

Uncertain Supply Chain Management

homepage: www.GrowingScience.com/uscm**The mediating effect of just in time on the relationship between green supply chain management practices and performance in the manufacturing companies****Fatima Lahcen Yachou Aityassine^a, Bassam Fathi Aldiabat^a, Salameh Radwan Al-rjoub^b, Faraj Mazyed Faraj Aldaihani^c, Hussam Mohd Al-Shorman^d and Sulieman Ibraheem Shelash Al-Hawary^{e*}**^aDepartment of Financial and Administrative Sciences, Irbid University College, Al-Balqa'Applied University, Jordan^bManagement philosophy/ HRMS, EFQM Licensed Certified Assessor, Jordan^cAssistant professor of Marketing, street 122, home 1, Kuwait^dManagement information system, Faculty of Amman College, AL-Balqa Applied University, Jordan^eDepartment of Business Administration, School of Business, Al al-Bayt University, P.O.BOX 130040, Mafrag 25113, Jordan**CHRONICLE****ABSTRACT***Article history:*

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The goal of the study was to determine the influence of green supply chain management strategies on performance in Jordanian industrial enterprises using just in time. All of Jordan's manufacturing enterprises were included in the analysis. A total of 218 companies were selected from the manufacturing industry. The study hypotheses were tested using Path Analysis. The results showed that green supply chain practices had a significant indirect effect on performance through JIT. Based on the study findings, the researchers recommend individuals and decision-makers to improve the expected results of green supply chain practices in the performance of economic and social business through just in time production and increasing the interest in logistics services as one of managing green supply chains practices in these companies.

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1. Introduction

Environmental issues are becoming more significant to businesses because of increased pressure from stakeholders such as management, consumers, competitors, NGOs, and employees to handle environmental and social sustainability in business and industrial operations (Al- Quran *et al.*, 2020; Alhalalmeh *et al.*, 2020; Tseng & Wang, 2018). Companies that want to lower their environmental footprint may find that their capacity to do so is contingent on their ability to manage complex supplier relationships (Darnall, & Cho, 2019), so one way to reduce environmental impacts is to plan green supply chain management practices and control business activities from raw material suppliers to end customers, as well as the relationship that binds these partners together in green supply chains through their practices. This offers a launchpad for business excellence and environmental sustainability (AlTaweel & Al-Hawary, 2021; Al-Hawary & Al-Syasneh, 2020; Hussain, & Malik, 2020).

Just-in-time production is suitable for reducing waste through a simple production process, as it regulates materials' smooth flow, reduces preparation time and uses resources efficiently. The on-time production practice is also a powerful tool to reduce wastage and costs, improve efficiency, speed up the production process and fast delivery (Karim, & Qamruzzaman, (2020).). The practice of carrying out production on time is also important in the industry as it focuses on producing a high quality product based on customer demand, reducing inventory levels and improving the relationship with suppliers (Novais, Marín

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& Moyano-Fuentes, 2020). Based on the total quality management concept, companies defend a common culture aimed at continuous improvement, customer orientation and employee empowerment. Aligning product design with customer expectations and focusing on quality at development stages and production processes are considered as drivers of product quality improvement and thus business performance (Al-Hawary & Al-Rasheedy, 2021; Eldahmsheh et al., 2021; Mohammad et al., 2020; Sahoo, 2019). Supply chain management is the process of coordinating and integrating flows throughout a supply chain with the primary goal of increasing material flow, lowering lead times and material prices, and enhancing product quality and response (Suri, & Burke, 2020). The term economic and social performance has emerged as a modern management concept concerned with society and the environment as basic pillars for achieving growth and sustainable development (AlHamad et al., 2022; Tien, Anh, & Ngoc, 2020). It is not limited to achieving financial and economic performance only, but also integrates all social and environmental conditions within the organization's strategic plan, as it is a term that expresses the organization's overall performance. Study problem is the study of population business performance and how to enhance business performance in light of the surrounding environmental changes, through supply chain practices, with the presence of contemporary global challenges and the global epidemic of covid-19 spread, which destroyed many organizations, decreased performance levels and global production and were reflected at its general level. Accordingly, it was necessary to find a new way to advance the organizations and preserve their survival. As a result, supply chain management practices are critical in guaranteeing the organization's survival and continuity in the face of rapidly changing environmental conditions. This research will help researchers and those interested in determining the impact of green supply chain management practices on business performance by trying to identify supply chain management practices and ways of managing and controlling them, as well as suggesting methods and procedures used in green supply chain management practices to improve the organization's performance.

2. Literature review and hypotheses development

2.1 Supply chain management practices

Environmental management is recognized as a strategic issue with the potential to have a long-term impact on organizational success. Therefore, these companies seek to develop an environmentally friendly approach to the supply chain, as this represents an issue of concern and challenge for many companies (Rahmi, 2018). Green supply chain practices are an important way for companies to achieve their environmental goals. The academic literature has a wide range of studies connected to green supply chain practices, resulting in a variety of definitions of this notion as an environmental evaluation of supply chain management and industrial procurement advances. Green supply chain management entails substituting recycling, reuse, and replacement materials for purchase activities, and measuring and improving the environmental performance of green supply chain practices (Pinto, 2020). The concept also refers to the integration of certain practices such as product design, delivery, raw material selection, and waste management into the supply chain by considering environmental considerations (Wibowo et al., 2018). Even though there are numerous definitions in the literature, all studies agree that the idea entails combining environmental consciousness with effective supply chain management. Green supply chain management is a new approach to supply chain management that incorporates environmental concerns and issues (Novitasari, & Agustia, 2021). Khairani et al. (2012) indicated that every company must undergo a paradigm shift in terms of its environmental commitments, and through this, companies will gain a competitive advantage in the global market where it is believed that competitive advantage and environmental sustainability coexist. However, in emerging economies these practices are not highly enforced as there are only a few companies that practice green supply management practices due to a lack of environmental concern and awareness. (Geng, Mansouri & Aktas, 2017). Green supply chains are an integrated configuration consisting of multiple subsystems, to implement effectively these subsystems and their components must be deeply understood and successfully implemented (Rushton, Croucher, & Baker, 2022). Green design, green purchasing, green manufacturing, reverse logistics, environmental cooperation with suppliers, and green distribution are among the most essential root aspects for the success of green supply chain operations. Because of the importance of strategic green supply chain management practices, green procurement entails "purchasing" through activities such as waste reduction, reuse, and recycling (Sezen, & Çankaya, 2018). The buying of eco - friendly materials which are either recyclable or already recycled is referred to as green purchasing (Çankaya, & Sezen, 2019).

As for green manufacturing, it is conducting manufacturing processes by taking into account environmental factors and re-designing and implementing those processes by paying attention to environmental aspects from an environmental protection perspective (Bhatia, 2021), this method of manufacturing also includes products used and reproduced after taking environmental aspects into account through certain processes, green manufacturing also ensures that the inputs or raw materials used in manufacturing are of low damage and reduce environmental risks by ensuring that products are recyclable and reusable.

While green distribution aims to identify and use shorter methods of distribution, reduce storage space and avoid unnecessary stock holding (Rahmi, 2018), and pay attention to the main factors that cause hazardous gas emissions and CO₂ particles within the supply chain and these are distribution and transportation practices (Ali, Paksoy, Torğul, & Kaur, 2020). Whereas reverse logistics is the process of regular products acceptance and parts that have already been sent from consumption points for remanufacturing or disposal (Wilson, & Goffnett, 2021).), and re-engineering reverse logistics in the supply chain to

manage remanufacturing, recycling or refurbishment and product/material flow, all this is done through the examination of reverse logistics management in six parts: acceptance, refund, review, renewal, transportation, and re-engineering (Rahmi, 2018). Green supply chain management practices area new concept that has emerged as a major driver of business value (Dadhich et al., 2015), which is an integration of sustainable practices in upstream supply chain management, including product design, materials management, manufacturing processes, product distribution and end management. product life.

2.2 Just in Time

Japan has successfully implemented just on Time (JIT) production for the past 20 years. It is a philosophy and technology that guides the industrial company in organizing and managing its business more effectively, and in planning and controlling its operations more efficiently, and thus represents a way to achieve high-speed manufacturing. The core ideas behind the Just-in-Time Production system, which have been practiced for many years in Japan, are waste disposal, cost reduction, and employee empowerment. The Japanese philosophy of doing business is quite different from the philosophy that has long prevailed in other countries where the prevailing belief was that the only way to make a profit was to add the cost of manufacturing to other expenses in order to arrive at a desirable selling price, Contrary to the Japanese approach which believes that customers are the generator of the selling price, the higher the quality of the product and the more service it provides, the higher the price customers will pay and the difference between the costs of this price determines the profit.

The JIT manufacturing system is to work in every aspect of the value stream by eliminating waste in order to reduce cost, generate capital, generate more sales, and stay competitive in a growing global market, where the value stream is defined as “the specific activities in the supply chain required to design, demand and deliver a specific product or value.

In order to efficiently implement on time production, it requires providing basic requirements including (Hussein,& Zayed, 2021), continuous support from management to make changes in trends and processes inside and outside the organization, change the factory internal organization and develop methods of handling raw materials and parts in a way that ensures the continued product flow, and a logical fit between the demand, the real and product design, and this is achieved through the factory diversified production that includes multiple production units within one factory, These factories form the total manufacturing network, so that each small factory has its outputs to another factory and successively to the final stage, with defining products types. Factories with diversified production in product and technology are among the main entrances used by factories that apply (JIT), and the need to form a network of communications with consumers and suppliers, as this requires suppliers to develop their capabilities and readiness to abide by the specifications required of the product (Kichwa, 2019).

2.3 Performance

Organizations strive to ensure their survival and continuity within the framework of what the current reality imposes by achieving competitive positions in a competitive environment (Al-Nady *et al.*, 2016; Al-Nady *et al.*, 2013, Tariq *et al.*, 2022). Through continuous monitoring, the organization determines the management effectiveness by reducing the gaps between what is planned and what has been actually achieved (Al-Juhani, 2020). With the emergence of sustainable performance concept, several challenges were imposed on institutions, including the integration of sustainable performance dimensions, especially social and economic, into the organization’s practices. That is why new areas of performance have emerged that have gone beyond profitability, market share and productivity to areas related to social and environmental responsibility, and include awareness of all stakeholders’ issues, namely An economic development model to improve the life quality of the local community (Mariani *et al.*, 2016).

To measure organizations sustainable performance, the measurement process must pass through three stages: a stage in which a framework is presented that clarifies the main organization concerns and its goals, and then the measures that drive it to adhere to these goals are tested. Then the stage of starting implementation, and in this stage the metrics are integrated with business procedures and conclusions are drawn that show the performance superiority. Finally, review and monitor performance by collecting information resulting from feedback (Hussain *et al.*, 2022).

Social performance measures the organization’s responsibility towards stakeholders, especially about individuals inside or outside the organization. It reflects the organization effectiveness level in general and human resources management in particular, about respect for labor laws and international treaties (Mostafapour *et al.*, 2021; Anis, 2020; Mukherjee, 2020). Social indicators are those that are used to assess the extent of an institution's impact on society, which involves workers, customers, the local community, and other partners, and they are linked to the capacity to attain a balance between economic efficiency and worker productivity for individuals and communities through the rational use of natural resources, as well as the link between business strategy and social management to achieve this balance (Abdul Hamid, 2021). As for the economic performance, it is represented in the surplus achieved by the organization in return for reducing the level resources use and it includes several areas, the most important of which are (responding to customer requirements, flexibility, financing), and with the development witnessed by organizations in the sustainable performance concept, there are other indicators that allow measuring the economic contributions of the organization and the extent of its observance of the sustainable development standards, Through which it is possible to judge the impact of the organization on the economy, society and individuals (Mahdi, 2020). Economic performance aims to reduce poverty and unemployment and optimize the use of economic resources with the aim of improving the standard of individual living and acquiring knowledge (Effendi, Purnomo, & Malawani, 2020). In the past, the economic indicators were those that allowed to measure the financial performance of the institution, and with the development that institutions began to know through the adoption of sustainable development, other indicators appeared

that move away from the financial aspect, and they allow measuring the institution economic contributions, in order to measure the extent of its observance of sustainable development and categorized according to the criteria of stakeholders (customers, suppliers, workers, investors); It works to achieve economic efficiency through the development of production and consumption patterns (Mauerhofer, 2021).

2.4 Supply chain management practices, business performance and just in time

The manufacturing industry competes on price, quality, variety, and after-sales service; today, few businesses do not offer low prices, great quality, and excellent service. Speed became the main competitive factor, as companies responded faster to their customers, which resulted in more profitability. The shorter the time a manufacturer can supply products, the more likely it is for its viability. High-speed manufacturing is a common goal of all manufacturing companies, and in high-speed manufacturing, everything is dynamic, machines, people, money and materials are constantly in motion. Inventory is only stored for a very short period, then moved to other locations just moments after it is stored, and high-speed manufacturing terms include flow, line balancing, schedule, and linearity in production. The just-in-time production system tries to achieve a smooth flow of materials from suppliers to customers, thus increasing the production process speed. Therefore, this system aims to change the production system gradually, not radically. This system can also help the organization to maintain its competitiveness by offering higher quality products to consumers compared to other competitors, and it is very important to ensure survival in the market, these key objectives are suitable for all organizations, but every organization is unique in some way, therefore adjustments must be made to the objectives of this system for each model in order to complete the overall production process,

JIT's On-Time Production philosophy seeks to minimize cost and waste by producing exactly what is needed when needed, with inventory planning for on-time production, and only inventory in transit; this results in lower capital costs. The on-time production system results in stronger bonds between customer and supplier because suppliers are considered partners. The basic concept of the on-time production inventory is based on waste disposal. The on-time production system enables companies to obtain an ideal contract size, where the price is best for them. The goal is to reduce inventory investment, cut production lead times, respond faster to demand changes, and detect any quality issues by driving all queues to zero. According to Ahmed et al. (2018), industries use a variety of green supply chain management strategies, including green design, green production, green procurement, and others. According to Al-Ghwayeen and Abdallah (2018), GSCM has a favorable and considerable impact on both export and environmental performance. Furthermore, the findings revealed that environmental performance has a favorable and significant impact on export performance. Furthermore, environmental performance interacts favorably and significantly in the relationship between green supply chain management and export performance. According to Samuel et al. (2018), green supply chain management practices such as Environmental Management Systems (EMS) and Green Procurement (GP) practices have a positive relationship with operational competitive performance in terms of cost, quality, and flexibility. Environmental management methods have a different impact on operational efficiency in services vs manufacturing, suggesting that environmental management practices have a significant impact on cost and flexibility. According to the findings of the study (Qadduri and Hamid, 2020), JIT and TQM are significantly and positively related to green supply chain management practices, and JIT and TQM methods and green supply chain management practices are supplementary to each other because they have a greater impact on environmental sustainability. Several studies have confirmed the presence of a positive and significant impact of sustainable leadership style on employee psychological safety, as leaders have a high level of communication and negotiation skills that also improves social performance as a result of the quality of communication between employees (Iqbal et al., 2020). As a result, the following is the study hypothesis:

H: *Green supply chain management practices have a statistically significant impact on performance in Jordanian industrial companies through just on-time.*

3. Study model

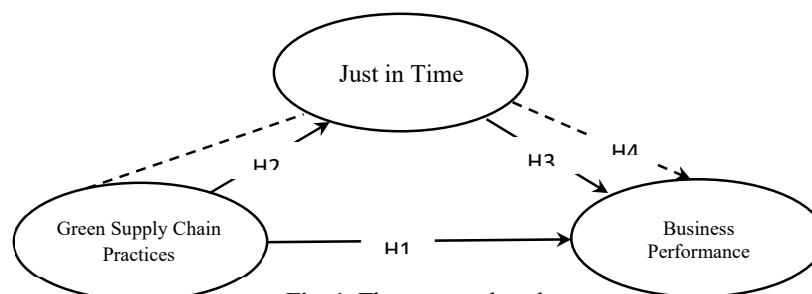


Fig. 1. The proposed study

4. Methodology

4.1 Population and sample selection

The study's goal is to examine the impact of green supply chain management practices on performance in Jordanian industrial companies using JIT. All of Jordan's industrial companies were included in the analysis. The manufacturing industry provided a sample of 218 companies. Data was collected mostly through self-reported surveys developed with Google Forms and disseminated by email to a random sample of (350) managers. In all, (263) replies were received, with (12) of them being ineligible for statistical analysis due to incomplete or erroneous information. As a result, the final sample included (251) replies acceptable for analysis, resulting in a response rate of (71.7%), which showed to be adequate to the level that really was predicted and permitted for a data saturation presumption (Sekaran & Bougie, 2016).

4.2 Measurement instrument

The measurement instrument was a self-reported survey with three main parts and a part on control variables. Sex, age range, level of education, and expertise were used as category measures as control variables. A 5 Likert scale (from 1=strongly disagree to 5=strongly agree) was used to deal with the two main parts. The first portion included (25) criteria for evaluating green supply chain activities (Rushton, Croucher, & Baker, 2022). Green design, green purchasing, green manufacturing, green distribution, and green logistics were the aspects that these questions were divided into. The second segment featured (6) items devised to measure JIT in accordance with what was brought up by the first section (Hussein, & Zayed, 2021). The third section contained (10) items to measure performance based on (Abdul Hamid, 2021). These questions were distributed into dimensions as follows: economic performance and social performance.

5. Findings

5.1 Reliability and validity

Reliability was measured using Cronbach's alpha (α) and composite reliability (CR). Value of such tests should be greater than 0.70 (de Leeuw et al., 2019). The results in Table 1 show that alpha coefficients and CR values were higher than 0.70, which means that the current constructs are reliable. Validity, on the other hand, was assessed using convergent validity and discriminant validity. The former was evaluated based on factor loadings and the Average variance extracted (AVE). Thresholds of factor loadings and AVEs are 0.60 and 0.50, respectively (Al-Lozi et al., 2018; Sung et al., 2019; Howard, 2018). The results in Table 1 assert that all factor loadings (0.611-0.914) were within the assumed criterion.

Table 1
Results of reliability and validity tests

Constructs	1	2	3	4	5	6	7	8
1. Green design	0.786							
2. Green Purchasing	0.457	0.823						
3. Green Manufacturing	0.316	0.436	0.817					
4. Green logistics	0.478	0.457	0.441	0.811				
5. Green distribution	0.551	0.358	0.361	0.451	0.814			
6. Just in time	0.492	0.507	0.387	0.502	0.522	0.826		
7. Economic performance	0.531	0.551	0.487	0.421	0.488	0.467	0.823	
8. Social performance	0.369	0.463	0.529	0.484	0.511	0.499	0.511	0.802
VIF	1.922	1.368	1.568	1.874	1.681	---	---	---
Loadings range	0.614-0.854	0.649-0.914	0.711-0.836	0.611-0.884	0.694-0.837	0.679-0.902	0.731-0.846	0.672-0.795
AVE	0.618	0.678	0.668	0.658	0.663	0.682	0.677	0.643
Internal consistency (α)	0.873	0.823	0.897	0.879	0.886	0.893	0.904	0.884
Composite reliability (CR)	0.889	0.912	0.909	0.904	0.907	0.914	0.913	0.900

Note: all correlations have a significance level less than 0.05, bold fonts refer to the square root of AVE.

The second indicator of validity, which is discriminant validity, was gauged by comparing the square roots of AVE ($\sqrt{\text{AVE}}$) with the correlation coefficients between latent constructs. That is, those square roots should be greater than the correlation coefficients between any pair of the research construct. As shown in Table, discriminant validity was assured. Moreover, multicollinearity was measured by variance inflation factor (VIF) which should be less than 5 (Hair et al., 2017). The results in Table 1 illustrate that VIF values were less than 5, which means that the current data is free from multicollinearity.

5.2 Structural model

Fig. 2 portrays the structural model, which presents a graph of research hypotheses testing. The figure shows acceptable values of model goodness-of-fit. The Chi-square to degrees of freedom (CMIN/DF) ratio was 2.651, which is less than the indicator's top limit of 3. The goodness of fit index (GFI) and comparative fit index (CFI) were both higher than the 0.90 minimum

acceptable criterion. Furthermore, the root mean square error of approximation (RMSEA) resulted in a value of 0.057, which is lower than 0.08. Structural equation modeling (SEM) was utilized to validate the findings of testing study hypotheses, and the results are reported in Table 2.

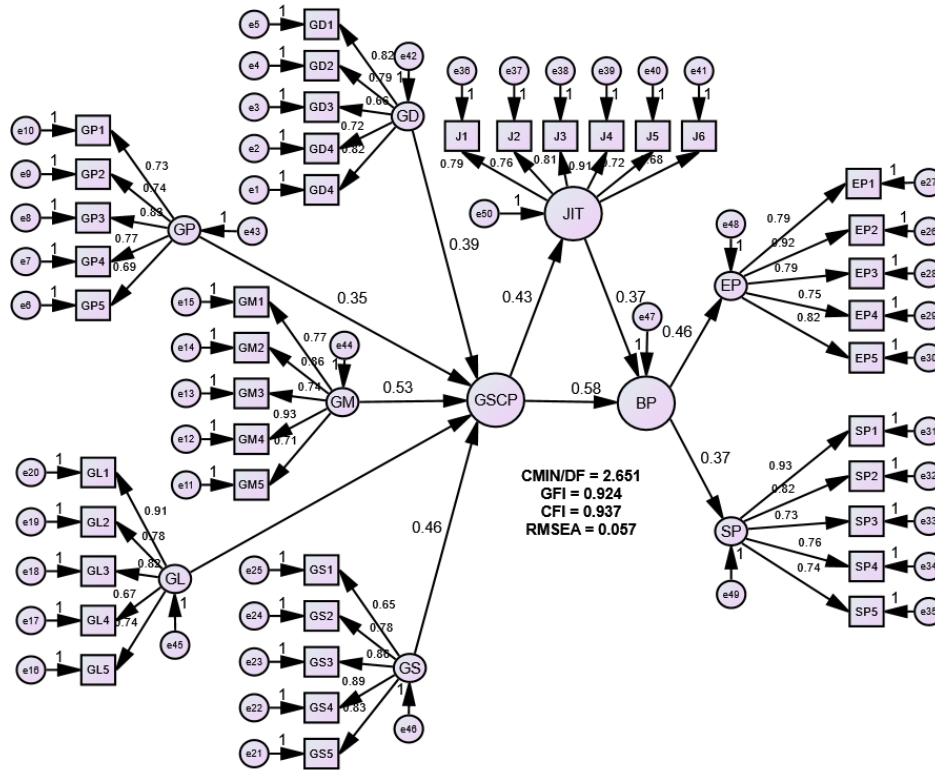


Fig. 1. Research structural model

Table 2 Results of hypothesis testing

Relation	Direct Effect		Indirect Effect		Total Effect	
	β	<i>p</i> value	β	<i>p</i> value	β	<i>t</i> value <i>p</i> value
GSCP→BP	0.581***	0.000			0.581***	14.206 0.000
GSCP →JIT	0.433**	0.004			0.433**	12.661 0.004
JIT→BP			0.374***	0.010	0.374***	10.223 0.000
GSCP →JIT→BP			0.162**	0.002	0.743*	19.332 0.002

Note: OIC: Organizational Innovation Capabilities, SUP: Sustainable Performance, ORC: Organizational Commitment, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The results in Table 2 show significant positive direct effects of green supply chain practices (GSCP) on business performance (BP) ($\beta = 0.581, P = 0.000$), and Just in Time (JIT) ($\beta = 0.433, P = 0.004$). JIT, also, showed a significant direct effect on BP ($\beta = 0.374, P = 0.010$). These results confirmed that H1, H2, and H3 were supported. The results showed also that GSCP had a significant indirect effect on BP through JIT ($\beta = 0.162, P = 0.002$), which means that H4 was accepted. Based on these results, it was stated that JIT mediates the effect of GSCP on BP.

6. Discussions

The results have shown that the industrial companies in Jordan, when designing the product, depend on choosing reusable materials as they are less harmful to the environment, and encourage product design that is highly easy to repair, with their attention to health, so they adopt reducing packaging and packaging waste, and thus they consider current and future users. This result was consistent with the study (Ahmed et al., 2018), which showed that the level of managers' adoption of green design in the companies was acceptable and that they understood the green design concept. The surveyed companies value green buying practices in terms of giving design requirements to suppliers that include environmental standards for the bought resources, and thus they collaborate with suppliers in accomplishing environmental targets, which is consistent with the supplier selection process based on environmental standards.

In order to accomplish this practice, the company conducts an environmental review of the internal management of suppliers, and is keen to deal with suppliers that have obtained the ISO14000 certificate. This result is consistent with the result of (Samuel et al., 2018) and (Al-Ghwayeen and Abdallah, 2018). According to the findings, industrial companies aim to reduce energy usage and natural resource consumption, and also minimizing pollution to a minimal level, as well as substituting environmental pollution and harmful components in production by the use of toxic emission filtration in the production process, and also minimization of waste to enhance material usage in production planning.

In addition, the industrial companies in Jordan are working to collect consumer products from customers and recycle, maintain, manufacture and recycle them, as well as for safe repacking. This result was consistent with (Mochamad et al., 2018; Reuel et al., 2018). The industrial companies in Jordan are working to exploit their financial resources in a way that enhances and develops their performance, by finding financial systems applied in the departments that need improvement in their financial performance, and they are keen to review the approved budget according to what is planned to detect deviations to correct them as a kind of control and audit. Thus, it applies control systems for its expenses in a way that achieves accuracy and excellence. In terms of its financial performance, companies are keen to find a reserve of resources to face any accidental emergency, and add good services to improve and increase their revenues, in terms of economic performance results, this study was consistent with the study of (Samuel, Amoako, Disraeli & Samuel 2018). The industrial companies in Jordan have been concerned with providing employees requirements and customers constantly, and working to find cooperation between all the different departments and sections, and trying to have the employees able to complete their work with the least effort and efficiency, researched companies providing an advanced communication network to communicate between all departments, and work on developing the concept of employees self-monitoring in their work performance, and strengthening these processes through the use of modern technologies for information systems to accomplish tasks, which enhances their social performance. The findings of the research hypothesis of green supply chain practices on business performance through just in time in Jordanian industrial companies, the investigated companies design their products by using recyclable material because they are less harmful to the environment, and motivate product design which is highly repairable, so they adopt reducing waste related to packaging, and offering design requirements to suppliers because these specifications include environmental specifications. As a result, it collaborates with suppliers to achieve environmental targets, based on supplier selection based on environmental standards, and the manufacturing process is designed to reduce energy consumption and natural resource usage.

The study's findings revealed that Jordanian industrial companies' interest in just-in-time production is represented in several of their practices, which include green design, green purchasing, green manufacturing, and green distribution, that all improve the just-in-time concept through identifying the specific suppliers and maintaining a strong relationship with them. This practice is based on the production flow system application, which necessitates factory rearrangement and improvement, This necessitates a flexible workforce, a quality control system, and the creation of service cells adjacent to manufacturing cells, which facilitates manufacturing operations and cut unnecessary activities. It also necessitates automation of production lines and the facilitation of administrative processes. The green supply chains practices affect a high contribution to business performance, and this effect is reinforced by what mediates this relationship through the production variable just in time. This effect of the just-in-time manufacturing factor is represented in deciding the number of suppliers and formulating a strong relationship between them, but also based on the implementation of the manufacturing flow system, reconfiguring and trying to improve the factory system, continuing to work to find a flexible workforce, a quality management system, and establishing service cells beside production cells, which facilitates manufacturing operations and cut unnecessary activities, automation of manufacturing. This impact of the just-in-time manufacturing variable is represented in determining the number of suppliers and forming.

7. Recommendations

Based on the findings of the study, the researchers recommend that individuals and decision-makers improve the anticipated outcomes of green supply chain practices in the achievement of social and economic business through just-in-time manufacturing in manufacturing sector in Jordan, trying to increase the attention of manufacturing sector in Jordan in logistics services as being one of having to manage green supply chain management in such companies, because it was discovered that such practices did not improve performance of economic and social business through just-in-time manufacturing, and rising the attention of manufacturing sector in Jordan in logistics services as being one of managing green supply.

Due to their significance in encouraging green supply chain practices, Jordanian industrial businesses should pay close attention to production methods on a timely basis.

Pay more attention to environmental cooperation with suppliers practice, as it was found that it has a low impact on the just in time, because attention to it enhances the possibility of enhancing production on time, which is reflected in its effect in enhancing business performance. The study also suggests that Jordanian industrial companies pay more attention to green manufacturing practices, which have a significant effect but are relatively weak, and to green distribution practices, that have a significant effect but are relatively weak in terms of impact on organizational performance in Jordanian industrial companies.

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