478	0.418	0.873		
GR	0.941	0.800	0.331	0.481	0.575	0.483	0.895	
SC	0.909	0.669	0.360	0.600	0.477	0.552	0.480	0.818

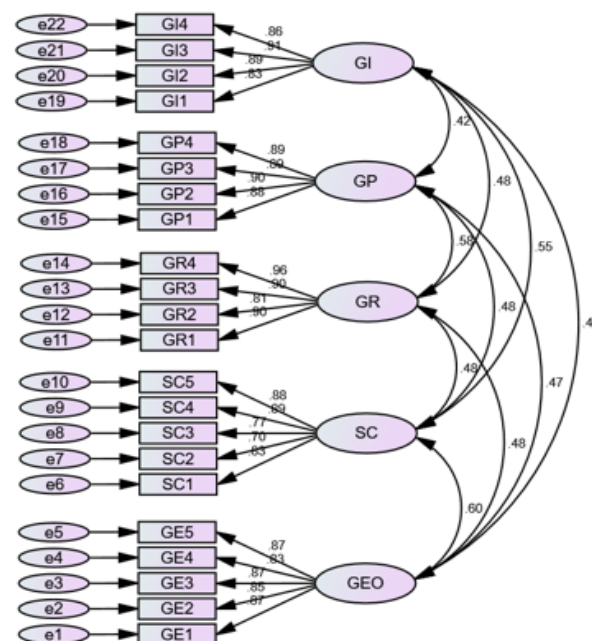
4.6. MODEL FITNESS

The CFA test is conducted to ensure the fitness of the model, the model is fit as the CMIN CFI IFI GFI RMSEA values are according to the threshold limits.

Table 5

Table 5 Confirmatory Factors Analysis		
Indicators	Threshold range	Current values
CMIN/DF	Less or equal 3	2.620
GFI	Equal or greater .80	.998
CFI	Equal or greater .90	.967
IFI	Equal or greater .90	.977
RMSEA	Less or equal .08	.061

Figure 1 CFA



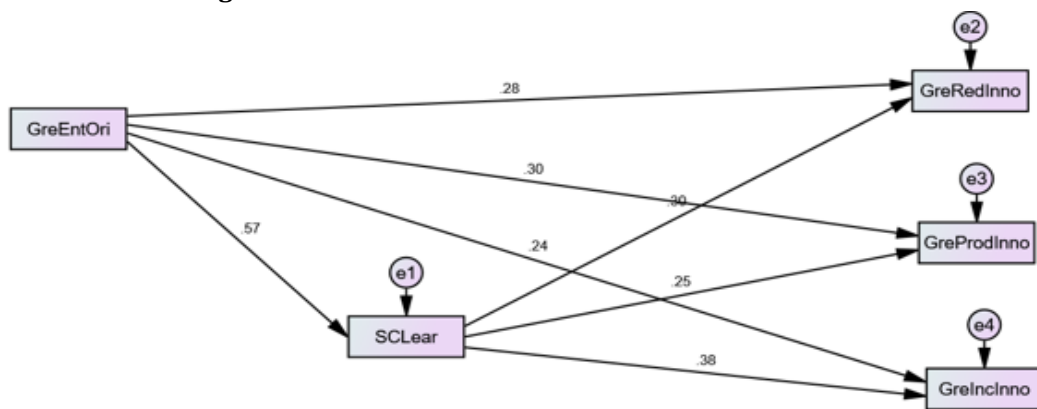
4.7. SEM

A unit change in GreEntOri produces an effect of 24.5 percent in GreInclInno, 29.7 percent in GreProdinno and 28.4 percent in GreRedInno. All three relationships and variances are significant therefore the hypotheses are accepted. The mediation of SClear produces similar significant effects. A change of 37.6 percent in GreInclInno is observed, 25.2 percent variation in GreProdinno occurs and 30 percent change is concurrent in GreRedInno. The relationships are significant therefore the hypotheses are accepted.

Table 6

Table 6: Structural Equation Modeling		
Total Effect	GreEntOri	SClear
SClear	.573	.000
GreInclInno	.460	.376
GreProdinno	.442	.252
GreRedInno	.456	.300
Direct Effect	GreEntOri	SClear
SClear	.573	.000
GreInclInno	.245	.376
GreProdinno	.297	.252
GreRedInno	.284	.300
Indirect Effect	GreEntOri	SClear
SClear	.000	.000
GreInclInno	.215	.000
GreProdinno	.145	.000
GreRedInno	.172	.000

Figure 2 SEM



5. DISCUSSION

Research by [Jiang et al. \(2018\)](#) manifests that GEO sometimes closely related to the concept of green innovation because it deals with all the aspects of green innovations and enables organizations to successfully achieve all the green innovation goals with a competitive advantage. In context to the pharmaceutical market of Thailand, this research study developed a model (conceptual) that consists of the impact of GEO on the green innovation products of the sector. Initial results and findings of this study revealed that the impact of GEO on green product innovation has been significant and positive and the hypothesis has been accepted. This is because research by [Fatoki \(2019\)](#) revealed that GEO consciously deals with environmental issues mainly through focusing on entrepreneurial ideas and concepts with a level of accuracy. Further findings of this research exhibit that the effects of the GEO on the green radical innovation GRI has also been positive and significant. Also, supply chain learning can significantly effects the relation of GEO with the green product

innovations. SCL can be referred to as an important source and tool related to CSB and might play a significant role in enhancing the association between the variable GEO and the green product innovation.

6. CONCLUSION

The purpose of the given theory is to detail how green Entrepreneurial orientation reveals the various ways of the successful industry can be by adopting such innovations in the internal structure of the industry but also the individuals can be benefited. Such innovations not only are essential but provide a path to industry to grow more successfully in the future. The Research paper shows that the data is taken by 421 employees of the various firms of the industry to analyze the impacts of the effects.

6.1. IMPLICATIONS AND LIMITATIONS

The research paper has a broad coverage of the different areas of the pharmaceutical sector in Thailand and this provides a further study to the researchers to find more ways and means to enhance the progress of the industry. The Findings of this research study makes significant contributions to the literature and theory of EO, supply chain learning and green innovation products.

This research study subject to some limitations and restrictions that provide crucial opportunities for future studies and analysts. Primarily, this research has considered the supplier and consumer learning CL together to construct the supply chain learning scale, thus, it is significant for future analysts that should know the contribution of individual type and dimension. Secondly, the research study only evaluates the mediating role of SCL between green product innovation and GEO; therefore, future analysts should add some other mediating variables for accurate results.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Arshad, M. H. (2018). Effect of Market Orientation, Learning Orientation and Entrepreneurial Orientation on SME's Performance in the Pakistan Context [Doctoral Dissertation, Universiti Utara Malaysia].
- Bouncken, R. B., Plüschke, B. D., Pesch, R., and Kraus, S. (2016). Entrepreneurial Orientation in Vertical Alliances: Joint Product Innovation and Learning from Allies. *Review of Managerial Science*, 10(2), 381–409. <https://doi.org/10.1007/s11846-014-0150-8>
- Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>
- Chen, C.-Y., Huang, H.-H., and Wey, S.-C. (2017). The Mediating Roles of Differentiation Strategy and Learning Orientation in the Relationship Between Entrepreneurial Orientation and Firm Performance. *Chiao Da Management Review*, 37(1), 1–40.
- Chen, Y.-S., Lai, S.-B., and Wen, C.-T. (2006). The Influence of Green Innovation Performance on Corporate Advantage in Taiwan. *Journal of Business Ethics*, 67(4), 331–339. <https://doi.org/10.1007/s10551-006-9025-5>
- Chiou, T.-Y., Chan, H. K., Lettice, F., and Chung, S. H. (2011). The Influence of Greening the Suppliers and Green Innovation on Environmental Performance and Competitive Advantage in Taiwan. *Transportation Research Part E: Logistics and Transportation Review*, 47(6), 822–836. <https://doi.org/10.1016/j.tre.2011.05.016>
- Chu, K.-M. (2019). Coevolution of Environmental Sustainability Orientation and Strategic Alliance Learning in Green Supply Chain Management. *International Journal of Management and Economics*, 55(1), 3–12. <https://doi.org/10.2478/ijme-2019-0001>

- Dai, J., Cantor, D. E., and Montabon, F. L. (2015). How Environmental Management Competitive Pressure Affects a Focal Firm's Environmental Innovation Activities: A Green Supply Chain Perspective. *Journal of Business Logistics*, 36(3), 242–259. <https://doi.org/10.1111/jbl.12094>
- Fatoki, O. (2019). Green Entrepreneurial Orientation and Firm Performance in South Africa. *Entrepreneurship and Sustainability Issues*, 7(1), 247–262. [https://doi.org/10.9770/jesi.2019.7.1\(19\)](https://doi.org/10.9770/jesi.2019.7.1(19))
- Flint, D. J., Larsson, E., and Gammelgaard, B. (2008). Exploring Processes for Customer Value Insights, Supply Chain Learning, and Innovation: An International Study. *Journal of Business Logistics*, 29(1), 257–281. <https://doi.org/10.1002/j.2158-1592.2008.tb00078.x>
- Gosling, J., Jia, F., Gong, Y., and Brown, S. (2016). The Role of Supply Chain Leadership in the Learning of Sustainable Practice: Toward an Integrated Framework. *Journal of Cleaner Production*, 137, 1458–1469. <https://doi.org/10.1016/j.jclepro.2014.10.029>
- Guo, Y., Wang, L., and Chen, Y. (2020). Green Entrepreneurial Orientation and Green Innovation: The Mediating Effect of Supply Chain Learning. *SAGE Open*, 10(1), 2158244019898798. <https://doi.org/10.1177/2158244019898798>
- Habib, A., and Bao, Y. (2019). Impact of Knowledge Management Capability and Green Supply Chain Management Practices on Firm Performance. *International Journal of Research in Business and Social Science*, 8(6), 240–255. <https://doi.org/10.20525/ijrbs.v8i5.548>
- Jiang, W., Chai, H., Shao, J., and Feng, T. (2018). Green Entrepreneurial Orientation for Enhancing Firm Performance: A Dynamic Capability Perspective. *Journal of Cleaner Production*, 198, 1311–1323. <https://doi.org/10.1016/j.jclepro.2018.07.104>
- Li, Y., Liu, Y., Li, M., and Wu, H. (2008). Transformational Offshore Outsourcing: Empirical Evidence from Alliances in China. *Journal of Operations Management*, 26(2), 257–274. <https://doi.org/10.1016/j.jom.2007.02.011>
- Li, Y., Wei, Z., and Liu, Y. (2010). Strategic Orientations, Knowledge Acquisition, and firm Performance: The Perspective of the Vendor in Cross-Border Outsourcing. *Journal of Management Studies*, 47(8), 1457–1482. <https://doi.org/10.1111/j.1467-6486.2010.00949.x>
- Mandal, S., and Saravanan, D. (2019). Exploring the Influence of Strategic Orientations on Tourism Supply Chain Agility and Resilience: An Empirical Investigation. *Tourism Planning and Development*, 16(6), 612–636. <https://doi.org/10.1080/21568316.2018.1561506>
- Song, Y., Cai, J., and Feng, T. (2017). The Influence of Green Supply Chain Integration on Firm Performance: A Contingency and Configuration Perspective. *Sustainability*, 9(5), Article 763. <https://doi.org/10.3390/su9050763>
- Trong Tuan, L. (2017). Organizational Social Capital as a Moderator for the Effect of Entrepreneurial Orientation on Competitive Intelligence. *Journal of Strategic Marketing*, 25(4), 301–315. <https://doi.org/10.1080/0965254X.2015.1076884>
- Wach, K., Głodowska, A., and Maciejewski, M. (2018). Entrepreneurial Orientation, Knowledge Utilization, and Internationalization of Firms. *Sustainability*, 10(12), Article 4711. <https://doi.org/10.3390/su10124711>
- Wang, Z., Wang, Q., Zhang, S., and Zhao, X. (2018). Effects of Customer and Cost Drivers on Green Supply Chain Management Practices and Environmental Performance. *Journal of Cleaner Production*, 189, 673–682. <https://doi.org/10.1016/j.jclepro.2018.04.071>
- Wątróbski, J. (2019). Ontology Supporting Green Supplier Selection Process. *Procedia Computer Science*, 159, 1602–1613. <https://doi.org/10.1016/j.procs.2019.09.331>
- Wei, F., Wang, C.-Y., and Xiong, Q.-C. (2018). Linking Proactive Environmental Strategy to Green Supply Chain Management: Commentary and Future Directions. In *Proceedings of the 4th Annual International Conference on Management, Economics and Social Development (ICMESD 2018)*. <https://doi.org/10.2991/icmesd-18.2018.31>
- Wickramaratne, A., Kiminami, A., and Yagi, H. (2017). External Relationships and Entrepreneurial Orientation of Tea Manufacturing Firms in Sri Lanka. *International Food and Agribusiness Management Review*, 20, 293–306. <https://doi.org/10.22434/IFAMR2015.0070>
- Zhao, Y., Li, Y., Lee, S. H., and Chen, L. B. (2011). Entrepreneurial Orientation, Organizational Learning, and Performance: Evidence from China. *Entrepreneurship Theory and Practice*, 35(2), 293–317. <https://doi.org/10.1111/j.1540-6520.2009.00359.x>