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The Intermediate Impact Of Green Brand On The Relationship Between Green Supply Chain Activities And Sustainable Environmental Performance: An Analytical Study Of The Opinions Of A Sample Of Employees Of The Union Food Industries Company Limited In The Province Of Babylon

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***Abstract* :** The main objective of the current study is to measure the role of green supply chain management activities (green design, green buying, green manufacturing, green distribution, green transportation) in sustainable environmental performance (economic performance, environmental performance, and social performance) through green brand's intermediary role of (Green brand image, awareness toward the green brand, trust toward the green brand, and satisfaction toward green brand) among a sample of employees of the Union Food Industries Limited in the province of Babylon, where the sample study was (300) workers. Thus, the problem study was formulated concerning the relationship between the variables involved in the study, which, as a result, set the objectives study, which was represented by the hypothetical scheme. It crystallized the formulation of particular hypotheses that were measured in the statistical package to model structural equations in the method of tiny squares (Amos.V.26), and to analyze what was provided by study management, a set of statistical methods was used in the form of confirmatory analysis, the Kronbach Alpha coefficient, the determining factor (R2), and the natural distribution of data. The descriptive statistics of the arithmetic mean, standard deviation, and correlation coefficient, and the results study showed a clear and vital perception of the relationship between green supply chain management, sustainable environmental performance, and green branding. Perhaps the most critical findings study are reflected in a positive statistically significant correlation and impact between green supply chain management, sustainable environmental performance, and green brand, as well as the need for Etihad Food Industries to focus on using user-friendly products to increase efficiency. This requires taking advantage of the advice and guidance provided by your suppliers.

Keywords: Green supply chain management, sustainable environmental performance, green brand.

Introduction: Sustainability is a recent issue, and a sustainable organization can thrive and achieve long-term success through a clear vision of its actions and specific goals, which stand alongside the achievement of societal, economic and environmental goals in a positive way. What is the tendency of most business organizations to invest brands aimed at preserving the environment based on green orientation, green brand helps to achieve excellence by creating certain environmental values for customers, and then create environmentally friendly market sectors, which makes the company ahead of its competitors in the market environment, Delivering superior customer value is a key strategy that many companies follow to gain competitive advantage and achieve long-term success.

Today in the business world, which is dominated by many rapid fluctuations as a result of the development of communication technology and intense competition that has cast its shadow on the production processes, so many organizations have searched for modern practices and methods that suit the requirements of the era. Green supply chain management has become the true artery for the growth and sustainability of any company as it forms the first key link that connects it to its processors, consumers and customers to become more responsive to the changing competitive environment around it

The economic boom as a result of technological development has led to further environmental degradation and increased air, water and soil pollution through increasing the output of industrial organizations and the accompanying clear energy consumption and waste disposal, as supply chain management has become an important competitive approach for organizations in this environment. Therefore, it has become necessary for organizations to move toward practices that lead to this, and that these practices take precedence in their activities and daily work and find appropriate ways without harming the environment and the consequences of their activities of pollutants and environmental waste. Green supply chain management has emerged as an organizational philosophy that helps the organization to make profits and expand its market share by reducing risks and environmental impacts. This strengthened the search to address the negative phenomena of the environment by adopting green supply chain management and to identify its implications in the competitive advantage of the organization and improve its competitive position.

The current study highlights the importance of green supply chain management activities (green design, green buying, green manufacturing, green distribution and green transportation) in sustainable environmental performance (economic performance, environmental performance, and social performance) through green brand's intermediary role (Green brand image, awareness toward green brand, trust toward brand).

part One: Methodology study

First: problem and questions study

The developments and developments in the environment have resulted in the product of variables and events that will affect the tastes of customers and their requirements, which creates a challenge for the Union Food Industries Company toward developing green supply chain activities and guiding customers' concerns in the preservation of the environment through green brand (green brand image, Awareness toward green brand, trust toward green brand, and satisfaction toward green brand) in order to improve sustainable performance, so achieving customer requirements is the key driver through which the company can focus on meeting it, and make it the main goal through which to improve the company in general.

Most business organizations, especially those working in the field of industry, have been interested in defining their strategic directions to the market and drawing their marketing strategies accordingly, and these organizations are trying hard to apply these visions and ideas in the field reality of their work and achieve excellence and success and achieve uniqueness and discrimination. Hence study problem can be formulated in an important and fundamental question (can the relationship between green supply chain activities and sustainable environmental performance be enhanced through a green brand?).

From this question arises a set of sub-questions:

1. What is the level of awareness of employees of green supply chain activities practiced by the Union company?
2. What is the nature of the sustainable practices of environmental performance practiced by the Union Company?
3. What is the level of green branding practiced by the employees of the Union company?
4. Is there a moral impact of green supply chain activities on sustainable environmental performance, and how can a green brand be employed in order to strengthen the relationship between them?
5. Is there a moral impact of green Brand on Etihad's sustainable environmental performance?

Second: objectives study

The current study provides a conceptual framework that explains a structural model of sustainable environmental performance based on the company's approach to building positive relationships with the customer by offering special activities that frame the relationship with him, and understanding the precedents that can improve sustainable environmental performance. The objectives study could therefore be formulated as follows:

1. Determine the level of employee awareness of green supply chain activities practiced by the Union Company.
2. Identify the nature of sustainable practices of environmental performance practiced by the Union Company.
3. Identify and disclose the level of green brand practiced by employees of the Union Company.
4. Identify the nature of the relationship of the moral impact of green supply chain activities on sustainable environmental performance, as well as the employment of green brand in order to strengthen the relationship between them.
5. Determine the nature of the relationship of the moral impact of green brand in the sustainable environmental performance of the Union company.

Third: importance study

The importance study lies in the realism and applicability study and the extent to which the sample study entity benefits from its focus on the problems currently existing, and in this sense can determine the importance study as follows:

The current study highlights the existence of two important gaps that distinguish it from the other studies that dealt with its subjects by comparing them to other variables, as study derived its importance from the importance of covering three variables (green supply chain activities, green brand, and sustainable environmental performance). Drawing its current structures has earned it a special importance in which it distinguished itself from other studies corresponding to it in the field of competence, and that this thesis focuses mainly on the introduction of the use of green trend as a contemporary phenomenon suffered by the industrial sectors in their products and the preservation of the environment, which requires attention to it, The current study also attempts to bridge the knowledge gap by adding an intermediate variable between green supply chain activities and sustainable environmental performance, as recommended by several previous studies.

Fourth: Study model and the development study hypotheses

After presenting the problem, importance, and objectives study, the next step is to develop study hypotheses, which require the construction of a hypothesis chart for study that reflects the nature and type of relationship between the

variables, and that the construction of the hypothetical chart study requires the presentation of a set of previous cognitive efforts, and Figure (1) illustrates the hypothetical scheme study.

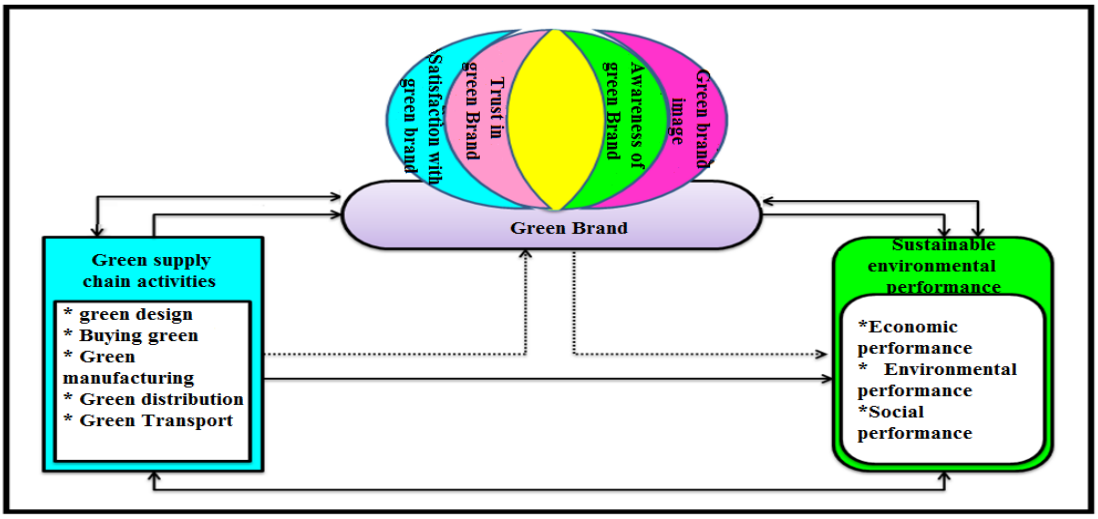

Figure (1) the hypothetical scheme study

The hypotheses study are formulated by starting from the questions presented and the problem study and its hypothetical scheme:

The first major hypothesis: There is a statistically significant correlation between green supply chain activities, sustainable environmental performance, and green branding, from which several sub-hypotheses branch out.

The second key premise: There is a statistically significant, moral impact of green supply chain activities on sustainable environmental performance through green brand.

Fifth, study variables

The second section included the questionnaire tool with paragraphs and dimensions study variables (green supply chain activities, green brand, sustainable environmental performance), the tool aims to create new knowledge and better understanding study topics. Study deals mainly with different forms of knowledge, so it gave workers time and freedom to answer the paragraphs of the measuring instrument, as shown in table (1).

Table (1) Interface of the measuring instrument

The variable	Distance	Number of paragraphs	Source
Green supply chain activities	green design	5	Sezen and , Yildiz 2017
	Buying green	5	
	Green manufacturing	5	
	Green distribution	5	
	Green Transport	5	
Green Brand	Green brand image	5	Kotler & Keller,2012
	Awareness of green Brand	5	
	Trust in green Brand	5	
	Satisfaction with green brand	5	
Sustainable environmental performance	Economic performance	5	Gerdessen& Pascucci,2013
	Environmental performance	5	
	Social performance	5	

Sixth: The sample study

The community and sample study consists of the directors of units, departments and employees (workers, employees, people officials and their assistants) in the Union Company for Food Industries in the province of Babylon, and the number of (1125) workers and employees, in various levels and functional specialties. The random sample method was adopted in order to obtain the crisis data and the sample size was determined by relying on the Stephen Thampson equation because it is considered one of the most commonly used equations in academic studies.

Applying the equation shows that the minimum is (287), and therefore the researcher distributed the questionnaire to the individuals of the eye consisting of (350) form, and was retrieved (329) form, and when collecting and sorting the forms for the purpose of preparing them for analysis data, and the fact that (29) found damaged, and (21) not

recovered, This means that the number of valid questionnaires (300) is a survey (86%) of the sample response, showing the sample's interest in green supply chain activities, green branding, and sustainable environmental performance.

part two: The theoretical side

First, green supply chain

1. concept of Green supply Chain

Historically, we can talk about old supply chains by multiplying examples of supply chains in the Silk Road, an ancient trade route that was complex but flexible. There were many overlapping supply chains operating along the Silk Road that learned from each other in order to create value. Supply chains have been instrumental in the production, distribution and sale of a variety of products to a wide geographical area surrounding the Silk Road, from China to the Balkans and Europe for a long time in human history haksöz and Durak, 2011:2)).

Successfully transporting goods from east to west and west to east along the route the Silk Road was a difficult task requiring the development of many institutions. Creating a performance and risk management strategy was similar to current global supply chains. However, the spread of information in the 21st century everywhere about international trade did not exist. Thus, demand was not as common as supply. On the other hand, states and empires have emerged and benefited from Silk Road operations to gain the advantages of competitiveness. After observing the complex details of supply chains on the Silk Road, both spatial and temporal, we can conclude that the seeds of the modern era were planted as concepts and ideas for the global supply chain many centuries ago. For example, countries along the ancient Silk Road emerge as globally competitive entities in the new century, over time the seeds sown in ancient times sprout and open up modern supply chains for the 21st century. (haksöz and Durak, 2011:2)

(VORST, 2004:4) and around 1990, academics first described the concept of supply chain management, an English term abbreviated SCM composed of the initials of the words "supply chain management") SCM. It is better to meet consumer demand at lower costs. Supply chain management focuses on relationship management. Integrated planning, coordination and control of all business processes and activities in the supply chain to deliver superior value to the consumer at lower cost to the supply chain as a whole meeting the requirements of other stakeholders in the supply chain (e.g. government and NGOs).(VORST, 2004:4).

Supply chain is one of the active application areas in operational research and management science. The success of the company depends on the efficiency of strategic and tactical review and operational decision planning in the reverse logistics of green signature supply chain, production and distribution of products in the network. The supply chain is designed to meet consumers' demands and satisfaction in a timely manner and with the greatest possible efficiency and profitability. Dealing with the demands that need to be matched with supply, reliability, high quality and acceptable cost are the main problems in the design of the supply chain network with all its contents (Missniand Lee, 2017:104).

Based on the above literature, the researcher believes that the concept of green supply chain is an integrated system of work of the organization with environmental objectives in providing environmentally friendly services or products by reducing the negative impact of its products on the environment starting from the availability of raw materials, procurement, transportation, design, production and distribution to customers, brokers and vendors And recycle them as raw materials. This creates a relationship opportunity for the company to connect with other members suppliers, processors and customers in a long-term relationship through the exchange of raw materials and information technology.

2. Dimensions:Green supply Chain

Green supply chain concept includes the diversity of operations, personnel and activities in companies seeking to minimize the negative impact on the environment Vachon, and Kasslen2006:670)). The dimensions of green supply chain vary according to the views of researchers and vary according to the importance of the dimensions in the research and study addressed, for example (Lockamy and McCormack, 2004:1192) explained that there are several dimensions such as quality, cost and efficiency, or (Zhu et al, 2005) different dimensions that they added include production and internal management and the restoration of external management investment.

Lee et al., 2012:104))) referred to the procurement, production, internal environmental management, environmental cooperation with the customer and green procurement and identified (Teixeira et al. 2016) Restore investment, green thinking and green buying as dimensions of green supply chain. Some researchers (Weeratunge and Herath, 2017:126) identified dimensions as green design, green production, green distribution, and reverse logistics. This corresponds to the view of John, 2018:643) (which mentioned green design, green production, green distribution and reverse logistics.

The researchers (Sezen and, Yildiz 2017:97) referred to green buying, green distribution, green packaging, green training and production, green design, reverse logistics and environmental cooperation by the customer.

Second: green brand

1. concept of Green Brand

Green brand has emerged as a result of the emergence of green marketing, whose most important manifestation has been environmental crises, in recent years, which have included deforestation, air pollution, rising temperatures along with water and food shortages, in part due to economic factors and industrial developments. As such, all the above factors are at the forefront of the cause of conservation among many communities (Dolatabadi, 2020:2).

Climate change awareness has influenced the use of green brand as a global product and consumer support mechanism. After that, green brand images emerged as a powerful tool for marketers to engage climate change through the prominent focus on attracting the attention of buyers from consumers and there was a radical shift represented by marketing (Polonsky and Rosenberger, 2001:22), it led to transformational marketing practices that are environmentally friendly and accordingly, Organizations need to protect the planet through new scientific and technological developments that are less harmful to the environment. Because of the increased awareness of the environment and its issues, the process of selling green products is increasing steadily, so much so that customers still prefer to buy green products and companies have to develop new strategies, and in order to achieve competitive advantage gains they have to focus on green options such as green marketing (Dolatabadi, 2020:2).

Thus, after the momentum of the environmental crisis exceeded the threshold mark, which strengthened the public perception of green washing.in this context, a new market called the specialized market for environmentally interested consumers that excites companies to re-evaluate human consumption habits and shape green strategies for such responses will make green marketing tools. Such as environmental labels, environmental branding and environmental advertising, public perception is easier toward awareness of the properties and characteristics of green products, thus directing them to buy environmentally friendly and friendly products (Todd,2004:89).

Grant (2008:65) comments on this as he considers the most successful green brands to be those that rely on alternative technology or the company's green philosophy. Therefore, brands are preserving the environment and sustainable business practices, offering products and services that will reduce the environmental impact throughout their life cycle and therefore, green color is not an image value such as "gorgeous" or "classic", but rather a realistic assessment.

Green brands are trademarks that convey a product or service as environmentally friendly or friendly. These brands may use green letters or use the following conditions (organic natural environmental green with clean, biodegradable green carbon that can be recycled and contain recyclable or recyclable materials (Hack, 2010:3).

Green brand image covers functional benefits, symbolic benefits and experiential benefits. Therefore, a green brand image is a set of brands' perceptions associated with consumers' minds of environmental concerns and obligations by perspective (Chen, 2010: 31).

The researcher believes that green brand is a symbol of a product or service that is friendly or friendly to the environment. The symbol will in turn be a set of perceptions in the mind of the consumer related to the environmental obligations and environmental concerns of the company providing the product and that the image of that green brand is based on the resulting belief in its credibility, goodness and ability to environmental performance, it includes several features, the most important of which are green and environmentally sound production processes, and environmentally responsible uses of the product Or remove that product, including effective communication with the consumer and differentiate the brand from its competitors through those friendly qualities.

2. dimensions of green brand

Customers with certain environmental concerns are positively influenced by the decision to purchase a green product, price awareness and awareness of green brand images (2014:277,Zubair). Customers tend to prefer green brands because of their awareness of inter-growth, and this phenomenon has reinforced the role of green brands in changing customers' attitudes toward more environmentally friendly use patterns and has been defined as a set of characteristics and benefits associated with a variety of issues related to the reduction of interplay and ethical issues They organize and unify the company's efforts toward environmental sustainability and attract additional green investments to develop the company and the authors measure any added value to green brand of the company in general by deriving financial market estimates from the profits related to that green brand. This is done by using the financial market value of the company as a base and then extracting the added value of green brand of the company from it the value of other tangible and intangible assets of the company. Green brands act as an important driver of cash flow. It is important here to include the dimensions of green brand that the literature has generally referred to. After the development of the concept of a green brand, the researchers pointed out that green brand has various dimensions, the numbers varied with the diversity of views of researchers, some added and others only some dimensions included by others.

Fama (1993:7, Keller) researched the following dimensions (loyalty) of green brand, green brand image, green brand awareness, green brand appendages and the perceived quality of green brand) that were the basis for those who studied those dimensions.

He developed (2009:220, .Boo et al) a measure of the value of green brand by its dimensions when studying tourists in countries. The scale includes the following dimensions: Green brand awareness, green brand image, green brand quality, green brand value, and green brand loyalty.
(2012:55, .Christoulides, et al.) conducted qualitative research with green brand management experts to determine the dimensions of a green brand, then tested and validated its size in a multinational study. Their perception of brand value includes five dimensions of green brand awareness, heritage, uniqueness, reliability and willingness to sacrifice.)
His research (2001:25, Aaker) into the dimensions of green mark has included the following dimensions (green brand loyalty, green brand image, green brand awareness, green brand attachment and perceived green brand quality).

Third: Sustainable environmental performance

1. The concept of sustainable environmental performance

The word environment is one of the most common terms used by the general public and their private, and the concept of this word and its meaning is often associated with (environment and relationship pattern), which is linked to the use and purpose of its use, the whole universe constitutes an environment as well as land, state and home. It is possible to refer to the environment through human activity itself, such as the industrial, economic, cultural, agricultural, political, community and other environment, and on this basis it is not easy to develop a comprehensive concept that accommodates all areas of use of this concept, which requires knowledge of both these uses and areas (Peter & Ibrahim, 2009: 2) the environment is defined as the sum of physical, chemical, biological and social elements that can have immediate, potential, direct or indirect effects on human activities and on living organisms (Hasiloglu et al., 2011:1053).
Sustainability as a concept is a very prominent issue at the moment, as sustainability is more inclusive in nature and has long-term environmental concerns compared to sustainable development, sustainability from the environmental axis is empowering current people to prepare and protect the environment for future generations. (Yadav&Bandyopadhayay, 2014:130). Kamaruddin et al., 2016:730) showed that awareness of environmental issues may or may not affect an individual in order to participate in a particular activity in the environmental program, as other factors such as social standards, financial resources and other psychosocial conditions may affect him or her in order to participate in environmental programs.
Sustainable performance also means that performance is not only financial results and maximizes the benefit to shareholders, sustainability of performance requires taking into account the interests of workers, the local community, customers and the natural environment as well as future generations Rathore et AJ., 2020:497). He saw (di Vaio et al., 2020:2) that it is the challenge that organizations face in their business today, due to what some traditional organizations believe is the purpose of organizations to create short-term value and self-interest. While other non-traditional organizations believe that their business is intended to serve society, there is common ground to focus on the value that sustainable business performance can add to society and contribute to the sustainability of the triple bottom line (environmental, economic and social).
Based on the above, sustainable environmental performance is a combination of the capacities, skills and expertise that an organization uses to improve its scenarios to build its level of environmental, economic and social performance.

2. Dimensions of sustainable environmental performance

Sustainable environmental performance can be measured in three dimensions:
a) Economic performance: The principle of economic performance promotes a reasonable quality of life by enhancing the productive capacity of organizations and individuals in society. Economic performance involves the creation and distribution of goods and services that will help raise the standard of living worldwide. As open and competitive global markets that encourage innovation, efficiency and wealth creation, economic performance is intrinsically linked to the principles of social justice and environmental integrity (Bansal et al., 2005:198-199).
b) **Environmental** performance: Environmental performance focuses on investing natural resources in a way that meets an individual's need and reduces unnecessary depletion, as well as actively contributing to encouraging the organization to develop its potential to produce environmentally friendly products (Mallea, 2011:77).
c) Social Performance: Social influence implies a customer's cause in another customer to cause a change in their feelings, behavior, thoughts, and behavior, intentionally or unintentionally. Social impact refers to the degree to which service providers recognize their ability to influence strategic, managerial and operational outcomes of an organization's internal processes by influencing customer feelings and behaviors (sağnak et al., 2015:152). Saleem et al., 2017:130) showed that social impact represents the extent to which a service provider can influence decisions made by the organization about encouraging customers to purchase products

Part three: The practical side

First, test the data moderation

The results of table (2) show that data drawn from the surveyed community is naturally distributed, which means that the moral value study variables is higher than (0.05), which indicates that the results study can be generalized to the research community.

Table (2) Test the normal distribution study variables

Standards of comparison		The variables		
		Green supply Chain	Green Brand	Sustainable environmental performance
Arithmetic mean		3.76	3.71	3.75
Standard deviation		0.419	0.449	0.476
Kol-Smi	Absolute	0.072	0.099	0.092
	Positive	0.064	0.099	0.064
	Negative	-0.072	-0.067	-0.092
Statistical teacher		1.911	1.720	1.585
Sig.		0.200	0.200	0.200

Second, the stability of the measuring instrument

1. The results of table (3) show the stability of the measuring instrument by a strong PPI according to the classification (Cohen et al., 1983), and (0.746), indicating the consistency and consistency of the paragraphs of the measuring instrument, and according to the halves of the incidence (0.890) of the individual paragraphs and (30) paragraphs, and (0.875) by (30) paragraphs, The results study also showed that the sperman brown coefficient was (0.855), which means the harmony of the paragraphs of the resolution and their suitability for the interpretation and measurement of what is the norm for a measurement, while the value of the kutman coefficient of half-division was estimated At (0.854) and this confirms the strength of the relationship paragraphs of the measuring instrument.

2. Green supply chain model has a five-dimensional stability, a (25) paragraph with a total stability score of (0.918), and a distributed stability between its dimensions ranging from (0.919-0.928).

3. The stability of green brand model, which is represented in four dimensions, and by (20) paragraph with an overall stability degree of (0.917), and the stability of the distributor of its dimensions ranging from (0.919-0.925).

4. The sustainability of the sustainable environmental performance model is estimated in three dimensions, with (15) paragraphs with a total degree of stability of (0.918), and the stability of the distribution of dimensions ranging from (0.922-0.23).

based on the above, the Kronbach Alpha coefficient is highly stable, meaning that the measuring instrument is highly consistent and appropriate to the sample responses

Table (3) resolution stability test

variables				Number of paragraphs	cronbach Alpha coefficient	
Chairperson						
Green supply Chain	Green design			5	0.919	**0.918**
	Buying green			5	0.924	
	Green manufacturing			5	0.928	
	Green distribution			5	0.923	
	Green Transport			5	0.924	
Green Brand	Green brand image			5	0.925	**0.917**
	Awareness of green Brand			5	0.919	
	Trust in green Brand			5	0.923	
	Satisfaction with green brand			5	0.923	
Sustainable environmental performance	Economic performance			5	0.923	**0.918**
	Environmental performance			5	0.923	
	Social performance			5	0.922	
The correlation coefficient between the two parts of the resolution				**0.746**	**Strong direct relationship**	
The half-division factor	30	**Individually**	**0.890**		**His words meet the condition of consistency**	
	30	**My husband**	**0.875**		**His words meet the condition of consistency**	
The Sperman Brown factor				**0.855**	**It's hard**	
The Cotman factor of half-division				**0.854**	**It's hard**	

Third, describe study variables

1. Green supply Chain

Notes from the table (4) that the best dimension represented in green distribution dimension by a factor of difference of (13%) and a high calculation and oriented toward agreement of (3.77) and a standard deviation of (0.48), which means that the Union Food Industries Company is interested in improving its distribution capabilities through the use of suppliers with efficiency, effectiveness and a positive reputation. This generated a relative interest of (75%), and this variable was measured by five dimensions with an arithmetic mean between (3.66-3.80) and a high level and with a relative agreement between (73%-76%), and the results showed a differential coefficient between (13%-17%).

Table (4) Statistical description of green supply chain variable

NO.	mean	Direction of response	Level of response	Standard deviation	Relative importance of %	Level of availability	difference percentage
Green design	3.66	I agree	High	0.56	73%	Good	15%
Buying green	3.80	I agree	High	0.60	76%	Good	16%
Green manufacturing	3.76	I agree	High	0.63	75%	Good	17%
Green distribution	3.77	I agree	High	0.48	75%	Good	13%
Green Transport	3.79	I agree	High	0.54	76%	Good	14%
The total green supply chain variable							
	3.76	**I agree**	**High**	**0.42**	**75%**	**Good**	**11%**

2. Green brand variable

It is noted from table (5) that green **brand variable has** a maximum arithmetic mean of (3.71) and a standard deviation of (0.45), and a difference factor (12%), which shows the interest of the company by (74%) to the requirements of the labor market, To indicate that the best dimension represented in the image of green brand by a difference factor of (14%) and a high calculation and oriented toward the agreement of (3.82) and a standard deviation of (0.54), which means that the Union Company for Food Industries is interested in building a positive green image of its products presented in the labor market, This generated a relative interest of (76%), and this variable was measured by four dimensions whose arithmetic mean ranged from (3.64-3.82) to a high level and with a relative agreement between (73%-76%), and the results showed a differential coefficient between (14%-19%).

Table (5) Statistical description of green brand variable

Distance	mean	Direction of response	Level of response	Standard deviation	Relative importance of %	Level of availability	difference percentage
Green brand image	3.82	I agree	High	0.54	76%	Good	14%
Awareness of green Brand	3.70	I agree	High	0.54	74%	Good	15%
Trust in green Brand	3.68	I agree	High	0.58	74%	Good	16%
Satisfaction with green brand	3.64	I agree	High	0.68	73%	Good	19%
The total green brand variable							
	3.71	**I agree**	**High**	**0.45**	**74%**	**Good**	**12%**

3. Sustainable environmental performance changes

Notes from table (6) that the variable of sustainable environmental performance has a maximum arithmetic mean of (3.75) and a standard deviation of (0.48), and a difference factor (13%), which shows the interest of the company by (75%) to the requirements of the labor market, He pointed out that the best dimension represented in the dimension of social performance by a factor of difference (14%) and a high calculation and oriented toward agreement of (3.82) and a standard deviation of (0.55), which means that the Union Food Industries Company is interested in building positive relations with customers in order to invest these relations positively in building its resources Financial and social, and this generated a relative interest of (76%), and this variable was measured by three dimensions, with the average arithmetic range between (3.67-3.82) and a high level and a relative agreement between (73%-76%), and the results showed a fluctuating coefficient of difference between (14%-16%).

Table (6) Statistical description of the sustainable environmental performance variable

Distance	mean	Direction of response	Level of response	Standard deviation	Relative importance of %	Level of availability	difference percentage
Economic performance	3.67	I agree	High	0.60	73%	Good	16%
Environmental	3.74	I agree	High	0.59	75%	Good	16%

performance							
Social performance	3.82	I agree	High	0.55	76%	Good	14%
The total variable of sustainable environmental performance							
	3.75	**I agree**	**High**	**0.48**	**75%**	**Good**	**13%**

Fourth, test the assumptions

1. Assumption of connection

Table (7) explains the existence of a statistically significant correlation between green purchase and green brand and the value of the correlation coefficient (0.494) at a moral level (0.01), The strength of the relationship between green buying and green brand dimensions has earned the team a strong correlation strength for the trust dimension toward green brand and its value (0.270) to a moderate correlation strength of (0.446) for the awareness dimension toward green brand. This means that Etihad Food Industries recognizes the importance of the relationship between green buying and green branding by enhancing customers' awareness in order to earn their trust in their products.

Note from table (7) the existence of a moral relationship between green brand and sustainable environmental performance and the value of the correlation coefficient (0.681) at a moral level (0.01), This means that Etihad Food Industries recognizes the importance of the relationship between green brand and sustainable environmental performance through its focus on customer satisfaction and represents the core pillar that depends on the provision of high quality products, and based on the above, the correlation can be interpreted as a positive correlation.

Table (7) correlation matrix

Green supply Chain	Green Brand
Economic performance	
0.459**	**0.568****
Environmental performance	
0.487**	**0.528****
Social performance	
0.481**	**0.581****
Sustainable environmental performance	
0.580**	**0.681****
****. Correlation is significant at the 0.01 level (2-tailed).**	
Sig. (2-tailed)=0.000	

2. Assumption of impact

The second main assumption:

The 12th main premise states: (**There is a statistically significant, moral impact of green supply chain activities on sustainable environmental performance through green branding).**

To test this hypothesis, a structural model has been built that demonstrates the nature and type of relationship between green supply chain and sustainable environmental performance with green brand presence, as structural clarification of the indirect macro impact of green supply chain on sustainable environmental performance with green brand presence. Table (8) also shows that the more Etihad Food Industries recognizes the importance of green supply chain with the presence of green brand, the better sustainable environmental performance will be. In other words, increasing green supply chain with a green brand by one unit improves sustainable environmental performance by one standard weight (0.782), critical value (60.154) and standard error (0.013). This means that Etihad Food Industries recognizes the importance of refining green brand in order to ensure customer satisfaction and trust, which contributes to the company's awareness of the importance of achieving customer happiness around this brand because it is environmentally friendly.

The results of table (8) also show that green supply chain contributes to explaining (0.612) the variation in sustainable environmental performance with the presence of green brand, while the remaining value is due to factors not included in study.

Based on the above, the results of table (8) show that green brand has contributed to improving the strength of green supply chain impact relationship in sustainable environmental performance, as the results show an improvement of (0.66) in the standard estimates, and this has been accompanied by a decrease of (0.067) in the standard error, An improvement in critical value (9.851), meaning a reduction in the amount of risk that can improve a company's ability to improve its sustainable environmental performance, and the results showed a marked increase in the explanation of sustainable environmental performance with the presence of green brand (0.597) of the variation in green brand.

Table (8) Final results of the direct impact of green supply chain activities on sustainable environmental performance through green brand

Path	The standard	Standard error	The critical	R2	Sig.

					estimate		value		
Green supply Chain	--->		Green Brand		0.909	0.063	14.429	0.826	0.001
Green Brand	--->		Sustainable environmental performance		0.726	0.060	12.100	0.703	0.001
Green supply Chain	--->		Sustainable environmental performance		0.122	0.080	1.525	0.015	0.178
Green supply Chain	--->	Green Brand	--->	Sustainable environmental performance	0.782	0.013	60.154	0.612	0.001
The amount of improvement that green brand has brought about									
Green supply Chain	**--->	**Green Brand**	**--->	**Sustainable environmental performance**	**0.66**	**0.067**	**9.851**	**0.597**	**0.001**

part Four: Conclusions and recommendations

First: conclusions

1. The results show that the company is aware of the importance of green supply chain activities, and the statistical description shows the following:

a) The company has an interest in green design to enhance and sustain the relationship with its customers by offering price discounts to permanent and loyal customers with special offers that distinguish them from other customers.

b) The management of the company directs green manufacturing and distribution through its determination to study the requirements and needs of customers continuously in light of the constant communication with them and try to maintain them.

c) The company's management is committed to structuring and investing new systems to develop the relationship with its customers by providing after-sales services according to the customer's requirements and responding quickly to customer complaints.

2. The results showed that the Union Food Industries Company is interested in the commitment of suppliers to include the requirements and conditions of raw materials in a manner consistent with the conditions of the environment they deal with, as well as focusing on the maintenance of its equipment and tools periodically, which contributed to the implementation and use of programs to reorganize its manufacturing processes.

3. Etihad Food Industries is interested in enumerating different distribution channels for the delivery and delivery of products to the final consumer.

4. Etihad Food Industries is interested in implementing a program to reorganize manufacturing processes, which has improved Etihad Food Industries' ability to implement green transport system by investing off-peak times, redefining the numbers of trucks for transportation and identifying less crowded routes.

5. Etihad Food Industries is focusing on using some of its brand's environmental labels and logos, which has improved the company's ability to use means to understand the customer about the environmental logos and symbols used by the brand in its marketing campaigns.

Second: recommendations

1. The need for Etihad Food Industries to focus on the use of easy-to-use products that increase their efficiency, which requires the benefit of the advice and guidance provided by the suppliers with whom it deals.

2. The company management should focus on green supply chain activities by taking care of green brand and collecting and maintaining the necessary information about the tastes of customers and using it to study the different customer patterns that the company deals with and turn the requirements of customers into actual services.

3. The informed company should use green supply chain and green brand activities to improve sustainable environmental performance and enhance customer value and commitment, by ensuring that service providers do not overlook the importance of the relationship between green supply chain and green brand activities in increasing customer engagement.

4. The company should be aware of the importance of green supply chain activities, as improving these activities will enhance customers' awareness of their activities and therefore they are more willing to enter into new relationships with the company. By guiding customers' awareness of the benefits offered by green supply chain activities that may contribute to maximizing their returns.

5. The need for Etihad Food Industries to cooperate with distributors and suppliers to develop environmentally friendly marketing programs, which requires the company to improve its distribution capabilities through the use of efficient, effective and reputable suppliers.

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