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ORIGINAL PAPER

EFFECTS OF GREEN SUPPLY CHAIN MANAGEMENT APPLICATIONS ON OPERATIONAL, ENVIRONMENTAL AND FINANCIAL PERFORMANCE: COMPANY AND FINAL CUSTOMERS

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ABSTRACT. Background: Green supply chain management (GSCM) practices are vital to environmental protection. Many large-scale companies claim that GSCM applications are implemented in their business (with ISO 14001 documents, advertisements, etc.). The purpose of this study is to reveal the relationships between GSCM applications and the operational, environmental, and financial performance of the business. In addition, GSCM practices applied in the business ensure that what is done from the perspective of the final customer. It also determines the external pressures that affect the businesses most in protecting the environment.
Methods: The study consists of two parts. The data in the first part includes the lower, middle and senior managers working in the construction sector operating in Turkey. The data in the second part includes the final customers located in Yenice, Çanakkale**.**
Results: GSCM applications affect the operational, environmental, and financial performance of the business positively. Additionally, similar results were obtained for the final customers. However, there are differences in the degree of impact of both outcomes.
Conclusions: GSCM applications in Turkey protect the environment while searching for the efficiency of the business. However, it seems that the GSCM applications of the business are not fully informed or understood by the final customers. In addition, business employees see that the first factor that will push people to become environmentalists is customer pressure, and the second is the pressure of nongovernmental organizations. The final customers, on the other hand, give priority to environmental awareness first and nongovernmental organizations second. State authority is in the third place.

Keywords: Green Supply Chain Management, Operational Performance, Environmental Performance, Financial Performance, Logistics

INTRODUCTION

Although businesses meet the endless needs and desires of people, they struggle to survive in competitive conditions. Along with the increasing world population, businesses have tended to produce more with the effect of globalization and the development of technology. The world population is expected to increase to 9.2 billion by 2050. This means that production will increase in many areas and natural resources will be consumed more [EU - Green Supply Chain - CE Intelligence Portal, 2022].

While natural resources are consumed in supply chain processes, preproduction and production, the environment is harmed. As in the process before production, carbon emissions are released to the environment due to the heavy use of internal combustion engines in the transfer of products or materials from one place to another in post-production processes. Many scientific studies have been and continue to be done to reduce the carbon emission rate, both in terms of the environment and businesses [Krikella, 2019: 2]. According to world bank open access data, total greenhouse gas emissions [kt of CO2 equivalent] have been increasing rapidly between 1990-2019 [World Bank Open Data, 2022]. This means that the environment is

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rapidly polluted in TZ processes. Pollution causes climate change and drought in the world. According to the May 2022 Global Climate Report, approximately 7% of the Earth's surface reached a record temperature in May 2022, and this is the third highest temperature since 1951. The hottest and the driest month of May was experienced in southern, central, and western Europe with temperatures reaching record levels [https://www.ncei.noaa.gov/access/monitoring/monthly-report/global/202205,05.07.2022].
Many countries emphasize that environmental protection is not an option but a necessity, by environmental protection agencies. While considering the elimination of poverty in the world through economic developments, the welfare of future generations should also be taken into account [Suansawat, 2013: 1]. Environmental pollution can be the basis for epidemics and natural disasters such as COVID-19, which we live in today and affect the whole world.

GSCM is an emerging field that adds a different perspective from traditional supply chain management understanding. The quality revolution of the late 1980s and the supply chain revolution of the early 1990s encourage businesses to be environmentally conscious. With GSCM, it is aimed at reducing waste in all logistics processes, increasing product-life quality, and protecting natural resources [Mavani, 2015: 20].

GSCM activities have many benefits for companies and society. Businesses acting with the understanding of GSCM can optimize their activities and avoid waste by using their resources (water, energy, materials, natural resources, etc.) in the most ideal way. In addition, businesses can reduce their costs, increase their profitability, produce new environmentally friendly products, create a good image, and increase their level of competition [Zhao, 2016: 6-17]. Some of the benefits for society are clean environment, reduction of climate change, reaching the desired product on time, healthier products or services, reduction of epidemic diseases such as COVID-19, and leaving a good world to future generations.

When the literature in the field of GSCM is examined, organizational, environmental, and financial performance issues are among the leading research. Furthermore, market performance,, financial performance and senior management commitment (Blome et al., 2014; Diab et al., 2015) are among the main topics of GSCM in the field of corporate pressures (Zhu et al., 2013). Also, Chin et al. [2015] conducted studies on environmental cooperation and sustainability performance, Murphy [2012] on the success factors that are the basis for achieving GSCM performance, and Mao [2012] on sustainable development.

One of the most important goals of businesses is to have very good organizational performance. Until recently, organizational performance was divided into financial performance [Feng et al., 2018; Khan, Qianli, 2017] and environmental performance [Seman et al., 2019] and was evaluated in that way. However, studies that are evaluated separately are confusing, inconsistent, and complicated. Furthermore, studies on GSCM performances [Hashmi and Akram, 2021; Feng et al., 2017] are not clearer and more understandable due to being one-sided (business-oriented). Therefore, in the field of GSCM, it is necessary to determine the relationships between variables and conduct more in-depth research, including final customers.

As mentioned above on GSCM, there are few studies on operational, environmental, and economic performance. On the other hand, generally refer to the relationships between performances. Additionally, performance percentages in companies are high. However, there is no study on the determination of the performance status of an exemplary business in GSCM and the evaluation of the business performance of the final customers in this regard.

In this study, the GSCM performances of a large operator in the construction sector are determined. In addition, the status of business performance is determined in the eyes of the final customers. Thus, by determining the levels of relations between the business and its customers, it is revealed what measures should be taken in order to develop relations. Furthermore, in this

study, it is ensured that GSCM applications are made in business. GSCM is important in that it raises awareness in a different field, with a different perspective, in the business and in the society, and is the first original research that includes the final customers. For this, the relationships between GSCM applications (environmental management policy (EMP), green purchasing (GP), green marketing (GM), green production (GPR.), green logistics (GL), and green information systems (GIS)) are required for both the business and the customer), and the GSCM performances of the enterprise in the past years (operational performance (OP), environmental performance (EP) and financial performance (FP)) were investigated both in terms of the business and the customer.

The construction sector is one of the most important economic dynamics in Turkey. It affects more than 200 different sectors connected to it [Yavuz, 2019: 2]. The construction sector contributes to the development of the country's economy through the construction of houses, roads, bridges, and dams. With the development of the sector, there is an increase in the rates of gross domestic product, and on the contrary, a decrease occurs [Çınar, 2018: 26]. For these reasons, the construction sector was preferred in our research and the research data were collected by obtaining the necessary permission from the company.

LITERATURE REVIEW

Green Supply Chain Management Applications and Operation Performance

In GSC management, operational performance can be improved by reducing costs, preventing waste, improving the quality of products, and increasing efficiency and productivity. Factors such as delivery times, inventory levels, quality of products and services, capacity utilization rates, and scrap rates are listed as performance metrics. In addition, perceived quality of the products, position of the products in the market, presence of better quality products, the reduction of waste, and the sales in the international market are accepted as operational performance criteria [Lee, 2013: 27].

Businesses are faced with legal and environmental pressure to protect the environment while producing under competitive conditions. Therefore, customers and regulators are constantly pushing businesses to increase their operational efficiency and produce products that protect the environment [Kleindorfer et al., 2005].

Businesses that manage their operational performance well can reduce their costs, increase their profitability, produce new environmentally friendly products, create a good image, and increase their level of competition [Zhao, 2016: 6-17]. In addition to these, they also obtain positive contributions such as safety image, environmental image, image in areas of social responsibility and gaining the loyalty of customers [Çapan, 2008:10-11].

The operational performance measurement factors related to GSCM can be listed as the efficiency of reverse logistics and logistics distribution network, the environmental green image perceived by the society, the green certificates and green image of the suppliers, the compliance of the materials used with ecological design, the green practices in the labeling of the products, the amount of material obtained in recycling, the situation in cooperation with customers and suppliers, the percentage values of the materials that can be recycled, the percentage values of the products determined as waste, the amount of raw materials per product, the amount of energy used per product, the average amount of fuel consumed in vehicle fleets, the amount of pollutants in the air (Günday, 2018: 68-69; Büyüksaatçı, 2009: 30).

Thus, we propose that:

Hypothesis 1: The GSCM applications of the enterprise (EMP, GP, GM, GPR., GL, GIS) are positively related to operational performance.

Hypothesis 2: According to final customers, the GSCM applications of the enterprise (EMP, GP, GM, GPR., GL, GIS) are positively related to operational performance.

Green Supply Chain Management and Environmental Performance

Environmental performance is defined as "the degree to which enterprises improve their performance in accordance with their environmental responsibilities". This performance can be achieved as a result of green practices. Today, performing and monitoring performance studies in SCM activities has become important [Lee, 2013: 24].

The ability of companies to develop environmentally conscious strategies depends on their resources and capabilities. If businesses act according to their strategic business policies and environmental policies, they can use their resources more effectively and efficiently and gain a competitive advantage. In other words, it depends on in-house integration for environmentally friendly production. With environmental policies, while businesses provide economic gains, the consumption of natural resources (mines, air, water, energy, etc.) decreases. If customers and other stakeholders act in environmental cooperation within the SC, the use of natural resources can be reduced by increasing recyclable materials [Suansawat, 2013: 78-80].

There are laws and regulations to protect the environment in Turkey. However, there are no serious targets in the conscious use, re-evaluation, and re-use of resources. Strong state willpower is needed to set serious rules and create policies to protect the environment. In this regard, with the support of local governments, environmental protection cooperation can be achieved among SCM stakeholders. For a more environmentally friendly SCM, the necessary financial resources can be determined and implemented [Toprak, 2017: 190]. Environmental performance is determined by the Department for Environment, Food and Rural Affairs (DEFRA) in 4 main categories (air, water, soil emissions, and resource use) and 22 key indicators. The first category is the waste that each enterprise has left to the environment. These wastes can be hazardous materials as well as recyclable materials. The ISO (International Organization for Standardization) 14001 environmental management system has been developed in order to evaluate and record the environmental performance of enterprises. This ISO-developed criterion can be applied in all kinds of businesses. Additionally, the ISO 14031 standard was developed to guide companies in designing and using environmental performance [Suansawat, 2013: 42-45]. The ISO 14031 standard is based on the plan-do-check-act (PDCA) model. Thus, it creates an infrastructure for continuous improvement and reporting to organizations in areas such as environmental protection, lean production, and sustainable development. The PDCA cycle also forms the basis of the SC management performance system [Shaw and Grant 2010: 327].

Environmental protection activities can provide a sustainable competitive advantage among companies. Some of the benefits of environmental performance to businesses can be listed as providing improvements in costs and productivity, improvements in product quality, increases in market share, more comfortable competitive advantage, increases in employee motivation, and improvements in communication with customers [Zhu and Sarkis, 2004: 269-270].

Thus, we propose that:

Hypothesis 3: The company's GSCM applications are positively correlated with environmental performance.

Hypothesis 4: According to final customers, the company's GSCM applications are positively related to environmental performance.

Green Supply Chain Management and Financial Performance

Businesses must constantly evaluate their financial performance to maintain their assets in a healthy way and make the right decisions. In addition, businesses evaluate their financial performance to reveal where and how much they have spent, what gains they have achieved, and what new investments may be in the future. Since financial performance is a very comprehensive field, studies are carried out in many areas such as accounting, economics, management, and marketing. Traditional and modern metrics are

used to measure financial performance. Traditional criteria are accounting content and include studies on the costs incurred as a result of the activities performed. In the modern approach, in addition to the traditional approach, there is a performance measurement based on market conditions. Some researchers who want to measure the financial performance of the business use accounting data by making use of financial statements, while others use data obtained from the market value of the business [Kurt, 2020: 69-71].

The existence of studies in which GSCM-related activities affect financial performance positively or negatively creates uncertainty. However, the source of motivation for GSCM activities is financial factors. The decrease in external costs of the enterprise affects financial performance positively. Competitiveness and company image in GSC management can increase the financial performance of the enterprise by facilitating market entry [Günay, 2018: 70].

Environmental management has a direct relationship with the financial performance of an enterprise. Financial performance is associated with short-term profitability and sales performance [Zhu et al., 2004: 462]. Financial performance is expressed as the financial profit obtained through GSCM activities. The increase in profitability, sales, and economic benefits in market share represent financial performance [Lee, 2013: 28].

Financial performance is one of the priority issues to determine the status of production and service enterprises. Fulfillment of production or services in the desired time and amount is related to the financial power of the enterprises. Financial performance is related to the purchasing of companies, energy consumption, waste management, and legal penalties [Günday, 2018: 69-70].

Thus, we propose that:

Hypothesis 5: The firm's GSCM applications are positively correlated with financial performance.

Hypothesis 6: According to the final customers, the GSCM applications of the enterprise are positively related to the financial performance.

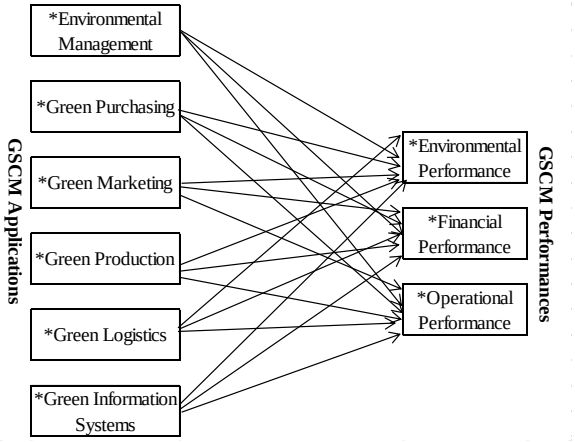

Fig.1. Research model

The model of the study for the business and final customers is shown in Figure 1.

METHODS

Sample and data collection procedure

The data in the first part used in this study consists of lower, middle, and senior managers working in a large business operating in the construction sector in Turkey. The name of the business was not given due to competition conditions. The data in the second part consist of final customers located in Yenice, Çanakkale. The reason why the construction sector is preferred is that one of the most important dynamics of the Turkish economy from 2002 to 2020 is the construction sector and it has relations with more than 200 subsectors. The convenience sampling method was used in both research sections and participation in the survey was voluntary. Data were collected between September and December 2020.

In the first part, an online questionnaire was sent to 200 managers working in the business (under the conditions of the Covid-19 pandemic). The sample size was calculated as 82, with an error rate of 10% and a confidence interval of 90% in a population consisting of 200 managers (lower, middle, and senior managers). 86 participants responded to the online

questionnaire and 86 data were evaluated. 26.5% of the participants in this section are women and 73.5% are men. The ratio of undergraduate and graduate graduates is 69.9.

The second part, made for the final customers, consists of people over the age of 18 in Yenice, Çanakkale. To determine the sample size of the data collected face-to-face and online, the sample number was calculated as 134, with 90% confidence interval and 10% margin of error. In the study, data were collected from 288 people. However, as there were inappropriate, unusable, and unanswered questions in 13 questionnaires, they were excluded from the study and 275 data were evaluated. 38.2% of the participants in this section are women and 61.8% are men. The ratio of those who have an associate degree and a bachelor's degree is 58.9. Reliability, frequency, KMO, and correlation analyzes were performed to determine the hypotheses.

Measures

The scales in the study were obtained from Öçlü's [2015] master's thesis. Öçlü coded as "I agree", "Partly agree", "Neither agree nor disagree", "Partly Disagree" and "Disagree" using a 5-point Likert scale. The scale of the study was changed to a 6-point likert, in order to get clearer answers from the survey questions and considering that the participants could give an average answer (Neither Agree or Disagree). The variables in the whole study were measured using a six-point Likert scale ranging from 1 to 6 (1=Strongly Disagree, 2=Disagree, 3=Somewhat Disagree, 4=Somewhat Agree, 5=Agree, and 6=Strongly Agree).

Control Variables

Reliability refers to how much of the measurement tool is free from random errors. Errors can be caused by measurement tools, not understanding the questions, and editing the data. The importance of reliability is that as error rates increase, the confidence in the scale decreases. A reliable scale is one that measures without error. Methods such as test repetition, equivalent forms, and internal consistency methods can be used for reliability calculation. The internal consistency method is used to apply the scale once. The coefficient as a result of the reliability analysis can vary between 0 and 1 numerically. The Cronbach Alpha coefficient is used in the internal consistency method to evaluate reliability. This value is found by dividing the variances of all the variables in the scale by the total variance of the general scale. If this value is less than 70%, the scale is not reliable. However, acceptable scale reliability can be reduced to 60% in exploratory studies [Okumuş, 2018: 242-244]. Reliability analysis results of both survey data were made for the research.

The Cronbach Alpha (α) values obtained according to the analysis results can be interpreted as follows [Öçlü, 2015: 106].

$a < 0.40$	Scale Is Not Reliable
$0.40 < \alpha < 0.60$	Low Confidence Scale
$0.60 < \alpha < 0.80$	Scale Is Highly Reliable
$0.80 < \alpha < 1{,}00$	High Confidence Scale

Table 1. Reliability results of business and customer data scales

Variables	Number of Items	Measuring range	Cronbach Alpha Coefficient (business)	Cronbach Alpha Coefficient (customer)
EMP	7	6 Likert	0.91	0.866
GP	6	6 Likert	0.884	0.890
GM	7	6 Likert	0.883	0.842
GPR.	5	6 Likert	0.876	0.894
(GL)	4	6 Likert	0.879	0.861
GIS	4	6 Likert	0.911	0.880
EP	6	6 Likert	0.947	0.929
FP	5	6 Likert	0.89	0.884
OP	6	6 Likert	0.884	0.883

As seen in Table 1, the reliability (Cronbach Alpha values) of the data collected from businesses and customers is quite high.

The validity of the data for analysis was evaluated by looking at Exploratory Factor Analysis (Kaiser-Meyer-Olkin) values. Kaiser-Meyer-Olkin (KMO) values range from 0 to 1. If the partial correlation sum is greater than the correlation sum, it means that the KMO value is zero, and this indicates the spread in the correlation model. The reliability of the data increases as the KMO value approaches 1. If the KMO value is 0.5, data analysis can hardly be accepted [Andy 2013: 1974].

Table 2. KMO values of scales applied in the enterprise

Variables	Percentage of variance explained	KMO value	Barlett test	Number of component factors	sd value	p value
EMP	64.971	0.861	359.30	1	21	0.000
GP	65.197	0.814	298.77	1	15	0.000
GM	60.177	0.861	294.21	1	21	0.000
GPR.	67.050	0.852	203.66	1	10	0.000
GL	73.741	0.744	194.93	1	6	0.000
GIS	79.302	0.790	248.82	1	6	0.000
EP	79.088	0.903	463.56	1	15	0.000
FP	69.679	0.794	276.40	1	10	0.000
OP	63.89	0.834	263.64	1	15	0.000

The KMO analysis results of the business and customer data are given in Table 2. In the analysis, multiple variables were gathered under a single factor and the variance and KMO values were close to 1. Additionally, since the "p" value is less than 0.05, the data are in good condition for analysis and the analysis can be continued.

DATA ANALYSIS AND RESULTS

Descriptive Statistics and Correlation Analysis

Descriptive statistics and correlation analysis results for enterprise data are given in Table 3.

According to the results of the correlation analysis matrix in Table 3, the "r" and "p" values between the GSCM applications of the enterprise (EMP, GP, GM, GPR., GL, GIS) and the operational, environmental and financial performance are significantly and positively related. According to the final customers, it is seen in the matrix in Table 4 that the "r" and "p" values between the GSCM applications of the enterprise (EMP, GP, GM, GPR., GL, GIS) and the operational, environmental and financial performance are significant and positive. In this case, hypotheses H2, H4 and H6 are supported. The strongest positive relationships in the matrix are between GIS – OP (r=.524**, p< 0.000) and GL – OP (r=.503**, p< 0.00).

DISCUSSIONS AND CONCLUSION

There have been many studies on financial and operational performance in different countries on green supply chain management [e.g. see, Hashmi and Akram, 2021; Feng et al., 2017]. However, there is a lack of clear information and evidence on how GSCM practices directly and indirectly affect their operational, environmental, and financial performance [Golicic, Smith, 2013].

In this study, the relationships and severity of the relationships between the business and final customers GSCM applications and the operational, environmental, and financial performances of the business were determined. Furthermore, external pressures and their importance levels for green activities in terms of businesses and customers were determined. The results of the study support the hypotheses formulated. The first and second hypotheses of the study, according to the business and the final customer (H1 business, H2 customer), have been

confirmed that GSCM applications positively affect the operational performance of the business. There are differences between the effect levels of both results. Although the results of the first processing are close to each other, the greatest effect is between GP-OP (r=.518**, p< 0.00). Similarly, although the final customer results are close to each other, the most impact is between GIS-OP (r=.518**, p< 0.00). Hashmi & Akram [2021], Feng et al., [2017] and Jawaad & Zafar [2019] found a positive relationship between GSCM and operational performance, similar to this study. Furthermore, in this study, the employees of the company believe that the most important factor that increases the operational performance is the GP. Final customers, on the other hand, believe that the green information system contributes more to operational performance.

The third and fourth hypotheses of the study, (H3 enterprise, H4 customer), according to the enterprise and the final customer, were confirmed that GSCM applications positively affect the environmental performance of the enterprise. There are differences between the effect levels of both results. The most effect on the results of the processing is between GPR.-EP and GIS-EP (r=.739**, p< 0.00). Similarly, Kumar et al. [2019] and Rao and Holt [2005] determined that green supply chain management is an element that reduces environmental pollution and increases the efficiency of the enterprise that protects the environment. Furthermore, although the final customer results of the customers are close to each other in this study, the most impact is between GIS-EP (r=.466**, p< 0.00). In this case, while the employees of the company believe that the most important element that increases environmental performance is the GPR., the customers believe that the green information system contributes more to environmental performance.

Table 3. Correlation matrix of enterprise performance with GSCM applications

Variables		EMP	GP	GM	GPR.	GL	GIS	EP	FP	OP
EMP	Pearson Correlation	1	.572**	.584**	.571**	.606**	.680**	.728**	.523**	.457**
	Sig. (2-tailed)		.00	.00	.00	.00	.00	.00	.00	.00
GP	Pearson Correlation	.572**	1	.754**	.540**	.688**	.515**	.480**	.417**	.518**
	Sig. (2-tailed)	.00		.00	.00	.00	.00	.00	.00	.00
GM	Pearson Correlation	.584**	.754**	1	.621**	.683**	.584**	.626**	.522**	.501**
	Sig. (2-tailed)	.00	.00		.00	.00	.00	.00	.00	.00
GPR.	Pearson Correlation	.571**	.540**	.621**	1	.727**	.686**	.739**	.584**	.507**
	Sig. (2-tailed)	.00	.00	.00		.00	.00	.00	.00	.00
GL	Pearson Correlation	.606**	.688**	.683**	.727**	1	.628**	.561**	.504**	.475**
	Sig. (2-tailed)	.00	.00	.00	.00		.00	.00	.00	.00
GIS	Pearson Correlation	.680**	.515**	.584**	.686**	.628**	1	.739**	.578**	.492**
	Sig. (2-tailed)	.00	.00	.00	.00	.00		.00	.00	.00
EP	Pearson Correlation	,.728**	,.480**	,.626**	,.739**	,.561**	.739**	, 1	,.556**	,.685**
	Sig. (2-tailed)	.00	.00	.00	.00	.00		.00	.00	.00
FP	Pearson Correlation	,.523**	,.417**	,.522**	,.584**	,.504**	.578**	, .685**	, 1	, .672**
	Sig. (2-tailed)	.00	.00	.00	.00	.00		.00	.00	.00
OP	Pearson Correlation	,.457**	,.518**	,.501**	,.507**	,.475**	.492**	, .556**	, .672**	, 1

	Sig. (2-tailed)	.00	.00	.00	.00	.00		.00	.00	.00

(**) The correlation shows that it is significant at the 0.01 level.

Table 4. Correlation matrix of enterprise performances with GSCM applications according to final customers

	Variables	EMP	GP	GM	GPR.	GL	GIS	EP	FP	OP
EMP	Pearson Correlation	1	.718**	.502**	.503**	.562**	.528**	.446**	.350**	.423**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
GP	Pearson Correlation	.718**	1	.585**	.573**	.552**	.538**	.422**	.364**	.386**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
GM	Pearson Correlation	.502**	.585**	1	.717**	.668**	.623**	.305**	.339**	.396**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000
GPR.	Pearson Correlation	.503**	.573**	.717**	1	.773**	.670**	.381**	.383**	.443**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
GL	Pearson Correlation	.562**	.552**	.668**	.773**	1	.751**	.462**	.399**	.503**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000
GIS	Pearson Correlation	.528**	.538**	.623**	.670**	.751**	1	.466**	.411**	.524**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
EP	Pearson Correlation	.446**	.422**	.305**	.381**	.462**	.466**	1	.647**	.730**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
FP	Pearson Correlation	.350**	.364**	.339**	.383**	.399**	.411**	.647**	1	.626**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000
OP	Pearson Correlation	.423**	.386**	.396**	.443**	.503**	.524**	.730**	.626**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000

The fifth and sixth hypotheses of the study, (H5 enterprise, H6 customer), according to the enterprise and the final customer, were confirmed that GSCM applications positively affect the financial performance of the enterprise. There are differences between the effect levels of both results. The most effect on the results of the processing is between GPR.-FP (r=.584**, p< 0.00). Similarly, Rao and Holt [2005] and Zhu et al. [2013] reported that green practices have a positive relationship between profitability and financial performance of enterprises. Furthermore, although the final customer results are close to each other in this study, the greatest effect is between GIS-FP (r=.466**, p< 0.00). In this case, the most important element that increases the environmental performance of employees is the GPR. while customers believe that the green information system contributes more to environmental performance.

In addition to these, Hashmi and Akram [2021] found the highest level of relationship between GSCM and FP (r=.680**, p< 0.01) in their study between GSCM and OP, EP and FP for businesses. In this study, the highest relationship level in terms of business is GIS and GPR. and EP (r=.739**, p< 0.00). Unlike other studies, to protect the environment, it is necessary to reduce environmental waste in environmental performances and spread environmental awareness more than activities aimed at reducing costs in financial performances in this study.

In summary, in this research conducted for businesses and final customers, the GSCM applications of the business are not fully informed or understood in terms of final customers. While the enterprise effect of the GSCM applications on the performance of the enterprise is high, the final customers are low. Additionally, as a result of frequency analysis, while the company's employees believe that environmentally friendly works are sufficient, the final customers believe that environmentally friendly work should be increased. Furthermore, the most recyclable material in the enterprise was determined as "plastic", while the final customers mentioned "cardboard". In this respect, the GSCM activities implemented in the enterprise will be able to contribute more to the image and profitability of the enterprise by informing the final customers.

In addition to the business differences between the results and the final customer, the similarities are as follows. In both, recycling bins are at the forefront of the most important waste facilities. All parties should act with understanding of GSCM in the prevention of epidemics.

Factors that will push people to be environmentalists (customers, non-governmental organizations, state authority, competitors, and environmental awareness) see the first as customer pressure and the second as the pressure of non-governmental organizations. The final customers are environmental awareness first, and nongovernmental organizations second. This situation shows that while businesses evaluate the environment according to self-harm, end customers think more about environmental issues.

The necessary trainings should be increased in terms of final customers, environmental protection, and raising awareness. With the environmental awareness that will be formed in society, businesses will focus able to be more directed towards green activities. For a more environmentally friendly SCM, state authorities need to provide more solidity and act in cooperation with businesses. Businesses can be encouraged to be more innovative and act with environmental awareness.

One of the most important limitations of the research is that the study was carried out in the Covid-19 pandemic outbreak. Due to the pandemic, it was not possible to reach more participants. However, the minimum data collection levels that can represent the main population have been reached. In face-to-face data, the possibility of misunderstanding or incompleteness of the subject explained to the final customers by wearing a mask is another limitation. In addition, while some of the people participating in the survey answer the questions, there may be measurement errors due to the possibility of choosing the ideal rather than the current situation. In addition, choosing a company from among existing industrial establishments is another constraint.

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