

green behavioral loyalty as an mediating variable between social responsibility and green customer satisfaction: Applied study in Al-Qadisiya dairy factory

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Abstract: The purpose of the present study is to reveal the interactive role of and green behavioral loyalty as an intermediate variable between social responsibility and green customer satisfaction, accordingly, in order to reveal the level of availability of the study variables at the Qadisiyah dairy factory, the questionnaire tool was adopted as a measuring tool through which to detect problems and events that stand without preventing the development of the factory, Thus (70) forms were distributed to a group of associates inside the factory, after tabulating the data, it became clear that the valid data are (90) questionnaires, which means that the response rate was (90%), In order to show the results that the study seeks to clarify, a set of methods was used to test the applied aspect of the study, Perhaps the most famous of these methods are the arithmetic mean, the standard deviation, the level of significance, the Pearson correlation coefficient, and the influence factors between the internal variables according to the AMOS.V.24 program, Therefore, after showing the results of the study, it was found that there is a positive correlation relationship between the internal variables in the study (Social responsibility, green customer satisfaction, , and green behavioral loyalty), Consequently, the most important results of the study are represented in the fact that the studied plant focuses on providing opportunities to develop the skills of individuals through providing training, educational and development programs to them.

Keywords: social responsibility, green customer satisfaction and green behavioral loyalty.

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INTRODUCTION

Due to the development, complexity, rapid changes and the increasing competition among competitors, whether at the local or regional level, this has led to increasing and improving customers' awareness of the products and services offered by the companies, thus demonstrating the tastes of the customers. It has become a priority for the studied factory to adopt a set of related techniques and topics through which the long-term goals of social responsibility, green customer satisfaction and green behavior can be achieved in order to preserve customers and fulfill their requirements and satisfy their different tastes.

Social responsibility is one of the important pillars through which the organization can strengthen its ability to commit itself to economic, legal, moral and charitable responsibility, which in turn leads to the satisfaction of the green client by reducing the negative effects on society and the environment. Thus, the intermediary role of Green Behavioral Loyalty leads to sustainable satisfaction and creates a good image and reputation for customers for the studied factory.

Therefore, in order to show and measure the variables of the study, the study was divided into four investigations, the first of which included the scientific methodology of the study, and the second among the theoretical aspects of the study, which included four variables (social responsibility, green client satisfaction, and green behavioral loyalty), while the third one represented the practical side of the study. The fourth research included the findings and recommendations of the study

part One: Scientific methodology of study

First: problem of study

Developments and breakthroughs in the environment resulted in changes and events that could affect the tastes and requirements of customers, which creates a challenge for Al-Qadisiya milk factory to bear social responsibility in order to produce products that meet these different tastes and gain the satisfaction of the customer on the one hand, and to enhance the green behavior loyalty to the customer on the other. Therefore, meeting customer requirements is the main engine through which the factory can focus on meeting these tastes and making it the main and long-term goal through which the factory standard can be improved in general, and thus addressing this problem lies in determining the accurate answer to the next question (What methods and marketing methods can the Qadisiya dairy plant take responsibility for customer satisfaction and enhance their behavioral loyalty to the plant?)

Second: The importance of the study

The importance of the study lies in the following points:

- ١) The paucity of studies that combine two types of analysis between study variables, to the knowledge of the researcher.
- ٢) The study contributed to the sample's definition of social responsibility, green customer satisfaction, and green behavioral loyalty.)
- ٣) To indicate the level of importance of the study variables (social responsibility, green customer satisfaction, and green behavioral loyalty) in the Al Qadisiya dairy plant, and to determine the level of lacklusion the factory means toward each of the variables

Third: objectives of the study

The main objectives of the study are to be reflected in the following points:

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- 1) Determine the level of availability of study variables (social responsibility, green customer satisfaction, and green behavioral loyalty) at Al Qadisiya dairy plant
- 2) Determine the sample level of need considered for each of the study variables (social responsibility, green customer satisfaction, green behavioral loyalty).
- 3) Indicate the nature and type of relationship between study variables.

Fourth: hypothesis scheme of the study

In the light of the above problem, the importance and objectives of the study, a hypogonal study outline has been prepared to reflect the relationship between the study variables, see Figure 1, and therefore the study variables can be reflected in the following points:

- 1- **The independent variable:** - Social responsibility was represented in four main dimensions (economic responsibility, legal responsibility, moral responsibility, and charitable responsibility).
- 2- **Intermediate variable:** Green behavioral loyalty is a one-dimensional variable.
- 3- **Dependent variable:** - Customer's green satisfaction is a one-dimensional variable.

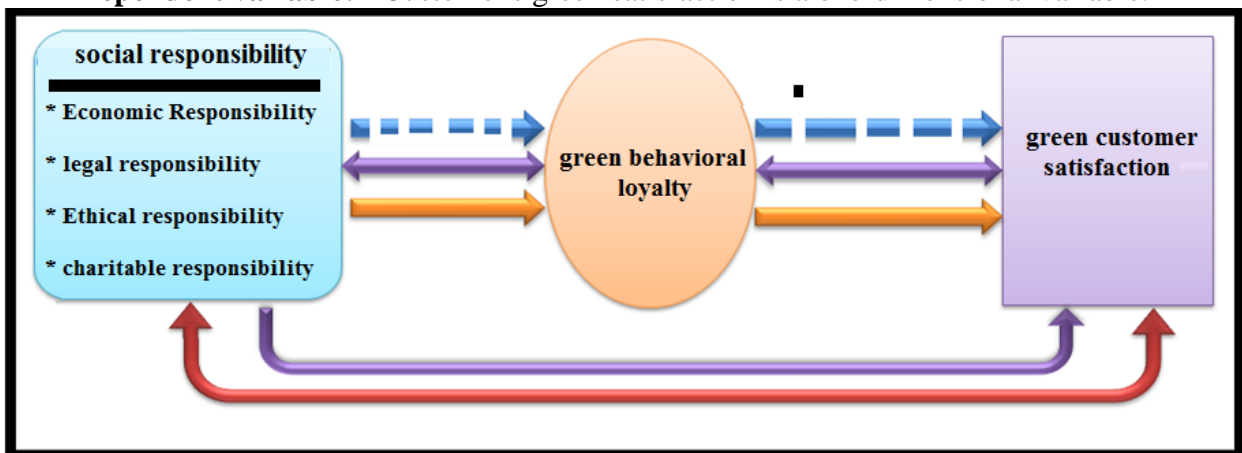


Figure (1) Search hypothesis diagram

Fifth: Study hypotheses

❖ **Correlation hypotheses**

- ✓ There is a statistically significant correlation between social responsibility (economic, legal, moral, and charitable) and green customer satisfaction.
- ✓ There is a statistically significant correlation between social responsibility (economic, legal, moral, and charitable) and green behavioral loyalty.
- ✓ There is a statistically significant correlation between green behavioral loyalty and green customer satisfaction.

❖ **Effect hypotheses**

- ✓ There is a direct and statistically significant impact of social responsibility (economic, legal, moral, and charitable) in green behavioral loyalty.
- ✓ There is a statistically significant indirect impact of social responsibility (economic, legal, moral, and charitable) on green customer satisfaction through the intermediary role of green behavioral loyalty.

Sixth: Statistical methods

In order to analyze and tabalize data and to establish the validity of the hypotheses relating to

the study, a number of statistical methods were used using the statistical program SPSS and the following were found:

- 1- Mean: —Used for the purpose of finding the average answers of sample members.
- 2- Standard deviation: - Used for the purpose of identifying the dispersion of the answers of the sample studied from its mean.
- 3- Correlation coefficient Pearson: - Used for the purpose of determining the correlation between quality data
- 4- The alpha cronbach coefficient: —Ensures that the study scale is consistent and that the vertebrates are consistent.
- 5- Natural distribution analysis: -To verify the existence of a natural distribution of data drawn from the study sample community by adopting a set of statistical tests as a kolmogorov-smirnov test).
- 6- Effects parameters per software (AMOS.v 24)

Seventh: study sample description

The study sample community consists of (10) affiliated with the Al-Qadisiya dairy laboratory, where 10 of the samples were distributed, and after the data tabulation it was revealed that a number of the deductions are not valid for analysis, and therefore the deductions included in the analysis reached (9) its determination for the purpose of measuring the availability of the study variables. This means that the sample studied included (90%) of the study population.

Eighth: study variables and their parameters

The study relied on the resolution tool technique in order to measure the availability of study variables in the sample studied, as the study resolution was based on the Pentecarte scale as one of the most common measures in the statistical and administrative area, and as can be seen from the results shown in the table, the measurement tool is relatively stable. The fact that the alpha coefficients are higher than (0.70), which means that the measurement tool is suitable for the sample studied, and the argument (1) shows the target study measurements that are the variables in the study and the alpha coefficients.

Table (1) Study variables, scale, and stability parameters

Variables	Alpha Cronbach of the variable	Dimensions	Paragraphs	Symbol	Alpha cronbach to the dimensions	Alpha Cronbach for study	Source
Social responsibility (SSRR)	0.970	Economic responsibility	3	SRE	0.972	0.970	Researcher preparation based on ideas (Rothaermel, 2017)
		Liability	3	SRL	0.970		
		Moral responsibility	3	SRT	0.971		
		Charitable responsibility	3	SRC	0.980		
Green Customer satisfaction	0.974	One dimensional	3	LCG	0.974	Martínez, 2010	
Green Behavioral Loyalty	0.971	One dimensional	4	LBG	0.971	Martínez, 2010	

Part Two: Theoretical Framework

First: Social responsibility

1) concept of social responsibility

Social responsibility is one of the important pillars through which organizations can be strengthened and motivated to take care of the environment. Social responsibility plays an important role in responding to and addressing natural disasters as much as possible (Teck et al., 2019:136). Činčalová&Prokop, 2019:1) considers that social responsibility is one way in which the Organization's competitive advantage can be enhanced, because competitors and society are more interested in customer behavior, by identifying customer concern for the environment. (Lu et al., 2019:82) pointed out that the primary role of social responsibility is to achieve and implement sustainable development goals, and therefore that the social responsibility of organizations is vital to achieving sustainability, competitive advantage, organizational progress and global economic development. (Birjani et al., 2019:691) found that social responsibility represents the ability to understand responsibility toward society, on the one hand, and the competence with which to take care of the efforts of workers and serve the interests of others and outside groups at the level of individual requirements and organizational goals. Benabou&Tirol, 2019:1) believes that social responsibility refers to the actions of organizations that go beyond legal obligations in pursuit of social interest.

2) **activities of Social responsibility**

Social responsibility activities involve the integration of social characteristics or advantages into products, and therefore these activities can be limited to the following points:

- ✓ Internal Social responsibility (ISR): It relates to all internal corporate processes, where CSR practices related to the employee are grouped into four groups called value classes that create value for stakeholders in the company, thereby meeting the different requirements and expectations of the organization.
- ✓ External Social responsibility, including the Company's activities related to responsible conduct related to the Company's external operations related to external stakeholders such as customers, communities and business partners (Skudyene& Auruskeviciene, 2012:51).

3) **Dimensions of social responsibility**

This framework helps companies recognize and address the economic, legal, ethical and charitable expectations of a business at a given time, as the measurement of social responsibility is based on four key dimensions:

- ✓ **Economic responsibility:** A business is, first and foremost, an economic institution. Investors expect an appropriate return on venture capital. Creditors expect the organization to pay its debts. Consumers also expect safe products and services at affordable prices and quality.
- ✓ **Legal responsibility:** The written ethics of society, which embodies the concepts of right and wrong
- ✓ **Ethical responsibility:** The responsibilities that determine what is desirable and what is not
- ✓ **Charitable responsibility:** Charitable responsibilities are often included within the notion of corporate citizenship, reflecting the idea of voluntary community giving (Rothaermel, 2017:20-21).

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Second: Green Behavioral Loyalty

1) **concept of Green Behavioral Loyalty**

This concept has been used to see that writers and researchers have a great interest in this subject, as customer loyalty is the ultimate goal of any organization (Kiran&Diljit, 2017:97). Bezeshki, 2009:30) explained that behavioral loyalty is one of the ways in which customers can reinforce their repurchase intent such as a positive word to the product or service or recommend to knowledge, etc. Polatcan&Titrek, 2014:1293, states that most of the behaviors individuals feel toward their organizations are a statement of lack of credibility. In addition to the sharp criticism and negative expectations the organization is facing, he (martínez,2010:901) believes that green behavioral loyalty is defined as the consumer's commitment to buy back or continue using a green brand.

2) **Characteristics of Customer Loyalty**

The characteristics of Customer Loyalty can be limited to the following points:

- ✓ Promote regular product repurchase
- ✓ Purchase of product or service line
- ✓ Attract new customers
- ✓ The Customer Loyalty process enhances the Organization's immunity against competitors (Heryanto, 2011:67).

3) **importance of Customer Loyalty**

The importance of customer loyalty is reflected in its green intent to the organization, which can be reflected in the following points:

- ✓ The cost of marketing is reduced: Because the cost of attracting new customers requires high costs.
- ✓ Reduction of transaction costs: - Such as the costs of negotiations, contracts, and processing system.
- ✓ Lower circulation costs: - Because customer replacement is less.
- ✓ Increase the sale of products, which increases the market share of the Organization.
- ✓ The word mouth is more positive.
- ✓ Reduce internal labor costs such as replacement costs for machines, equipment or machinery (Heryanto, 2011:67).

Third: Green Customer satisfaction

Satisfaction is one of the most important theoretical and practical issues for most marketers and customer seekers, and organizations faced increasing pressures to become responsible and green, as many stakeholders pressured companies to minimize their negative effects on society and the natural environment. Thus, green customer satisfaction is the customer's feeling that performance meets or exceeds their green requirements, environmental regulations, and sustainable community expectations (Chang&fong, 2010:2837). Satisfaction is the starting point of loyalty (Munari et al., 2013:142), because customers' decisions are almost rational even at high risk (belás&gabčová, 2016:134)

IV.Part Three: The practical aspect

First: Analysis of normal distribution

This paragraph clarifies the possibility of generalizing the results of the study to the studied society, as in order to show this, the test of the Chomgrove Semanrov, which is capable of answering the question of the study reflected in whether the results of the study can be

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generalized to the studied society. The answer to this question is that the test's moral value must be higher than (0.05).

Table (7) tests of normal distribution of study variables

	Kolmogorov-Smirnov ^a		
	Statistic	df	Sig.
SRE	.161	07	P>.05
SRL	.140	07	P>.05
SRT	.197	07	P>.05
SRC	.219	07	P>.05
SSRR	.097	07	P>.05
LCG	.218	07	P>.05
LBG	.189	07	P>.05

From the results shown in the table above, the results show that the value of the study test is higher than (0.05), which means that the test has achieved the desired goal, and the results of the study can therefore be disseminated to the studied community.

Second: The descriptive statistics of the study

This paragraph sets out the results of the descriptive statistic of the variables included in the study, and therefore these outcomes will be centered on the mean, standard deviation, relative importance, and order of importance, as in the table below.

Table (8) descriptive statistics of the variables in the study

NO.	mean	S.D	%	Order of importance	NO.	mean	S.D	%	Order of importance
SRE ¹	3.49	0.928	70%	3	SRC ²	3.72	0.726	74%	2
SRE ²	3.63	0.879	73%	1	SRC ³	3.79	0.700	76%	1
SRE ³	3.06	1.018	71%	2	SRC	3.71	0.643	74%	A
SRE	3.06	0.800	71%	B	SSRR	3.08	0.708	72%	Fourth
SRL ¹	3.77	1.000	70%	1	LCG ¹	3.89	0.790	78%	1
SRL ²	3.42	0.920	78%	2	LCG ²	3.68	0.848	74%	3
SRL ³	3.37	0.970	77%	3	LCG ³	3.70	1.040	70%	2
SRL	3.02	0.889	70%	C	LCG	3.78	0.841	76%	First
SRT ¹	3.06	1.160	71%	2	LBG ¹	3.70	0.906	74%	1
SRT ²	3.40	1.208	78%	3	LBG ²	3.63	0.837	73%	3
SRT ³	3.60	1.000	72%	1	LBG ³	3.63	0.808	73%	4
SRT	3.02	1.086	70%	D	LBG ⁴	3.70	1.068	74%	2
SRC ¹	3.61	1.013	72%	3	LBG	3.67	0.844	73%	Second

The results of the table above have noticed that the level of green customer satisfaction in Al-Qadisiya milk factory hit 76%, which makes it first, which means that the studied factory has a good awareness of the environment and its requirements, while it came second and third with a level equal to 73% of the green behavioral loyalty variable. This means that the studied factory has a group of customers who have loyalty, commitment to its own actions and purchase its products, while the factory's responsibility to the community (social responsibility) This means

that the factory must develop its capabilities in order to improve its view of caring for the society and its requirements, meet its requirements, and preserve the society's environment from pollution.

Third: Test study hypotheses

❖ **Test the correlation hypothesis**

This paragraph contributes to the strength and correlation between the variables involved in the study and their respective dimensions, which are explained in the correlation matrix shown in Table 4.

Table (4) correlation matrix

	SRE	SRL	SRT	SRC	SSRR	LCG	LBG
SRE	1	.86.**	.845.**	.45.**	.916.**	.701.**	.905.**
SRL	.86.**	1	.808.**	.577.**	.901.**	.715.**	.87.**
SRT	.845.**	.808.**	1	.481.**	.936.**	.77.**	.81.**
SRC	.45.**	.577.**	.481.**	1	.673.**	.469.**	.434.**
SSRR	.916.**	.901.**	.936.**	.673.**	1	.771.**	.877.**
LCG	.701.**	.715.**	.77.**	.469.**	.771.**	1	.822.**
LBG	.905.**	.87.**	.81.**	.434.**	.877.**	.822.**	1

** . Correlation is significant at the .01 level (2-tailed).
 Sig. (2-tailed) = .000
 N= 57

The results shown in the table above show a significant correlation between the study variables involved in the analysis, at a significant level of .01 (a confidence level of .99).

❖ **Test the hypothesis of effect**

In order to measure the effect hypothesis from the study variables of social responsibility (independent variable), green behavioral loyalty (intermediate variable), and green customer satisfaction (Go ahead a good variable), so in order to demonstrate this hypothesis it will be measured based on two paragraphs:

The results shown in Figure 5 and shown in Table 6 show that there is no statistical effect of social responsibility on the green client's satisfaction, while a statistically significant influence of social responsibility on the green client's satisfaction is observed through the intermediary role of green behavioral loyalty. Increasing social responsibility by one benchmark weight improves green customer satisfaction by .63 and by a benchmark error of .105, a critical value of 4.9.

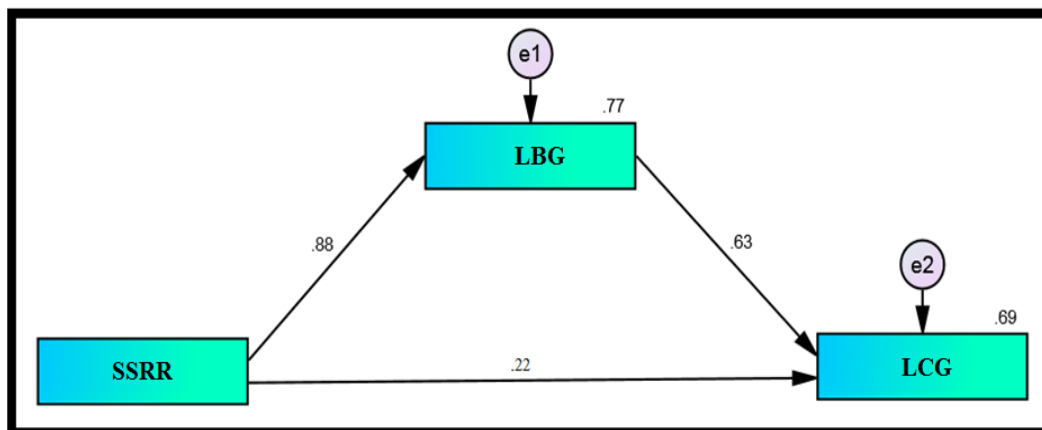


Figure (5) Standard chart of direct and intermediate impact relationship

Table (e) Standard weights of direct and intermediate impact relationship

				Weights	S.E.	C.R.	R ²	P		
SSRR	---	>	LBG	0.877	0.071	12.30	0.770	***		
SSRR	---	>	LCG	0.210	0.173	1.24	0.686	n.s		
SSRR	---	>	LBG	---	>	LCG		0.634	0.100	4.09

Four Part: Conclusions and recommendations

First: conclusions

- 1) There is a statistically significant correlation between social responsibility (as an independent variable), green behavioral loyalty (as an intermediate variable), and green customer satisfaction (as Go ahead a true variable), which improves the image and reputation of the factory in customers' minds.
- 2) A statistically significant impact of social responsibility (economic, legal, moral, and charitable) on green customer satisfaction through the intermediary role of green behavioral loyalty, which enhances customers' loyalty to products and services offered by the factory.
- 3) The factory is keen to produce safe products at reasonable prices and quality, thus enhancing the factory's economic responsibility, in a cycle that will generate customer satisfaction through customer awareness of the value of the factory.
- 4) The manufacturer is keen to establish a set of regulations and regulations for personnel, which help to identify desired and desired behavior, and address undesirable behavior.
- 5) The factory is keen to preserve its reputation in the community through its giving.
- 6) The factory is keen to earn workers' sympathy for Dean in order to foster their loyalty to him and produce as much products as possible.

Second: Recommendations

- 1) The factory must ensure that its revenues are achieved without harming the environment by producing environmentally friendly products.
- 2) The need for the factory to fulfill all its obligations toward the community by preserving the community environment from pollution, and by working on ethical codes that will contribute to educating workers about the environment.
- 3) The need for the factory to provide periodic grants to charities, thereby generating sympathy and trust in the community that seeks to satisfy its needs and desires.
- 4) The need to instill a spirit of cooperation and trust between workers toward each other, which will be reflected positively toward the factory.
- 5) A well-educated factory should provide periodic rewards to highly skilled and capable workers who contribute to the capacity, growth and profitability of the factory.
- 6) The factory must establish deterrent laws for workers who exceed ethical and legal standards, and ensure that they are held to account fairly.
- 7) In order to gain customer satisfaction, the factory will increase customer satisfaction.

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